AIR POLLUTION CONTROL PERMIT APPLICATION FOR PROPOSED LANDFILL GAS-FIRED COMBUSTION TURBINE COMBINED CYCLE POWER PLANT

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TABLE OF CONTENTS

TABLE OF CONTENTS (Continued)

TABLES

FIGURES

TABLE OF CONTENTS (Continued)

APPENDICES

1.0 INTRODUCTION

Rhode Island Central Genco, LLC (the applicant) is proposing to install a 42-MW, landfill gas-fired combustion turbine combined cycle (CTCC) electric generation plant at the Central Landfill in Johnston, Rhode Island to be operated by Ridgewood Power Management (Ridgewood). This document constitutes an application for pre-construction approval required under Rhode Island Air Pollution Control (RIAPC) Regulation 9.

The existing power generation facilities at the Central Landfill consist of the original nine landfill-gas fired Waukesha engines capable of generating approximately 14 MW of electricity (the Ridgewood Providence Power Partners or RPPP facility), two landfill gas-fired Deutz engines capable of generating 2.5 MW of electricity (the Ridgewood Rhode Island Stage 1 facility, hereinafter referred to as the Stage 1 facility) and four landfill gas-fired Caterpillar engines capable of generating 6.4 MW (the Ridgewood Rhode Island Stage 2 facility, hereinafter referred to as the Stage 2 facility). Although these facilities, as well as the proposed CTCC facility are owned by separate corporate entities, they are (and will be) operated by Ridgewood and are considered a single stationary source for air pollution control permitting purposes. The proposed CTCC facility, because it will be operated by Ridgewood, is a modification of the existing Ridgewood-operated stationary source. The Central Landfill is owned and operated by the Rhode Island Resource Recovery Corporation (RIRRC) and is a separate stationary source from the Ridgewood-operated facilities.

The existing RPPP and Stage 1 facilities are within the footprint of the proposed Phase VI expansion of the Central Landfill and must be removed or relocated. The Stage 1 facility will be relocated to the southern boundary of the Central Landfill on Shun Pike adjacent to and immediately west of the existing Stage 2 facility. The RPPP facility will be permanently removed.

The new CTCC facility will be located on Shun Pike, directly across from the main entrance to the Central Landfill on land owned by RIRRC, the operator of the Central Landfill. In addition, a landfill gas treatment system will be constructed within the boundaries of the Central Landfill near the intersection of Shun Pike and Green Hill Road to serve not only the proposed turbine plant, but also the existing Stage 1 and Stage 2 engines and the Ultra–Low Emission (ULE) flare. A locus plan showing the Central Landfill and the location of the proposed CTCC plant is provided as ***Figure 1***.

As a result of this project, the gas management system at the Central Landfill will have power generation equipment as the primary means of combusting landfill gas, with flares expected to provide gas control solely on a supplemental and backup basis.

1.1 FACILITY DESCRIPTION

1.1.1 Proposed New CTCC Facility

The proposed CTCC plant will replace the electric generating capacity that will be lost from removal of the RPPP plant and will generate additional electricity from landfill gas currently being combusted in flares as well as additional gas that will be available as a result of the Phase VI expansion. The CTCC plant will include:

- Five Solar Taurus 60 landfill gas-fired combustion turbines, each having a nominal electrical output of 6 MW. Each turbine will be equipped with Selective Catalytic Reduction (SCR) to control nitrogen oxides (NO_X) emissions;
- Five heat recovery steam generators (HRSGs), each capable of generating 27,000 pounds of steam per hour at 250 pounds per square inch gauge (psig);
- One steam turbine with a maximum output of 11 MW;
- A four-cell cooling tower to provide cooling for the steam turbine condenser;
- An auxiliary cooling tower for the gas treatment and compression system; and
- Electrical interconnection equipment.

The hot exhaust gases from each turbine will pass through the associated HRSG to generate steam and will be exhausted to the atmosphere through individual stacks 75 feet high and four feet in diameter.

Facility parameters are summarized in ***Table 1***.

1.1.2 Gas Treatment Plant

The gas treatment plant will provide sulfur removal, will remove siloxanes and other contaminants that that would interfere with reduce the efficiency of the proposed Selective Catalytic Reduction (SCR) system, and will filter, dewater, and compress the landfill gas to meet the treatment standard in 40 CFR Subpart WWW. Landfill gas treatment in the form of filtering, dewatering, and compressing the gas is one of the landfill gas control options allowed under 40 CFR 60.752(b)(2). Equipment combusting treated landfill gas is not subject to any of the requirements of Subpart WWW.

The gas treatment plant will serve not only the new CTCC facility, but also the relocated Stage 1 facility and the existing Stage 2 facility. It will also provide sulfur removal for the existing ULE flare owned by RIRRC.

The sulfur removal equipment for the gas treatment plant has not yet been selected, but Ridgewood is proposing sulfur removal down to a concentration of 100 parts per million by volume (ppmv) as hydrogen sulfide (H_2S). The sulfur content of the raw landfill gas from Phases IV and V of the Central Landfill has been measured at concentrations ranging from about 400 ppmv to 3000 ppmv, as H_2S. Thus, the gas treatment plant will substantially reduce sulfur dioxide (SO_2) emissions from the existing Stage 1 and Stage 2 facilities and RIRRC's ULE flare.

1.1.3 Operating Plan

With the construction of the proposed CTCC facility, it will be possible to recover energy from nearly all of the gas generated by the Central Landfill, and it is Ridgewood's intention to operate its facilities to maximize power generation from the gas generated at the Central Landfill, thus leaving minimal gas to be controlled by the existing destruction flares owned by RIRRC. Due to its superior heat rate (i.e., kilowatt-hours generated per unit of heat input), the CTCC facility be operated as a first priority, followed by the Stage 1 and 2 facilities. If there is surplus gas, it will be combusted in RIRRC's flares, which will also provide backup capacity in the event that one or more of the power generating devices is inoperable or is undergoing maintenance.

2.0 EMISSIONS DATA

2.1 CRITERIA POLLUTANTS, AMMONIA, AND HCL

The proposed emission limits for the new CTCC facility include an oxides of nitrogen (NO_X) emission limit of 25 ppmvd at 15% O_2, a carbon monoxide (CO) emission limit of 200 ppmvd at 15% O_2 (100 ppmvd at full load), a VOC emission limit of 20 ppmvd at 15% O_2 as methane (10 ppmvd at full load) and a particulate matter (PM_{10}) limit of 0.0238 lb/MMBTU.

Unreacted ammonia from the SCR system (i.e., ammonia slip) will also be emitted through the HRSG stacks. The maximum ammonia slip rate is expected to be up to 20 ppmvd at 15% O_2.

Sulfur oxides (i.e., SO_2, SO_3) are emitted as a result of reduced sulfur compounds present in the landfill gas. Using the most conservative approach, it is assumed that the sulfur is oxidized completely and emissions are therefore dependent only on the sulfur content of the landfill gas combusted in the turbine. Most of the sulfur is oxidized only to SO_2. However, a small percentage is oxidized further to SO_3. The applicant intends to install a sulfur removal system to reduce sulfur in the landfill gas to approximately 100 ppmv as H_2S. This sulfur removal system will serve not only the proposed turbines, but also the Stage 1 and Stage 2 engines and the ULE flare.

Particulate matter is emitted directly from the turbine, as well as being formed post-combustion as a result of chemical reactions between SO_3, water, and ammonia in the SCR system. Based on the turbine manufacturer's warranty as well as estimates of ammonium salts formed in the exhaust stream, the maximum particulate matter emission rate will be 0.0238 lb/MMBTU.

Ammonia is injected into the exhaust stream upstream of the SCR catalyst to control NO_X emissions. A portion of this ammonia remains unreacted and is emitted. Due to the uncertainty about SCR catalyst performance when firing landfill gas, the applicant is proposing an ammonia emission limit of 20 ppmvd at 15% O_2.

Hydrogen chloride (HCl) is also emitted as a result of chlorinated compounds present in the landfill gas. Based on a site-wide average chlorine content of 12.79 parts per million (ppm) as measured in May 2000, the HCl emission rate assuming 100 percent conversion of the chlorine has been estimated as 1.23 pounds per million standard cubic feet of gas consumed. This may vary with time.

Based on the emission factors described above, hourly and annual emission rates for the proposed CTCC facility are provided in ***Table 2***.

2.2 TOXIC AIR POLLUTANTS FROM LANDFILL GAS

Landfill gas contains a number of organic compounds that are considered hazardous air pollutants (HAPs) or toxic air pollutants (TAPs) regulated under Rhode Island Air Pollution Control Regulation 22. The proposed turbines will destroy most of these pollutants in the combustion process. The proposed CTCC facility is a separate stationary source from the Central Landfill, and it is considered a source of emissions for the HAPs and TAPs that are not destroyed in the combustion process.

Individual constituents present in the landfill gas based on tests performed by Ridgewood at the Stage 2 facility are listed in ***Table 3***. Emissions from the existing Stage 1 and Stage 2 facilities and the proposed CTCC facility are also listed. Emissions have been estimated based on 98 percent destruction of the landfill gas contaminants in the combustion process.

The combined total HAP emissions from the Ridgewood-operated facilities (including HCl, which is the majority of the HAP) are estimated to be well below the major source threshold of 10 tons for any individual HAP or 25 tons for all HAPs in aggregate.

3.0 APPLICATION REQUIREMENTS

The project is located in an area classified as serious non-attainment for ozone and as attainment for NO_2, CO, SO_2, and PM_{10}. The proposed CTCC facility is not within any of the named categories for which the Prevention of Significant Deterioration (PSD) major source threshold is 100 tons per year. Therefore, the major source threshold for attainment pollutants is 250 tons per year. The major source threshold for non-attainment pollutants, NO_X and VOC (as precursors of ozone), is 50 tons per year. Based on these criteria, the existing facility is a major source for PSD purposes and is a major source of NO_X and VOC for non-attainment New Source Review (NNSR) purposes. A modification to the facility is considered major if the net emissions increase exceeds the significance level or if the modification itself would be considered a major source.

Table 3 presents a comparison of criteria pollutant emissions from the CTCC facility to the significant emissions increase thresholds contained in RIAPC Regulation 9. The proposed facility constitutes a major modification for VOC and NO_X under NNSR and a major modification for CO, SO_2, PM_{10}, and NO_2 under the PSD program. As such, the proposed facility is subject to the major source permitting requirements of RIAPC Regulation 9 for both attainment and non-attainment pollutants.

The application requirements for a major modification are described below.

1. The applicant is required to apply Lowest Achievable Emission Rate (LAER) for NO_X and Best Available Control Technology (BACT) for all other pollutants. BACT and LAER are discussed in ***Section 4*** below.
2. An analysis of alternative sites, sizes, production processes and environmental control techniques is found in ***Section 5***, below. The analysis demonstrates that the benefits of the proposed modification significantly outweigh the environmental and social cost imposed as a result of its location, construction, or modification.
3. The applicant must comply with all state and federal air pollution control regulations. The applicable requirements are discussed in ***Section 6***.
4. An air quality impact assessment is required for those pollutants for which the emissions increase exceeds the significance levels defined in RIAPC Regulation 9.1.34. The proposed CTCC facility exceeds the significance level for NO_2, SO_2, CO, and PM_{10} and an ambient impact analysis is required for these pollutants. The impact analysis must demonstrate that the proposed modification will not cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS) or PSD allowable increment. In

addition, RIAPC Regulation 9.5.3 restricts increment consumption for a major modification to 75 percent of the remaining 24-hour increment and 25 percent of the remaining annual increment. The proposed facility is a major modification for NO_2, SO_2, CO, and PM_{10}, but there is no increment for CO, so this additional restriction on increment consumption applies only to NO_2, SO_2, and PM_{10}.

This application includes an ambient impact assessment for criteria pollutants in ***Section 7***.

5. The applicant must demonstrate that the emissions from the proposed CTCC facility will not cause an increase in ground level ambient concentrations of TAPs in excess of that allowed by Regulation 22. Air toxics impacts resulting from landfill gas constituents are discussed in ***Section 7***. The proposed power plant does not burn fossil fuels. Therefore, it is classified as a Tier II power plant for the purposes of assessing health risks. Because it combusts gaseous fuel, with essentially no emissions of metals, no other studies are required by the *Guidelines for Assessing Health Risks from Proposed Air Pollution Sources* for the proposed CTCC facility. It should also be noted that the landfill gas must be combusted, whether as a fuel to generate electricity or in a flare where no useful energy is extracted from the combustion process, and, therefore, the facility poses no additional risk when compared to other landfill gas control technologies.

6. An Additional Impacts Analysis is required. This analysis must include an assessment of the impact of pollutants for which there is a significant net emissions increase due to the proposed modification on visibility, soils and vegetation and the impact of general commercial, residential and industrial growth resulting from the proposed modification. The analysis of additional impacts is provided in ***Section 8***.

7. The applicant must certify that all existing major stationary sources owned or operated by the applicant located within Rhode Island are in compliance with all applicable state and federal air pollution rules and regulations under the Clean Air Act and federally enforceable compliance schedules. The certification is found in ***Section 9***.

8. The NO_X emissions increase from the proposed CTCC facility must be offset at a ratio of 1.2 to 1. Although the proposed facility will have potential annual NO_X emissions of 159.1 tons per year, some of this emissions increase will be offset by the removal of the existing RPPP facility. Emissions offsets are discussed in ***Section 10***.

4.0 BEST AVAILABLE CONTROL TECHNOLOGY / LOWEST ACHIEVABLE EMISSION RATE

BACT refers to an emission limitation, work practice, design or operational standard that reflects the maximum degree of emission reduction for each pollutant from a stationary source, taking into account environmental, energy, and economic impacts. BACT must not be less stringent than any applicable state or federal rule or regulation.

LAER means the most stringent emission limitation in any State Implementation Plan (SIP) for a particular category of source (unless it can be demonstrated that such a limitation is not achievable) or the most stringent emission limitation achieved in practice for a particular category of source.

A survey of published BACT/LAER databases and guidance documents was performed for landfill gas-fired turbines. The sources consulted included the following:

- EPA's RACT/BACT/LAER Clearinghouse;
- Bay Area Air Quality Management District BACT Guidelines;
- California Air Resources Board BACT Clearinghouse;
- San Joaquin Valley Unified Air Pollution Control District BACT Clearinghouse;
- The Texas NRCC BACT Guidelines;
- New Jersey State-of-the-Art Manual;
- The Background Document for Pennsylvania Department of Environmental Protection's General Permit for Landfill Gas-fired Simple Cycle Turbines; and
- South Coast Air Quality Management District BACT Guidelines.

In addition, emissions limits from other sources been included. ***Table 5*** summarizes the BACT/LAER information for individual projects available from published sources. ***Table 6*** includes a summary of general BACT policies, guidance, or regulations relevant to landfill gas-fired turbines from the sources listed above.

Three projects listed in ***Table 5*** are not considered representative of landfill gas-fired turbines. The Los Angeles Joint Water Pollution Control Project fires digester gas, which contains less inert constituents (primarily CO_2) and has a heat value midway between landfill gas and natural gas. The presence of inert constituents has considerable influence on the combustion characteristics, and hence the emissions characteristics, of the turbine. Similarly, the secondary turbine being installed at the University of New Hampshire (UNH) landfill gas pipeline project is not representative because much of the CO_2 will be removed from the landfill gas prior to it being combusted by UNH because the existing primary combustion turbine was designed for natural gas and cannot burn landfill gas. The third project is the Tullytown landfill project, which was permitted, but which was never built, so the emission limits cannot be considered as having been demonstrated as achievable in practice.

4.1 NO_X

The proposed CTCC facility is subject to LAER for NO_X. In general, control options for NO_X from landfill gas-fired turbines have been historically limited due to the inherent characteristics of landfill gas. The combustors in landfill gas-fired turbines cannot achieve the same level of NO_X emissions as natural gas-fired turbines because the CO_2 in the landfill gas prevents the turbines from being fired as lean as natural gas-fired turbines. Furthermore, selective catalytic reduction (SCR), which is widely used on natural gas-fired combined cycle plants, has never been successfully used in a landfill gas application. Landfill gas contains siloxanes, which are organic compounds that are contained in consumer products and that are present in landfill gas in very small amounts. The siloxanes are oxidized to silica in the combustion process, which blinds or poisons downstream catalytic surfaces. Other landfill gas constituents (e.g., sulfur) can also poison the catalyst. Thus, catalyst-based control technology has generally been unsuccessful when used in landfill gas-fired equipment.

Water or steam injection has been used to provide NO_X control for combustion turbines. The Los Angeles Joint Water Pollution Control Project listed in ***Table 5*** uses water injection for NO_X control. However, landfill gas contains a high level of inert gases that result in lower combustion temperatures, and the potential NO_X reduction from water or steam reduction is relatively small. Furthermore, Solar does not consider water or steam injection as a feasible control option for turbines fired with gas containing less than 60 percent methane because the flame becomes too unstable. Therefore, water injection is not considered technically feasible for landfill gas-fired turbines, which fire a fuel that ranges from 45 to 55 percent methane (Digester gas typically contains about 75 percent methane). The Bay Area Air Quality Management District concluded that water injection was feasible to achieve 25 ppm NO_X for a landfill gas-fired turbine at the Vasco Road landfill, but the manufacturer would not guarantee successful operation and the project was terminated.[1]

It should be noted that the proposed CTCC facility is somewhat unique due to its size, and there are no comparably-sized landfill gas-fired combined cycle electric generation facilities in the United States. In addition, Solar Turbines bases its emission warranties on the specific characteristics of the landfill gas at each site, so that emission warranties obtained from Solar are project-specific, and it cannot be assumed that the same emissions level can be achieved at a different site.

The most nearly size-comparable project to the proposed project at the Central Landfill is the Middlesex County Landfill in New Jersey, which utilizes two de-rated Taurus 60 turbines to achieve 32 ppmvd NO_X at 15% O_2 in a combined cycle system. Another New Jersey project, the Monmouth Energy project, also utilizes the Taurus 60 turbine and was also permitted at 32 ppm NO_X. Since these two projects were permitted, Solar has redesigned the Taurus 60 to improve its heat rate (i.e., fuel efficiency) and the redesigned turbine has higher NO_X emissions. The turbine used in the New Jersey projects is no longer commercially available, and Solar will not guarantee 32 ppm NO_X for a landfill gas application for the redesigned Taurus turbines.

With regard to smaller simple cycle landfill generation projects, the South Coast Air Quality Management District (SCAQMD) has been applying a 25 ppm limit which it considers to have been achieved in practice based on stack test results on a single older model Taurus 60 at the BKK landfill. This emissions level has not been replicated consistently at other landfills, as actual emissions are fuel and firing temperature dependent. Redesigned Taurus 60 turbines for landfill gas applications currently offered by the manufacturer have a NO_X guarantee of 42 ppm.

SCAQMD recently approved an air permit for a two-unit Mercury 50 turbine-based power project at the Chiquita Canyon landfill, located in Valencia, California. The Mercury 50 is a new turbine from Solar, suitable for landfill gas and incorporating a recuperated design and higher fuel efficiency. The permit was issued with an initial NO_X limit of 25 ppm.

The Mercury 50 is a small combustion turbine which produces about 4 MW net output. Because of its recuperated design, the exhaust temperature is only 720°F (as compared with larger unrecuperated turbines that have exhaust temperatures of 900 - 1,000°F). Generally, temperatures in excess of 800°F are required for an efficient combined cycle application. As a result, the Mercury 50 has the lowest heat rate of any landfill gas turbine in a simple cycle; however, it is ill-adapted to a combined cycle application because the quality of the waste heat is generally considered to be too low to economically produce steam for a bottoming cycle.

[1] *Background Document, General Plan Approval and/or General Operating Permit (BAQ-GPA/GP-22), Landfill Gas-fired Simple Cycle Turbines*, Pennsylvania Department of Environmental Protection, August 8, 2006.

A permit for a Mercury 50 was also recently issued to UNH with a NO_X limit of 5 ppm. However, this turbine is part of a larger project that involves building a 12-mile pipeline to provide fuel for an existing turbine that cannot burn landfill gas, so most of the CO_2 will be removed from the gas prior to delivery at the UNH campus, producing a gas nearly equivalent to natural gas. Therefore, although described as being landfill gas-fired, the fuel does not have the same characteristics as landfill gas, and Solar's emissions warranties for this turbine are equivalent to the warranties provided for a natural gas-fired Mercury 50. Furthermore, the processing plant needed to remove the CO_2 consumes a large amount of electric power that will be generated by landfill gas-fired reciprocating engines, creating additional NO_X emissions.

Thus, the lowest reported NO_X emissions limit for any landfill gas-fired turbine is 25 ppmv, which is achieved without add-on control technology. No add-on controls were reported for any of the NO_X determinations listed in ***Table 5***.

As stated above, the Mercury turbine is considered to be unsuitable for this application because of its small size and its low exhaust temperature. Despite the representations by the air quality management districts in California that 25 ppm NO_X is achievable in practice by larger turbines, there is no commercially available turbine for which the manufacturer will warranty the 25 ppm NO_X emission level when firing landfill gas.

In order to achieve 25 ppm NO_X, the applicant proposes to install a state-of-the-art landfill gas treatment system to remove contaminants and to install SCR to reduce the NO_X emissions to 25 ppm to meet the current LAER level. There is considerable commercial risk in this approach because previous attempts to treat landfill gas for the purpose of enabling the use of SCR have been unsuccessful, and it is likely some siloxanes will remain in the landfill gas after treatment. Possible complications from this approach include shortened catalyst life, less effective NO_X removal, and higher ammonia slip. Possible benefits of this approach are that a successful implementation of SCR on this project will demonstrate the feasibility of SCR for future landfill gas projects. Based on its discussions with engineers and SCR vendors, the applicant believes that SCR will be successful, and SCR vendors agree. However, they are not willing to guarantee the catalyst life or the success of the system. On that basis, the applicant can commit only to achieving the current LAER level of 25 ppm using SCR, although this project may demonstrate that SCR may well be capable of achieving lower NO_X emissions in practice.

4.1.1 CO

CO is typically controlled in combustion turbines by controlling combustion conditions. Where combustion conditions are optimized for NO_X emissions, very careful combustion control is required to minimize CO emissions, and this is more difficult with landfill gas due to the presence of inert gases in the fuel.

Oxidation catalysts have been used for natural gas-fired turbines to reduce CO emissions. However, oxidation catalysts are generally considered infeasible for landfill gas applications because the landfill gas contains siloxanes, which are oxidized to silica in the combustion process. Silica blinds or poisons catalytic surfaces, rendering the catalyst ineffective. The landfill gas-fired engines at the RPPP facility were originally installed with oxidation catalysts, which had to be removed because of the siloxanes in the landfill gas. Although the landfill gas will be treated to remove most of the siloxanes, there is still significant risk that a CO catalyst will not be effective.

Oxidation catalysts also greatly increase the oxidation of SO_2 to SO_3, which in turn increases the emissions of ammonium salts. It is estimated that 30 percent of the SO_2 in the exhaust gas will be oxidized to SO_3 by an oxidation catalyst. Given that there will still be sulfur in the landfill gas even after treatment to remove it, an oxidation catalyst would have a negative environmental impact.

Table 5 includes data for BACT determinations and emissions warranties for CO emissions from landfill gas turbines. CO emission warranties provided by Solar are turbine, load, and fuel-specific. The Monmouth Energy and Middlesex County projects, which are the most nearly comparable turbines, are older model de-rated Taurus 60 turbines that are no longer commercially available. In addition, the permit levels reflected in ***Table 5*** represent CO emission rates that were lower than what the manufacturer guaranteed and what can be achieved in practice over the normal operating range of the turbines. In the case of Monmouth Energy, the turbines could not meet the permitted emission limits, and the emissions limits were subsequently amended to allow for higher CO and VOC limits at less than full load operation. BACT Guidance from SCAQMD and BAAQMD (see ***Table 6***) indicates CO BACT levels of 130 and 200 ppm, respectively, as BACT. The background document for the Pennsylvania General Permit for landfill gas-fired turbines indicates a BACT level of 100 ppm. Emission warranties and permit data from other projects indicate CO emission levels ranging from 100 to 200 ppm. Oxidation catalysts have not been required for any of the projects listed in ***Table 5***.

According to Solar, the CO emissions from combustion turbines increase substantially at less than full load operation. Based on the information provided by Solar, the applicant believes that the BACT levels in ***Table 5*** represent full load operation. For full load operation, Solar will guarantee a CO emissions level of 100 ppmvd at 15% O_2.

In light of the failure of CO catalysts previously at this site and the sulfur remaining in the landfill gas, an oxidation catalyst is not considered technically feasible. Based on the emissions guarantee offered by Solar, the applicant is proposing 100 ppmvd at 15% O_2 at full load operation as BACT.

4.1.2 VOC

BACT, rather than LAER, is required for VOC in accordance with the provisions of RIAPC Regulation 9.4.2(a)(3) because the existing Ridgewood facilities have potential VOC emissions between 50 and 100 tons per year.

VOC includes unburned hydrocarbons, except methane and ethane. VOC emissions from combustion turbines are minimized by carefully controlling combustion conditions. Landfill gas-fired turbines cannot achieve the same level of VOC emissions as natural gas-fired turbines due to the presence of inert gases in the fuel.

CO oxidation catalysts can achieve some small degree of VOC emissions reductions; however, for the reasons stated above in ***Section 4.1.1***, a CO oxidation catalyst is considered technically infeasible.

VOC emission limits in ***Table 5*** range from 10 ppmvd at 15% O_2 as methane[2] to 10 ppmvd at 15 % O_2, as hexane (53.8 ppm as methane). GZA was unable to locate any general BACT/LAER guidance on VOC emissions, so VOC emissions are not included in ***Table 6***.

Solar has issued project-specific unburned hydrocarbon (UHC) emissions warranties ranging from 25 to 100 ppmvd at 15% O_2 as methane, where UHC may include methane and ethane, which are not VOC. Based on the information reported in ***Table 5***, the lowest reported VOC emission limit is 10 ppmvd at 15% O_2, as methane. As with CO, VOC emissions increase substantially at less than full load operation, and the emission levels presented in ***Table 5*** are believed to represent full-load operation. Solar will guarantee a VOC emission rate of 10 ppmvd at 15% O_2 as methane at full load operation.

Based on the emissions guarantee offered by Solar, the applicant is proposing 10 ppmvd at 15% O_2 as methane at full-load operation as BACT.

4.1.3 SO_x

Combustion of any fuel containing sulfur results in the oxidation of the sulfur compounds to sulfur oxides, primarily SO_2. Sulfur is present in landfill gas in the form of reduced sulfur compounds, primarily H_2S. At the Central Landfill, the sulfur content of the gas has been measured at levels ranging from less than 150 ppm to over 3000 ppm, depending on the particular location and time. Sulfur removal is not normally required for combustion of landfill gas; however, at some landfills, the sulfur concentration in the landfill gas has increased due to the presence of large amounts of gypsum (calcium sulfate dihydrate), which is biologically converted to H_2S under anaerobic conditions in the presence of organic carbon and water.

As presented in ***Table 5***, some landfill gas-fired turbines have SO_2 limits, but none of these limits contemplate the use of any sulfur removal technology. SCAQMD specifically limits the sulfur content of landfill gas to 150 ppmv (Rule 431.1), but California landfills typically have low sulfur levels, and gas treatment is not required to meet this level. There is one turbine plant in Florida that uses gas pre-treatment because of the large amount of demolition debris that was deposited after Hurricane Andrew struck Florida in 1992. The landfill gas treatment system removes H_2S down to 150 ppmv for odor control purposes and to protect the turbines from being damaged by sulfur[3]. Sulfur removal is also sometimes used for digester gas which normally has higher H_2S levels than landfill gas.

There are several types of H_2S removal systems used for landfill or digester gas. The first type uses non-regenerable solid media consisting primarily of iron. The H_2S reacts with iron the form iron pyrite. The sorbent media is replaced when H_2S breakthrough occurs and must be disposed of by landfilling. These systems have relatively low capital costs, but are too expensive to operate where large amounts of sulfur must be removed, because operating costs are directly tied to the H_2S loading.

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[2] The Green Knight project in Pennsylvania is reported to have a limit of 6.6 ppmvd at 15% O_2 as methane, but the pound per hour limit corresponds to 10 ppmvd.

[3] As reported in the Background Document for Pennsylvania Department of Environmental Protection's General Permit for Landfill Gas-fired Simple Cycle Turbines.

Another system uses a hexahydrotriazine-based compound in an aqueous solution. The solution reacts with the sulfur and the spent liquid must be disposed of. This system is also not cost-effective for gas streams with high H_2S loading because of the non-regenerable nature of the reactants.

A third system uses a proprietary chelated iron liquid redox process that removes H_2S, converts it to elemental sulfur and regenerates the reagent. Although capital costs are higher than the other sulfur removal systems, this type of system is more suitable for the expected amount of H_2S that must be removed from the landfill gas for the proposed turbines. There are also other regenerable systems using similar iron-based chemistry.

Although the applicant has not finalized the design of the proposed sulfur removal system, it anticipates using a system with a regenerable iron-based reagent, because the non-regenerable systems are not practical for the gas flows and sulfur loading expected at the Central Landfill.

The only large-scale landfill gas sulfur removal system identified in the review of BACT/LAER sources is the one in Florida, which is reportedly meeting 150 ppmv. The applicant is proposing a system that will remove H_2S down to 100 ppmv, which it believes represents BACT for a large-scale landfill gas removal system.

4.1.4 Ammonia

Ammonia is emitted as a result of ammonia that is injected into the exhaust stream upstream of the SCR catalyst passing through the catalyst unreacted. This unreacted ammonia is referred to as ammonia slip. Some level of ammonia slip is necessary to achieve high NO_X removal efficiencies. However, permitted ammonia slip levels for natural gas-fired turbines has decreased over time with the increase in SCR operating experience and is typically limited to between 5 and 10 ppmvd at 15% O_2 for a natural gas-fired turbine. As SCR has never been successfully used in a landfill gas application, there is no comparable operating experience and such ammonia slip levels cannot be considered to have been demonstrated in practice for landfill gas-fired turbines.

One of the key concerns in using SCR with landfill gas is that, due to the presence of siloxanes, there is considerable uncertainty about catalyst life and performance, even with removal of most of the siloxanes using a pre-combustion treatment system. It is not known how quickly the catalyst will degrade, whether the decline in performance will be gradual or sudden, or if larger levels of excess ammonia will be required to achieve the desired NO_X removal efficiency as the catalyst degrades.

Given the lack of SCR operating experience with landfill gas and the uncertainty about catalyst performance, the applicant is proposing 20 ppmvd at 15% O_2 as BACT for ammonia.

4.1.5 Particulate Matter

Particulate matter emissions arise from incomplete combustion, particulate matter present in the combustion air, solid and condensable materials in the fuel gas, and formation of ammonium salts as result of reactions between sulfur oxides and ammonia used in the SCR system. Oxidation of siloxanes to silica may also contribute a minor amount to particulate emissions. ***Table 5*** lists particulate emission limits ranging from 0.017 lb/MMBTU to

0.042 lb/MMBTU. None of the particulate matter emission limits in ***Table 5*** is based on add-on control equipment. BACT guidance from various agencies (as listed in ***Table 6***) indicates that fuel gas treatment to remove particulate is BACT, with the Pennsylvania General Permit specifying an emission limit of 0.0232 lb/MMBTU.

The applicant is proposing fuel gas pre-treatment in accordance with the requirements of 40 CFR 60, Subpart WWW, which requires filtration of the fuel gas. This is equivalent to the BACT Guidance in ***Table 6***. Furthermore, the applicant is proposing to install a treatment system to remove siloxanes which would minimize formation of silica, a minor component of particulate matter emissions. One complication is the proposed use of SCR. SCR catalysts increase the conversion rate of SO_2 to SO_3 and ammonia reacts with the SO_3 to form ammonium salts. The applicant is also installing a system to remove sulfur from the landfill gas prior to combustion, which will minimize, but not eliminate, the additional particulate emissions attributable to the formation of these salts. Thus, the applicant is implementing all possible measures to minimize the formation of particulate matter.

Since none of the listings in ***Tables 5 and 6*** contemplate the use of SCR, none of the specific emission limits listed in ***Table 5 or 6*** is directly applicable to this project. Solar has indicated that it is willing to provide an emissions warranty of 0.021 lb/MMBTU for the turbines themselves. Formation of particulate matter in the exhaust from the reactions of sulfur oxides is dependent on the conversion of SO_2 to SO_3, and subsequent reactions of SO_3 with H_2O and ammonia to create ammonium bisulfate ($(NH_4)HSO_4$) and ammonium sulfate ($(NH_4)_2SO_4$). The use of SCR is estimated to increase particulate emissions by 0.0028 lb/MMBTU. On this basis, the applicant is proposing 0.0238 lb/MMBTU as BACT.

4.1.6 HCl

HCl is a secondary pollutant arising from the small amount of chlorinated compounds present in landfill gas, including chlorinated solvents and refrigerants. In the combustion process the chlorine in the landfill gas is converted to HCl. For the purposes of estimating emissions, it is assumed that 100 percent of the chlorine present in the landfill gas is converted to HCl. No emission limits, BACT/LAER determinations, policies or guidance documents relative to HCl emissions from the combustion of landfill gas were found in the BACT/LAER review. Due to the low HCl concentration and high volume of exhaust gas generated by turbines, add-on controls for HCl are not feasible.

5.0 ALTERNATIVES ANALYSIS

The siting, size, processes, and environmental controls of the Central Landfill are necessitated by the waste management needs and limitations of the State of Rhode Island. Because the Central Landfill serves the waste disposal needs of most of the municipal and commercial solid waste generators in Rhode Island, the size of the landfill is determined based upon the quantity of waste requiring disposal in the state. Under the requirement of 40 CFR 60, Subpart WWW, all landfill gas collected at the Central Landfill must be combusted or treated for subsequent use as fuel. Therefore, all landfill gas collected at the Central Landfill must be combusted eventually, either on or off site. Furthermore, the operator of the Central Landfill, RIRRC, has an obligation to provide sufficient gas control on site to insure that all collectible landfill gas will be treated.

RIAPC Regulation 9.4.2(e) requires that the applicant provide an analysis of alternative sites, sizes, processes, and environmental control techniques to demonstrate that the benefits of the proposed modification significantly outweigh the environmental and social cost imposed as a result of its location, construction, or modification. Because the proposed facility is functionally equivalent to the required air pollution control equipment for the Central Landfill, the consideration of alternatives is reduced to the following issues: the appropriateness of energy recovery versus flares for pollution control, the size of the facility, and the technology used for energy recovery (i.e., engines vs. turbines). These issues are discussed separately below.

5.1 ALTERNATIVE ENVIRONMENTAL CONTROLS AND PROCESSES

For the purpose of this application, alternative environmental controls were interpreted as the use of dedicated control equipment rather than electric generation equipment for the control of landfill gas from the Central Landfill. For the same gas control capacity, dedicated gas control equipment provides more flexible operation, comparable or higher control efficiency and lower secondary emissions of NO_X and CO. For these reasons, dedicated control equipment is part of the gas management strategy at most landfill sites, including those that utilize power generation equipment for landfill gas control. The advantages of generating power from landfill gas rather than merely combusting it in dedicated control equipment, however, are considerable.

First, generating power from landfill gas displaces the need for power generated from other sources. The displaced power would typically be generated by the combustion of fossil fuels, which contribute air pollutant emissions of their own. Depending on the type of equipment that is used, the displaced pollutant emissions may be greater or less than the pollutant emissions of the landfill gas-fired equipment. Furthermore, fossil fuels are non-renewable resources, and the use of alternate fuels such as landfill gas conserves this resource. In fact, there is currently a premium being paid for electricity generated from landfill gas because it is considered a renewable energy source.

Second, the cost of the gas control equipment that generates a useful product, electricity, is borne by the project developers rather than RIRRC, a public agency. This assists in minimizing refuse disposal costs in Rhode Island.

Third, through royalty payments made by the applicant, the electric power generated creates a revenue stream for RIRRC, further offsetting the cost of gas control and minimizing refuse disposal costs in Rhode Island.

Other types of beneficial uses of landfill gas that have been explored by RIRRC over the years include the use of landfill gas for fuel by nearby industrial sources, treating the gas for distribution in natural gas pipelines, or selling the gas for use in the FPL power plant adjacent to the Central Landfill. None of these options is considered economically feasible at the present time.

Power is generated from landfill gas primarily by the use of combustion turbines or reciprocating engines. Turbines offer lower NO_X emissions than reciprocating engines in most cases, with turbine NO_X emissions typically being about 20 to 25 percent lower than NO_X emissions from engines. This is particularly true for this project because approximately one quarter of the power generated will be from steam generated from recovered heat. For example, a single one of the proposed turbines operating in simple cycle mode will produce approximately 1.17 pounds of

NO_X per megawatt hour of power produced (lb/MW-hr), compared to 1.54 lb/MW-hr for the existing Caterpillar 3250 engines. In combined cycle mode, with five turbines operating, the NO_X emission rate is 0.87 lb/MW-hr.

Reciprocating engines offer greater flexibility in scheduling maintenance because they are available in smaller unit sizes, have lower capital costs, and lower overall operating costs per unit. However, in this case, it is more economical to use turbines due to the amount of gas available. Turbines are available in much larger sizes than reciprocating engines, so fewer units can be used, thus reducing capital, maintenance, and operating costs. Furthermore, turbines can be used in a combined cycle system, which generates more power from the same amount of fuel by using waste heat for electric generation.

5.2 ALTERNATE SIZES

Sizing of the proposed facility is dependent on the need for gas control, the long-term availability of gas, the availability of capital to develop the project, the market for the generated power, and the economic benefit to the State of Rhode Island. At present, there is a high demand for electricity generated from renewable energy resources, with a market premium being paid for such electricity. In this environment, sufficient capital is available to develop the project. The generation of electricity provides economic benefits in the form of royalty payments to RIRRC, which accrue to the State of Rhode Island in the form of lower disposal costs and direct payments to the Rhode Island General Fund. Because of these benefits, the primary determinant of the size of the project is the availability of a reliable supply of gas. Based on current gas projections for Phases V and the proposed Phase VI landfills, the project has been sized for five combustion turbines, with a steam turbine for combined cycle generation. The modular design of the project allows for future expansion, should the markets for renewable power and the availability of gas make a larger plant feasible in the future. Furthermore, a larger facility allows the use of a combined-cycle system, wherein waste heat is used to generate additional electricity. No additional fuel is used to generate this electricity, thereby reducing emissions on a lb/MW-hr basis.

6.0 COMPLIANCE WITH APPLICABLE REQUIREMENTS

6.1 STATE REGULATIONS

The proposed CTCC facility will be subject to the following state regulations:

- The opacity limitations of Regulation 1. The turbines will fire landfill gas, a relatively easily combusted fuel with essentially no ash, and no difficulty in meeting this opacity standard is anticipated;
- The prohibitions on emissions harmful to persons or property and objectionable odors in Regulations 7 and 17. As control equipment for the landfill gas emissions for the Central Landfill, the proposed gas treatment system and turbines will actually assist the Central Landfill in meeting its obligations under these regulations;
- The fuel sulfur limitations in Regulation 8 of 0.55 lb/MMBTU. At a sulfur content of 100 ppm after treatment, the landfill gas at the Central Landfill is equivalent to a sulfur content of 0.017 lb/MMBTU (See ***Appendix B*** for supporting calculations);

- Certain permitting requirements under Regulation 9, which are described above in Section 3;
- The recordkeeping and reporting requirements of Regulation 14;
- Certain requirements under Regulation 22, which have been addressed in the ambient impact assessment described in ***Section 7*** below;
- The operating permit fees in Regulation 28; and
- The operating permit requirements of Regulation 29.

Although not specifically exempted, it is apparent that RIAPC Regulation 20 was not intended to be applicable to landfill gas-fired equipment functioning as control equipment. This is consistent with RIDEM's interpretation for the purposes of Ridgewood's Title V Operating permit for the existing facilities.

The proposed facility is not a NO_X budget source as defined in RIAPC Regulations 38 and 41, because it will not fire fossil fuels.

6.2 FEDERAL REGULATIONS

6.2.1 New Source Performance Standards

The applicant proposes to install a gas treatment process that filters, dewaters, and compresses the landfill gas prior to combustion in the proposed turbines. Landfill gas treatment is one of the landfill gas control options allowed under the New Source Performance Standard for municipal solid waste landfills at 40 CFR 60.752(b)(2)(iii)(C).

Therefore, the portions of the proposed treatment system that are needed to filter, dewater, and compress the gas to meet the treatment standard for 40 CFR 60.752(b)(2)(iii)(C) will be subject to the New Source Performance Standard for municipal solid waste landfills contained in 40 CFR 60, Subpart WWW. The proposed turbines, which will combust treated landfill gas and those portions of the treatment system unrelated to NSPS compliance will not be subject to Subpart WWW.

The proposed turbines will be subject to the New Source Performance Standard (NSPS) for stationary combustion turbines that commence construction, reconstruction, or modification after February 18, 2005 (40 CFR 60, Subpart KKKK).

As new turbines firing fuels other than natural gas and having a heat input rate of greater than 50 MMBTU/hr, but less than 850 MMBTU/hr each, each proposed turbine is subject to a NO_X standard of 74 ppm NO_X at 15% O_2 or 3.6 lb/ MW-hr of useful output (Table 1 to Subpart KKKK). In order to demonstrate continuous compliance, Ridgewood will perform annual NO_X emissions testing.

The turbines must either combust fuel with potential SO_2 emissions of 0.06 lb/MMBTU or less, or must meet an SO_2 standard of 0.9 lb/MW-hr of gross output (40 CFR 60.4330(a)). The applicant proposes to meet the fuel-based SO_2 limit by treating the gas to remove sulfur down to a concentration of 100 ppm as H_2S. However, the proposed turbines are also expected to be able to meet 0.9 lb/MW-hr in the simple-cycle mode (i.e., without consideration of the electric output from the steam turbine). The total sulfur content of the fuel must be monitored. Ridgewood intends to submit a proposed monitoring schedule prior to startup.

6.2.2 National Emissions Standards for Hazardous Air Pollutants

The Ridgewood-operated facilities will not be a major source of HAP emissions and, therefore, are not subject to National Emissions Standards for HAPs for Source Categories (MACT standards, 40 CFR 63) except that the gas treatment system is subject to certain requirements related to the MACT standard for landfills (40 CFR 63, Subpart AAAA), including the requirement to prepare a Startup, Shutdown and Malfunction Plan. With respect to the turbines, even if the facility were to become a major source of HAPs in the future, combustion turbines using landfill gas for fuel are subject only to certain recordkeeping and reporting requirements under 40 CFR 63, Subpart YYYY.

6.2.3 Accidental Release Prevention

The proposed CTCC facility will utilize aqueous ammonia (19 percent by weight) for the SCR system. Therefore, the facility is subject only to the general duty clause of 40 CFR 68. The effective capacity of the storage tank is expected to be 8,000 gallons.

6.2.4 Acid Rain Program

The proposed CTCC facility is not an acid rain affected source because it does not combust fossil fuels, and therefore it is not subject to any of the acid deposition control requirements contained in 40 CFR 72, 73, 75, 76, or 77.

6.2.5 Ozone Depleting Substances

The proposed facility will not include any manufacturing operations and, therefore, is not subject to the manufacturing and use restrictions and labeling requirements for ozone-depleting substances contained in 40 CFR 82, Subparts A, C and E. Ridgewood will not service motor vehicle air conditioning or space cooling air conditioning units, but these activities may be performed on site by outside contractors using certified technicians.

7.0 AMBIENT IMPACT ASSESSMENT

7.1 GENERAL APPROACH

The ambient impacts of criteria pollutants and TAPs regulated under RIAPC Regulation 22 were assessed using United States Environmental Protection Agency's (USEPA's) AERMOD model, which is able to account for a variety of source types, building downwash effects in both the cavity and wake regions, and the effects of elevated terrain. Details of the modeling methodology are described in the following sections.

Criteria pollutant emissions were modeled for all landfill gas control devices at the Central Landfill, the Ridgewood facilities, and the main steam boiler at the administration building of the Central Landfill. Combustion devices classified as insignificant activities or emergency generators were not included in the modeling. Based on discussions with the Office of Air Resources, the only off-site interactive source is the FPL power plant located adjacent to and southeast of the Central Landfill. This facility was also included in the modeling.

For the purpose of determining compliance with PSD allowable increments, all modeled sources at the Central Landfill, the RPPP facility, the FPL facility, and the proposed RRIG facility were assumed to have been installed after the baseline date and were counted as consuming increment.

For the purpose of modeling TAPs that are landfill gas constituents and that are normally destroyed in the combustion process, methane was modeled as a surrogate, and the methane modeling results were proportioned based on the emission rates of individual constituents relative to methane. Mercury, which is not destroyed in the combustion process, and HCl, which is created in the process of combusting landfill gas, were modeled individually. Emissions of pollutants that are emitted only from the turbines, such as ammonia, were modeled using a unit emission rate that was multiplied by the actual emission rate.

The proposed CTCC facility, the Stage 1 facility, and the Stage 2 facility each consists of multiple units with identical stack parameters. Each of these sources was modeled as a centrally located, single stack to simplify the modeling.

7.2 WORST-CASE LOAD

Worst-case load for the turbines was evaluated by modeling the turbines for various load conditions using AERMOD with five years of meteorological data. The receptor grid consisted of a polar grid with receptors at each 10º radial at distances of 25, 50, 75, 100, 150, 200, 250, 300, 350, 400, 500, 600, 700, 800, 900, 1000, 1200, 1400, 1600, 1800, and 2000 meters. To simulate the various load conditions, the exhaust flow and emission rate were varied to correspond to 100 percent, 80 percent, 70 percent, 60 percent, and 50 percent of the full load condition at an ambient temperature of 0º F. Results of this evaluation are summarized in ***Table 7***, with detailed results provided in ***Appendix C***. Based on the results of this evaluation, worst-case load is the 100 percent load condition for all averaging periods. Worst-case load for other sources was based on the worst-case load analysis performed for previous modeling studies, with the worst-case being the 100 percent load condition, except for the Central Landfill's ULE flare (50 percent load) and the Stage 1 engines (75 percent load).

7.3 SIGNIFICANT IMPACT AREA

The significant impact area was determined by modeling turbines at the full load condition corresponding to 0ºF ambient temperature. The significant impact area was determined by the area within a radius corresponding to the furthest distance at which the second high concentration (short-term) or high concentration (annual) exceeded the significant impact level. The significant impact levels, ambient impacts of the proposed turbine, and radius of impact are presented in ***Table 8***. The radius of impact ranges from zero for CO (no significant impact) to 1.2 kilometers for NO_2. The modeling results for NO_2 reflect a default NO_2/NO_X ratio of 75 percent, in accordance with guidance in 40 CFR 51, Appendix W.

7.4 SOURCE CHARACTERISTICS

Source parameters for modeling of landfill gas sources are presented in ***Table 9.*** For toxic air pollutants, only the emissions from the Ridgewood facilities were modeled, consistent with RIDEM policy.

Sources combusting landfill gas (turbines, flares, and engines) were modeled as point sources. Utility flares were modeled with AERMOD using the default parameters generated by the SCREEN3 model (see ***Appendix B***).

Diesel-fired grinding equipment operated by RIRRC is limited to a combined total annual fuel usage of 50,000 gallons per year, and operation of the equipment is limited to the hours of 6:00 A.M. to 5:00 P.M. under the Host Community Agreement between RIRRC and the Town of Johnston. The hour-of-day emissions factor option of the AERMOD model was used to account for the limited daily schedule.

7.5 MODEL OPTIONS

A refined modeling analysis was completed using the AERMOD model with five years of meteorological data. The AERMOD model allows for several control options with respect to modeling conditions. The modeling completed in this analysis utilized the regulatory default options. Direction-specific building dimensions from the BPIP-Prime output were included in the modeling to account for building wake downwash. Urban dispersion co-efficients were used based on guidance from RIDEM. The surface roughness input was 1.0 and the metropolitan population was input as 1,612,989 based on 2006 census projections.

7.6 RECEPTORS

Access to the Central Landfill is restricted. For the purposes of both the air toxics and the criteria pollutant modeling, the Central Landfill site boundary was considered the compliance boundary.

Receptors were placed at 10-meter intervals along the property boundary. A main polar grid of receptors was placed at distances of 25 meters out to 1000 meters, 100 meters out to 5000 meters at 500 meters out to 6000 meters. A supplemental polar grid centered on the Ridgewood Stage 2 plant was also included, with receptors at distances of 25 meters out to 1000 meters was added, also excluding receptors within the Central Landfill. All polar receptors were placed at 10 degree radial intervals. A graphic representation of the inner portion of the receptor network is presented in ***Figure 3***.

The modeling domain boundaries and required U.S. Geologic Survey (USGS) quadrangles for the receptor network were then calculated using Beeline Software's BEEST program, which uses the 10 percent slope criterion required by USEPA's AERMAP terrain processor to identify quadrangles that must be included in the modeling. The domain was calculated based on a preliminary 10 kilometer radius receptor grid around the proposed facility. The calculated domain is included within nine USGS quadrangles. Because the grid of the USGS quadrangles is not aligned exactly with the Universal Transverse Mercator (UTM) coordinates used for the modeling, the calculated domain was nudged slightly to fall within the boundaries of these nine USGS quadrangles.

The Digital Elevation Model (DEM) data for 7.5-minute units correspond to the USGS 1:24,000 and 1:25,000 scale topographic quadrangle map series for all of the United States and its territories. Each 7.5-minute DEM is based on 30- by 30-meter data spacing with the UTM projection. Each 7.5- by 7.5-minute block provides the same coverage as the standard USGS 7.5-minute map series. The DEM data for the nine quadrangles used in the model are referenced to the 1927 horizontal datum (NAD27).

Elevations and hill heights for the receptors in the Cartesian grids were calculated by AERMAP using DEM data files for the nine USGS quadrangles.

7.7 METEOROLOGICAL DATA

AERMOD refined modeling was completed using five years of surface meteorological data from Providence, Rhode Island and the corresponding upper air data from Chatham, Massachusetts.

For criteria pollutants, data for years 1986 through 1990 were used. This period was selected because it was the most recent contiguous five-year period for which SAMSON met data was available. 40 CFR 51, Appendix W prescribes five contiguous years of meteorological data.

For toxic air pollutants, five years of non-contiguous data, years 1972, 1976, 1980, 1984, and 1988 were used based on RIDEM's current requirements for modeling toxic air pollutants.

The meteorological data was pre-processed using USEPA's AERMET preprocessor. In addition to meteorological data, AERMET requires certain information to determine the boundary layer characteristics in the vicinity of the modeling site. The data include albedo, Bowen ratio and surface roughness.

For the Central Landfill site, the land use types within 3,000 meters of the center of the site were characterized for each of four quadrants (NE, SE, SW, and NW) using USGS quadrangles and aerial photographs. Albedo, Bowen ratio and surface roughness values were assigned for each quadrant and each season based on the values found in Tables 4-1, 4-2b, and 4-3 of the *AERMET User's Guide*. The boundary layer characteristics used with AERMAP are presented in ***Appendix D***.

Additional inputs to the AERMET program included selection of the randomizing option for wind direction data and the wind measurement height of 6.1 meters.

7.8 EMISSION RATES

7.8.1 Air Toxics

Landfill gas is generated as a result of the anaerobic decomposition of organic wastes in the landfill. The gas consists primarily of methane and carbon dioxide, but also includes ethane, nitrogen, oxygen, water and a variety of VOC, TAPs, and HAPs that are present in low concentrations. The VOC, HAPs and TAPs are emitted from materials disposed of at the landfill and are generally not the result of anaerobic decomposition.

Landfill gas emissions are controlled by collecting the gas in extraction wells and horizontal collectors and piping it to electric generation equipment operated by Ridgewood Power Management or to landfill gas flares.

Point source emissions were modeled at the potential emissions level of each device. This would tend to overestimate pollutant impacts considering that the actual amount of landfill gas available for combustion in any given year is significantly less than the design capacity of the devices.

Methane was modeled as a surrogate for most toxic air pollutants. For these constituents, the methane modeling results were proportioned based on the emission rate of each constituent relative to methane (See ***Table 3***). Mercury, HCl, and ammonia were modeled separately.

Toxic air pollutant modeling parameters and emission rates used in the modeling are presented in ***Table 9***. Supporting calculations are presented in ***Appendix B***.

7.8.2 Criteria Pollutant Emissions

Criteria pollutant emission rates and modeling parameters are also included in ***Table 9***. Criteria pollutant emission rates (and stack parameters, where necessary) for most emissions sources located at the Central Landfill were obtained from the *Revised Title V Operating Permit Application* for the Central Landfill (November 2000). Emission rates for diesel-fired grinding equipment were based on the maximum hourly emissions rates of the current equipment, except for NO_X emissions, which were based on the 50,000-gallon annual fuel limit annualized over 4,015 hours per year (11 hours per day).

Supporting data and calculations are provided in ***Appendix B***.

It should be noted that the emissions rates and modeling results for the Central Landfill's ULE flare reflect a maximum sulfur concentration of 100 ppmv, which is substantially lower than the sulfur concentration measured in recent tests. This is based on the ULE flare combusting landfill gas that has been treated in the sulfur removal process.

Emission rates, stack, and building parameters for the FPL facility were obtained from *Application for Approval of Plans for the Hope Energy Project* (July 1998), and were based on the 100 percent load condition at an ambient temperature of 50° F.

7.9 GOOD ENGINEERING PRACTICE STACK HEIGHT

Good engineering practice (GEP) stack height is the minimum stack height that would prevent the exhaust plume from becoming entrained in the turbulent wake created by nearby buildings or obstructions. For stack heights that are less than GEP, the plume may be affected by the wake region, possibly resulting in higher ground level concentrations as the plume is more rapidly mixed to the ground. To model stacks less than GEP height, direction-specific building dimensions are included in the modeling. These dimensions are then utilized to modify the dispersion parameters in the model to account for the building/obstruction wake effects. Stacks that are greater than GEP height will not be influenced by the building and, therefore, direction-specific building dimensions are not required by the model. Stacks that exceed both GEP height and 65 meters are treated as a prohibited dispersion technique and cannot be accounted for in the ambient impact assessment. In such cases the stacks are modeled as if they were 65 meters tall.

The proposed CTCC facility will include a 20-foot high building, a 25-foot-high cooling tower, and individually enclosed turbine and HRSG units that are also up to 20 feet high. The turbines and HRSGs will not be enclosed in a building. Based on these structure heights, the proposed stack height of 75 feet meets GEP. However, because other emission units have stack heights that are less than GEP, building dimensions must still be input to the model.

The Beeline Software version of EPA's Building Profile Input Program for the PRIME downwash algorithm (BPIP-PRIME) was used to calculate the GEP stack height and the direction-specific building dimensions required for input into the AERMOD model. BPIP-PRIME requires the input of building dimension and stack parameters and calculates the GEP stack height for 36 separate wind directions (i.e., every 10 degrees). These dimensions, as calculated by the BPIP-PRIME program, are presented in ***Appendix E***.

7.10 BACKGROUND DATA

Background air quality data to represent area sources that were not included in the modeling were obtained from the Aerometric Information Retrieval System (AIRS) for the three most recent years for which data is available, 2004 through 2006, and are presented in ***Appendix F***. Background concentrations were based on the highest, second high short-term concentrations or the highest annual concentrations measured at any site in Rhode Island within the selected period.

7.11 AMBIENT AIR MONITORING WAIVER

Under the PSD program, pre-construction air monitoring can be required for pollutants for which the project results in a significant net emissions increase, depending on the predicted ambient impacts of the proposed facility and the availability of representative monitoring data to assure compliance with the NAAQS and PSD allowable increments.

Air monitoring is not required if the emissions increase from the new or modified stationary source will not result in impacts exceeding certain levels as listed in RIAPC Regulation 9.5.2(b)(2)(d). Ambient impacts for the proposed turbines are compared to the applicable monitoring waiver concentrations in ***Table 10***. From the data presented in ***Table 10***, monitoring is not required for SO_2, CO, NO_2, Hg, H_2S, and vinyl chloride.

With respect to PM_{10}, adequate monitoring data is available from Rhode Island's existing air monitoring network to assure that compliance with NAAQS and PSD allowable increments can be determined. Monitoring data for calendar years 2004 through 2006 are summarized in ***Appendix F***. PM_{10} monitoring sites in and around Providence provide a conservative background concentration for the project site, which is on the suburban fringe of the Providence metropolitan area.

7.12 MODELING RESULTS

Detailed listings of modeling results are provided in ***Appendix G***. The results are summarized below.

7.12.1 Criteria Pollutants Modeling Results

The results of the increment consumption analysis are presented in ***Table 11***. The analysis included SO_2, PM_{10}, and NO_2. There are no increment limits for CO.

The results presented in ***Table 11*** indicate that the impacts are below the allowable PSD increments. Because the facility is a major modification for NO_X, SO_2 and CO, the increment consumed by the proposed modification is further limited by RIAPC Regulation 9 to 25 percent of the remaining increment annual increment and 75 percent of the remaining 24-hour increment for each of these pollutants. The proposed modification meets these requirements as well.

A comparison of the predicted ambient impacts with the National Ambient Air Quality Standards (NAAQS) is presented in ***Table 12***. The results indicate that the predicted ambient impacts from background and point sources do not exceed any applicable NAAQS.

The ambient impact assessment, as presented in ***Tables 11 and 12*** indicates that the proposed CTCC facility will not cause or contribute to a violation of any NAAQS or PSD allowable increment.

7.12.2 Air Toxics Modeling Results

Results of the air toxics modeling for the constituents of landfill gas, HCl, and ammonia are presented in ***Table 13***. Ambient impacts from the Ridgewood facilities are less than 2 percent of the applicable Ambient Air Limits (AALs) for all toxic air pollutants.

8.0 ADDITIONAL IMPACTS ANALYSIS FOR PSD

8.1 VISIBILITY IMPACTS

RIAPC Regulation 9 requires a review of impacts on visibility. In accordance with RIDEM's "Guidelines for Assessing the Welfare Impacts of Proposed Air Pollution Sources," the assessment of impacts must be performed using the screening procedures in *Workbook for Plume Visual Impact Screening and Analysis* (EPA 1988). This document outlines a visibility screening procedure for Class I areas.

The visibility screening analysis of the new landfill gas power plant was performed using USEPA's VISCREEN model. The model assesses plume contrast (C_p) and plume perceptibility (ΔE) against sky and terrain backgrounds based on NO_2 and particulate matter emissions. Particulate matter scatters or absorbs light and NO_2 absorbs light. These pollutants may increase or decrease the contrast of the plume against a background. VISCREEN calculates contrast at three wavelengths within the visible spectrum for two different sun angles.

A Level 1 visibility assessment was performed for the nearest Class I area, the Lye Brook Wilderness area in Vermont, located approximately 190 kilometers northwest of the project site. If visibility impacts meet the Level 1 screening criteria, then visibility impairment is not expected and no further analysis is necessary. The Level 1 screening criteria are $\Delta E \leq 2.0$ and $C_p \leq 0.05$.

Emission rates used in the VISCREEN analysis represent the maximum emission rate of the proposed new landfill gas-fired power plant. The results of the visibility screening indicate that no visibility impairment in the closest Class I air quality area is expected as a result of the project. The VISCREEN summary output is provided in ***Appendix H***.

8.2 SOILS AND VEGETATION IMPACTS

The PSD program requires a review of impacts on sensitive vegetation and soils. In accordance with RIDEM's "Guidelines for Assessing the Welfare Impacts of Proposed Air Pollution Sources," the assessment of impacts must be performed using the screening procedures and concentrations in *A Screening Procedure for the Impacts of Air Pollution on Plants, Soils, and Vegetation* (USEPA, 1980).

In addition, because the referenced document contains no screening levels for ammonia, a screening level for ammonia was identified based on an internet search. The ammonia screening levels were based on the Critical Exposure Levels for ammonia as reported by S. Krupa in "Effects of Ammonia on Terrestrial Vegetation" at the Ammonia Workshop held in conjunction with the annual meeting of the National Atmospheric Deposition Program, December 2003.

The screening concentrations in the referenced procedure are equivalent to or less stringent than the NAAQS and PSD allowable increments for annual NO_2, 24-hour SO_2 and the 1- and 8-hour CO concentrations. Results of the evaluation for other pollutants and averaging times are presented in ***Table 14***.

As indicated in ***Table 14***, the predicted annual SO_2 concentration exceeds the screening concentration of 18 µg/m^3. However, it should be noted that the background concentration alone is at the screening level. Furthermore, the SO_2 impacts presented in ***Table 14*** represent the impacts after treatment of the landfill gas to remove sulfur. Since all landfill gas must be combusted in a flare if not combusted for power generation, and sulfur is not currently being removed from the landfill gas, the proposed CTCC facility is expected to actually reduce overall SO_2 impacts rather than increase them. Therefore, the project is expected to have a positive benefit to vegetation with respect to SO_2.

The proposed turbines will combust pre-treated landfill gas, and deposition of any metals is not associated with the combustion of this fuel. Therefore, deposition impacts were not further evaluated.

8.3 GROWTH

The proposed facility will have minimal growth impact. The facility will be operated by Ridgewood, which already operates the three existing power generation facilities at the site. The existing RPPP facility will be removed. Based on the type of equipment at the proposed CTCC facility, Ridgewood's current work force at the site, and the removal of the RPPP facility, no increase in the permanent workforce is expected as a result of the project.

The facility will consist of turbines pre-installed in modular enclosures. As a result, the intensity and duration of construction activity is also expected to be minimal. The peak construction workforce is expected to be less than 50 workers, and the duration of construction activity is expected to be less than 1.5 years.

The project is located within the Providence metropolitan area and within 50 miles of Boston. Both metropolitan areas support well-developed housing markets and possess an ample supply of construction workers and skilled tradesmen. Therefore, both the construction and operation of the plant can be supported within the existing housing and labor markets.

Based on the relatively small projected peak construction force, the small increase in the permanent work force, and the size and diversity of the region's housing and labor markets, no impact on local housing markets is expected to occur as a result of the project and no impact on the area's commercial, industrial, or transportation infrastructure is anticipated as a result of the project.

9.0 COMPLIANCE CERTIFICATION

RIAPC Regulation 9 requires that the applicant for a non-attainment NSR permit certify that all of its Rhode Island facilities, including any that are under common control with the applicant, are in compliance with all applicable state and federal air pollution rules and regulations. This certification is included below:

On behalf of Rhode Island Central Genco, LLC, I certify that, to the best of my knowledge, all facilities owned or operated by Rhode Island Central Genco, LLC are in compliance with all state and federal air pollution rules and regulations under the Clean Air Act and federally enforceable compliance schedules.

____
Signature

____
Printed Name

____
Title

____
Date

10.0 EMISSIONS OFFSETS

Emissions offsets are required for each non-attainment pollutant for which there is a significant net emissions increase. The offsets must be provided at a ratio of 1.2 to 1. The proposed CTCC facility will be a major modification for NO_X and VOC. The net NO_X emissions increase for the CTCC facility will be 93.64 tons per year, which accounts for an emissions reduction of 65.46 tons per year attributable to the removal of the RPPP plant. Based on a net NO_X increase of 93.64 tons per year, 113 tons of NO_X offsets are required.

The net VOC emissions increase for the CTCC facility will be 28.11 tons per year, which accounts for an emissions reduction of 11.80 tons per year attributable to the removal of the RPPP plant.

The applicant has not yet identified the source of offsets for this project, but will identify federally enforceable offsets prior to the issuance of the permit.

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TABLES

TABLE 1
PROJECT DATA

Rhode Island Central Genco, LLC
Johnston, Rhode Island

PARAMETER	VALUE
Turbines (5)	
Heat Input Rating at 0º F Ambient (per turbine)	80.04 MMBTU/hr
Heat Input Rating at 40º F Ambient (per turbine)	73.12 MMBTU/hr
Electrical Output at 0º F (per turbine)	6.9 MW
Electrical Output at 40º F (per turbine)	6.2 MW
HRSG (5)	
Steam Output	25,000 pph @ 350 psig
Steam Turbine Generator	
Electric output	11 MW
Stacks (5)	
Base Elevation	310 ft above MSL
Height	75 feet above ground level
Exit Diameter	4.0 feet
Exit Temperature	250- 380 F
Exhaust Flow Rate at 0º F Ambient (per stack)	61,556 acfm

TABLE 2
EMISSION FACTORS AND EMISSION RATES FOR PROPOSED COMBINED CYCLE TURBINE PLANT

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Emissions Basis	Emission Rate Per Turbine (lb/hr)	Emission Rate for Five Turbines (lb/hr)	Emission Rate for Cooling Towers (lb/hr)	Annual Emissions for CTCC Facility[4] (tons/yr)
NO_X[1]	25 ppmvd@ 15% O2	7.95	39.76	-	159.1
CO[1]	200 ppmvd @ 15% O_2 at 90% load	34.86	174.29	-	697.4
PM_{10}	0.021 lb/MMBTU + 4% conversion to Ammonium salts	1.90	9.52	0.28	39.3
SO_2	100 ppmv as H_2S in LFG	2.70	13.51	-	54.1
VOC[1]	20 ppmvd @ 15% O_2 as methane at 90% load	1.99	9.97	-	39.9
NH_3	20 ppmvd@ 15% O_2	2.35	11.77	-	47.1
H_2S	100 ppmv in LFG	0.03	0.14	-	0.6
Hg	2.92×10^{-4} ppmv in LFG	2.47E-05	0.00012	-	0.00049
HCl[2]	12.59 ppm in LFG	0.197	0.98	-	3.9

Notes:
1. NO_X, CO, and VOC emissions are based on manufacturer's warranties.
2. HCl emission levels are based on landfill gas characteristics and may vary. Landfill gas characteristics are beyond Ridgewood's control.
3. Hourly emissions are based on a heat input rating of 80.04 MMBTU/hr per turbine at 0ºF.
4. Annual emissions for turbines are based on 8,760 hours of annual operation at an annual average heat input rating of 73.12 MMBTU/hr per turbine.
5. Supporting calculations are provided in Appendix B.

TABLE 3
TOXIC AIR POLLUTANT EMISSIONS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	CAS Number	HAP	TAP	Mol. Weight	Conc. in Gas (ppm)	Proposed Turbines		Stage 1 Engines		Stage 2 Engines		Total Annual Emissions (tons/yr)
						Hourly Emission Rate (lb/hr)	Annual Emission Rate (tons/yr)	Hourly Emission Rate (lb/hr)	Annual Emission Rate (tons/yr)	Hourly Emission Rate (lb/hr)	Annual Emission Rate (tons/yr)	
Landfill Gas Consumption (scf/hr)						800,400	731,200	49,204	49,204	121,903	121,903	-
Destruction Efficiency						98%	98%	98%	98%	98%	98%	-
Methane	NA			16.03	500,000	338.1	1352.8	20.8	91.0	51.5	225.5	1669.4
1,1 Dichloroethane	75-34-3	x	x	98.97	0.22	0.0009	0.0036	0.0001	0.0002	0.0001	0.0006	0.0045
1,4-Dichlorobenzene	106-46-7	x	x	147.01	0.21	0.0013	0.0052	0.0001	0.0004	0.0002	0.0009	0.0064
2-Propanol	67-63-0		x	60.11	6.13	0.0155	0.0622	0.0010	0.0042	0.0024	0.0104	0.0767
Acetone	67-64-1		x	58.08	18.70	0.0458	0.1833	0.0028	0.0123	0.0070	0.0306	0.2262
Benzene	71-43-2	x	x	78.11	1.20	0.0040	0.0158	0.0002	0.0011	0.0006	0.0026	0.0195
Carbon Disulfide	75-15-0	x	x	76.14	3.39	0.0109	0.0436	0.0007	0.0029	0.0017	0.0073	0.0538
Chlorodifluoromethane	75-45-6		x	86.47	3.06	0.0112	0.0447	0.0007	0.0030	0.0017	0.0074	0.0551
cis-1,2-Dichloroethene	156-59-2		x	96.94	0.55	0.0022	0.0090	0.0001	0.0006	0.0003	0.0015	0.0111
Cyclohexane	110-82-7		x	84.16	2.12	0.0075	0.0301	0.0005	0.0020	0.0011	0.0050	0.0372
Ethylbenzene	100-41-4	x	x	106.16	6.67	0.0299	0.1195	0.0018	0.0080	0.0045	0.0199	0.1475
Hexane	110-54-3	x	x	86.17	3.49	0.0127	0.0508	0.0008	0.0034	0.0019	0.0085	0.0626
Methylene Chloride	75-09-2	x	x	89.94	0.57	0.0022	0.0087	0.0001	0.0006	0.0003	0.0014	0.0107
Methylethyl Ketone	78-93-3		x	72.11	9.63	0.0293	0.1172	0.0018	0.0079	0.0045	0.0195	0.1446
Methylisobutyl ketone	108-10-1	x	x	100.16	0.77	0.0033	0.0130	0.0002	0.0009	0.0005	0.0022	0.0161
Styrene	100-42-5	x	x	104.20	0.66	0.0029	0.0116	0.0002	0.0008	0.0004	0.0019	0.0143
Tetrachloroethene	127-18-4	x	x	165.83	0.87	0.0061	0.0244	0.0004	0.0016	0.0009	0.0041	0.0301
Toluene	108-88-3	x	x	92.13	32.47	0.1262	0.5049	0.0078	0.0340	0.0192	0.0842	0.6231
Trichloroethene	79-01-6	x	x	131.40	0.49	0.0027	0.0109	0.0002	0.0007	0.0004	0.0018	0.0134
Trichlorofluoromethane	75-69-4		x	137.38	1.56	0.0090	0.0362	0.0006	0.0024	0.0014	0.0060	0.0446
Vinyl Chloride	75-01-4	x	x	62.47	0.68	0.0018	0.0072	0.0001	0.0005	0.0003	0.0012	0.0088
Xylenes	1330-20-7	x	x	106.16	17.78	0.0796	0.3186	0.0049	0.0214	0.0121	0.0531	0.3931
Hydrogen Chloride		x	x	36.46	12.79	0.9836	3.9355	0.0605	0.2648	0.1498	0.6561	4.8565
Hydrogen Sulfide	7783-06-4		x	34.08	100	0.1438	0.5752	0.0088	0.0387	0.0219	0.0959	0.7098
Mercury	7439-97-6	x	x	200.61	2.92E-04	0.00012	0.00049	0.00001	0.00003	0.00002	0.00008	0.00061
TOTAL HAP							5.07		0.34		0.85	6.26

Notes:
1. Landfill gas constituent concentrations, except mercury, are based upon the highest quarterly average concentration measured during the first three calendar quarters of 2007 at Ridgewood's Stage 2 facility. The following analytes were not detected during this period: acrylonitrile, bromodichloromethane, carbon tetrachloride, carbonyl sulfide, chlorobenzene, chloroform, trans-1,2-dichloroethene, chloroethane, 1,2-dichloroethane, chloromethane, 1,1,1-trichloroethane, 1,2-dichloropropane, 1,1,2,2-tetrachloroethane, 1,1 -dichloroethene, and mercury.
2. Mercury emissions based on AP-42.
3. The estimated destruction efficiency for landfill gas control devices is 98 percent.

TABLE 4
MAJOR MODIFICATION APPLICABILITY DETERMINATION

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Program	Proposed CTCC Facility Potential Emissions (tons/yr)	Significant Emissions Threshold (tons/yr)	Is Proposed Modification Significant?
NO_X	PSD/NNSR	159.1	25	Yes
CO	PSD	697.4	100	Yes
PM_{10}	PSD	39.3	15	Yes
SO_2	PSD	54.1	40	No (See Note 5)
VOC	PSD/NNSR	39.9	25	Yes
H_2S	PSD	0.6	10	No
Hg	PSD	0.00049	0.1	No
HCl	NA	3.9	NA	NA

Notes:
1. HCl emission levels are based on landfill gas characteristics and may vary. Landfill gas characteristics are beyond Ridgewood's control.
2. Supporting calculations are provided in Appendix B.
3. HCl is a hazardous air pollutant and is not subject to regulation under the PSD or Non-attainment NSR programs.
4. Emission reductions from the removal of the RPPP plant are not reflected here. There are no other creditable increases or decreases.
5. The emissions reduction from removing the existing RPPP plant exceeds the increase attributable to this project. See Appendix B for actual RPPP emissions data.

TABLE 5
BACT/LAER SUMMARY FOR LANDFILL GAS-FIRED TURBINES

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Data Source	ID	Company/Project	Turbine	Permit Date	NOx	SO_2	CO	VOC	PM_{10}
INDIVIDUAL BACT/LAER DETERMINATIONS FOR LANDFILL OR DIGESTER GAS-FIRED TURBINES									
RBLC	PA-0221	Green Knight/Plainfield	Solar Centaur	8/4/2001	50 ppmvd @ 15% O_2 (See Note 2)	0.8% S	28 ppmvd @ 15% O_2	6.6 ppm (See Note 3)	
RBLC	NJ-0052	DQE Services/Monmouth Energy (See Note 4)	Solar Taurus	6/11/2001	32 ppmvd @ 15% O_2	0.05 lb/MMBTU	72 ppm @ 15% O_2	10 ppmvd @ 15% O_2 (as methane)	0.017 lb/MMBTU
SCAQMD	CA-0963	LA County Joint WPCP (digester gas)	Solar Mars 90	7/15/2000	25 ppmvd @ 15% O_2	1.3 lb/hr	60 ppm @ 15% O_2	4.5 lb/hr as C	5.7 lb/hr
RBLC	NJ-0053	Middlesex County/MCUA LFG Project	Solar Taurus 60, 7301, de-rated	3/9/1999	32 ppmvd @ 15% O_2	0.04 lb/MMBTU	72 ppm @ 15% O_2	5 ppmvd @ 15% O_2 (as hexane)	0.034 lb/MMBTU
RBLC	PA-0137	Tullytown Resource Recovery Facility	Solar Centaur	2/1/1996	These turbines were never installed				
Permit	-	UNH LFG Pipeline Supplemental Turbine (See Note 5)	Solar Mercury 50	7/25/2007	5 ppmvd @ 15% O_2	0.001 lb/MMBTU	10 ppm @ 15% O_2	0.013 lb/MMBTU	0.042 lb/MMBTU
Ridgewood	-	Chiquita Canyon	Solar Mercury 50	-	25 ppmvd @ 15% O_2	-	-	-	
OTHER INSTALLATIONS									
PA Bulletin	48-328-008	PEPCO/Bethlehem Renewable Energy (See Note 6)	Solar Taurus 60	2006	42 ppm @ 15% O_2 (est.)	0.014 lb/MMTU (est)	100 ppm @ 15% O_2 (est.)	25 ppm @ 15% O_2 as methane (est.)	0.02 lb/MMBTU (est)

Notes:
1. No add-on control equipment was required for any of the above-listed turbines.
2. The Green Knight project was originally permitted at 9 ppm NO_X. According to Larry Strauss of PADEP, the applicant appealed the permit and the permit was re-issued at 50 ppm NO_X. After compliance testing, the operating permit was recently issued for 35 ppm NO_X.
3. The VOC limit for the Green Knight project is reported as 6.6 ppm @15% O_2 and 2.9 lb/hr. However, the mass emission rate corresponds to 10 ppmvd @ 15% O_2 as methane, not 6.6 ppm.
4. According to Solar, the Monmouth Energy project was unable to meet the CO and VOC emission limits listed here because it did not operate continuously at full load. The permit has been revised to include a CO limit of 240 ppm and a VOC limit of 38 ppm for less than 90 percent load.
5. The UNH gas pipeline is being built to provide fuel to an existing natural gas-fired turbine. Because the existing turbine was designed for natural gas, the landfill gas is being processed to bring it to near pipeline natural gas quality. Although the supplemental turbine is described as being fired by landfill gas, the emissions warranties offered by Solar for this turbine are equivalent to the warranties offered for natural-gas-fired turbines and are not reflective of the warranties offered for an equivalent landfill gas-fired turbine. This turbine is not yet operating.
6. Not yet operating.
7. All of the Solar Taurus turbines listed here are older models that are no longer commercially available. Newer model Taurus turbines have higher NO_X emissions and Solar's current NO_X emissions warranty is 42 ppm.
8. Pepco/Bethlehem Energy emission limits estimated from lb/hr limits.

TABLE 6
RULES AND GUIDANCE FOR LANDFILL GAS-FIRED TURBINES

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Regulatory Body	NOx	SO_2	CO	PM_{10}
South Coast AQMD	25 ppmvd@15% O_2	Rule 431.1	130 ppmvd@15% O_2	Fuel Gas Treatment for Particulate Removal
Bay Area AQMD	25 ppmvd@15% O_2 by water or steam injection or a low-NO_X turbine	150 ppmv as H_2S in fuel	200 ppmv@ 15% O_2	Fuel Gas Treatment for Particulate Removal
TCEQ/East Texas	1.77 lb/MW-hr at less than 30 gr S/100scf	-	-	-
TCEQ/West Texas	3.11 lb/MW-hr	-	-	-
PADEP General Permit for Simple Cycle Landfill Gas Turbines	42 ppmvd@15% O_2, Steam/Water Injection & SCR not feasible	30 ppmvd@15% O_2 without sulfur removal	100 ppmvd@15% O_2, Oxidation catalyst not feasible	0.0232 lb/MMBTU based on fuel gas pre-treatment and AP-42

TABLE 7
WORST CASE LOAD ANALYSIS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Input Parameters			Maximum Impact (μg/m³)
Load Level	**Exhaust Flow rate (acfm)**	**Emission Rate (lb/hr)**	
1-Hour Average			
100%	61,556	1	10.02
80%	49,245	0.8	8.51
70%	43,089	0.7	7.70
60%	36,934	0.6	7.18
50%	30,778	0.5	6.74
3-hour Average			
100%	61,556	1	9.14
80%	49,245	0.8	7.84
70%	43,089	0.7	7.11
60%	36,934	0.6	6.39
50%	30,778	0.5	5.82
8-hour Average			
100%	61,556	1	7.94
80%	49,245	0.8	6.91
70%	43,089	0.7	6.29
60%	36,934	0.6	5.68
50%	30,778	0.5	5.05
24-hour Average			
100%	61,556	1	5.59
80%	49,245	0.8	4.84
70%	43,089	0.7	4.47
60%	36,934	0.6	4.13
50%	30,778	0.5	3.96
Annual Average			
100%	61,556	1	0.75
80%	49,245	0.8	0.69
70%	43,089	0.7	0.65
60%	36,934	0.6	0.60
50%	30,778	0.5	0.57

Notes:
1. Worst-case load and cavity screening analysis performed using the AERMOD model.
2. Based on above results, the worst-case load for the turbines is 100 percent load.

TABLE 8
CRITERIA POLLUTANT IMPACTS OF PROPOSED CTCC FACILITY

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Averaging Time	Ambient Impact of Proposed Facility (μg/m^3)	Significance Level (μg/m^3)	Exceeds Significance Level?	Significant Impact Area (Km)
NO_2	Annual	2.8 *	1	Yes	1.2
CO	1-Hour	222	2,000	No	0.0
	8-Hour	172	500	No	0.0
SO_2	3-Hour	16	25	No	0.0
	24-Hour	9.5	5	Yes	0.6
	Annual	1.28	1	Yes	0.4
PM_{10}	24-Hour	11.8	5	Yes	0.4
	Annual	3.01	1	Yes	0.0

* Modeling results adjusted to reflect default NO_2 concentration of 75 percent of NO_X concentration, per 40 CFR 51, Appendix W, Section 5.2.4.

Other Notes:
1. Modeling results reflect the impacts of the proposed CTCC plant only.
2. Impacts represent the highest annual or highest, second highest short-term concentration that occurred within five-year period modeled.

TABLE 9
MODELING PARAMETERS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

POINT SOURCES

Emission Point	Landfill Gas Flow Rate (sft^3/min)	Base Elev. (ft MSL)	Stack Height (ft AGL)	Exit Diameter (ft)	Exit Flow Rate (ft^3/min)	Exit Velocity (ft/sec)	Exit Temp. (F)	LFG Control Efficiency	Methane Emission Rate (gm/sec)	HCl Emission Rate (gm/sec)	H_2S Emission Rate (gm/sec)	Hg Emission Rate (gm/sec)	NO_X Emission Rate (gm/sec)	CO Emission Rate (gm/sec)	SO_2 Emission Rate (gm/sec)	PM Emission Rate (gm/sec)
ULE Flare (100% load)	6,000	349	60.00	12.58	397,419	53.3	1500	99%	NA	NA	NA	NA	0.624	1.497	0.766	1.247
ULE Flare (50% load)	3,000	349	60.00	12.58	198,710	26.6	1500	99%	NA	NA	NA	NA	0.312	0.748	0.383	0.624
Remote Flare 1	400	380	25.62 *	2.09 *	13,509 *	65.6 *	1,832 *	98%	NA	NA	NA	NA	0.113	0.615	1.532	0.028
Remote Flare 2	2,000	360	54.72 *	4.67 *	67,545 *	65.6 *	1,832 *	98%	NA	NA	NA	NA	0.565	3.077	1.532	0.140
Remote Flare 3	2,000	395	53.64 *	4.67 *	67,545 *	65.6 *	1,832 *	98%	NA	NA	NA	NA	0.565	3.077	5.106	0.140
Ridgewood Stage 1 (100% Load)	820	411	25.0	1.17	8,649	134.8	880	98%	2.62	0.0076	0.0011	9.57E-07	0.743	3.096	0.105	0.124
Ridgewood Stage 1 (75% Load)	615	411	25.0	1.17	6,487	101.1	880	98%	1.96	0.0057	0.0008	7.18E-07	0.557	2.322	0.078	0.093
Ridgewood Stage 2 (100% load)	2,032	411	38.75	1.33	11,436	136.6	941	98%	6.49	0.0189	0.0028	2.37E-06	1.238	6.811	0.259	0.124
Steam Boiler	NA	316	33.80	2.00	2,209	11.7	400	NA	NA	NA	NA	NA	0.120	0.030	0.172	0.020
FPL1	NA	325	175	19	-	63.3	251	NA	NA	NA	NA	NA	2.33	12.69	1.37	2.27
FPL2	NA	325	175	19	-	63.3	251	NA	NA	NA	NA	NA	2.33	12.69	1.37	2.27
Compost Grinder 1	NA	398	13	0.67	4,907	232.0	814	NA	NA	NA	NA	NA	0.488 **	0.384 **	0.035 **	0.101 **
Compost Grinder 2	NA	398	13.6	0.67	6,074	287.1	899	NA	NA	NA	NA	NA	0.588 **	0.214 **	0.046 **	0.023 **
RecoverMat Grinder	NA	339	10	0.833	5,396	165.0	853	NA	NA	NA	NA	NA	0.482 **	0.443 **	0.039 **	0.120 **
New Turbine Plant (Turbines 1 - 5)	16,008	310	75.0	4.00	61,556	81.6	250	98%	42.60	0.1239	0.0181	1.56E-05	5.01	21.96	1.70	1.20
Main Cooling Tower	NA	310	25.0	16.0	187,680	15.6	80	NA	-	-	-	-	-	-	-	0.0278
Auxiliary Cooling Tower	NA	310	25.0	16.0	185,000	15.3	80	NA	-	-	-	-	-	-	-	0.0069

* These parameters were derived using the same method used for flares in the SCREEN3 model. See ***Appendix B*** for notes and calculations.

** These emission rates were modeled for 11 hours per day using the AERMOD model's hour of day emission factor feature, reflecting the operating hour limitations (6:00 AM to 5:00 PM) contained in RIRRC's Host Community Agreement with the Town of Johnston.

TABLE 10
PRE-APPLICATION MONITORING WAIVER

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Averaging Time	Emission Rate (lb/hr)	Proposed Turbines Modeled Impact ($\mu g/m^3$)	Monitoring de minimis Level ($\mu g/m^3$)	Exceeds de minimis?
CO	8-Hour	174.29	172	575	No
NO_2	Annual	39.76	2.8 *	14	No
SO_2	24-Hour	13.51	9	13	No
PM_{10}	24-Hour	9.79	12	10	Yes
Mercury	24-Hour	0.00012	0.00010	0.25	No
Vinyl Chloride	24-Hour	0.0018	0.0014	15	No
H_2S	1-Hour	0.14	0.19	0.20	No

* Modeling results adjusted to reflect default NO_2 concentration of 75 percent of NOX concentration, per 40 CFR 51, Appendix W, Section 5.2.4.

Other Notes:

1. Short-term impacts are based on the receptor with the highest, second high concentration in the five-year modeling period. Annual impacts are based on the receptor with the highest annual average concentration in the five-year modeling period.

TABLE 11
INCREMENT CONSUMPTION ANALYSIS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Averaging Time	PSD Allowable Increment ($\mu g/m^3$)	Maximum Total Increment Consumption ($\mu g/m^3$)	Existing Sources Maximum Increment Consumption ($\mu g/m^3$)	Proposed CTCC Facility Maximum Increment Consumption ($\mu g/m^3$)	Increment within Allowable (See Note 5)
NO_2	Annual	25	11.2 *	11.0 *	2.8 *	Yes
SO_2	3-Hour	512	48.2	48.2	15.9	Yes
	24-Hour	91	26.0	26.0	9.5	Yes
	Annual	20	4.7	4.6	1.3	Yes
PM_{10}	24-Hour	30	18.8	18.8	11.8	Yes
	Annual	17	3.3	2.6	3.0	Yes

* Modeling results adjusted to reflect default NO_2 concentration of 75 percent of NO_X concentration, per 40 CFR 51, Appendix W, Section 5.2.4.

Notes:
1. Increment consuming sources include all landfill gas control devices at the Central Landfill, all landfill gas-fired engines, the proposed turbines and cooling towers, the main boiler at the Central Landfill's administration building and FPL's RISEC facility. Emergency generators and insignificant activities were not evaluated.
2. Impacts represent the highest annual or highest, second high short-term concentration that occurred within five-year period modeled.
3. Detailed modeling results are presented in Appendix G.
4. Because the facility is a major modification , the modification cannot consume more than 25 percent of the remaining annual increment or 75% of the remaining 24-hour increment.

TABLE 12
COMPARISON OF AMBIENT IMPACTS TO NAAQS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Averaging Period	Maximum Modeled Impact for 100% Load ($\mu g/m^3$)	Maximum Modeled Impact for Worst-Case Load ($\mu g/m^3$)	Maximum Modeled Impact ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Ambient Impact ($\mu g/m^3$)	NAAQS	In Compliance?
NO_2	Annual	11.18 *	10.40 *	11.18 *	33	44	100	yes
CO	1-Hour	635	550	635	11,106	11,741	40,000	yes
	8-Hour	534	470	534	2,862	3,396	10,000	yes
SO_2	3-Hour	48	48	48	126	174	1300	yes
	24-Hour	26.0	26.0	26	63	89	365	yes
	Annual	4.68	4.57	4.68	18	23	80	yes
PM_{10}	24-Hour	18.8	16.9	19	54	73	150	yes
	Annual	3.26	3.25	3.26	24	27	50	yes

* Modeling results adjusted to reflect default NO_2 concentration of 75 percent of NO_X concentration, per 40 CFR 51, Appendix W, Section 5.2.4.

Notes:
1. Impacts represent the highest annual or highest, second highest short-term concentration that occurred within five-year period modeled.
2. Background concentration is the highest annual or highest, second highest short-term concentration recorded at any Rhode Island monitoring station in calendar years 2004 - 2006.
3. Total concentration is the sum of the modeled impact and the background concentration.

TABLE 13
TOXIC AIR POLLUTANT IMPACTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	CAS Number	Molecular Weight	Conc. In Landfill Gas (ppm)	Proposed Turbines			All Ridgewood Sources			1-Hour AAL (ug/m^3)	24-Hour AAL (ug/m^3)	Annual AAL (ug/m^3)	Percent of 1-Hour AAL	Percent of 24-Hour AAL	Percent of Annual AAL
				Max. 1-Hour Impact (ug/m^3)	Max. 24-Hour Impact (ug/m^3)	Max. Annual Impact (ug/m^3)	Max. 1-Hour Impact (ug/m^3)	Max. 24-Hour Impact (ug/m^3)	Max. Annual Impact (ug/m^3)						
Methane	NA	16.03	500,000	440.03	271.89	35.97	559.84	383.90	64.91	n/a	n/a	n/a	n/a	n/a	n/a
1,1 Dichloroethane	75-34-3	98.97	0.22	0.001	0.001	0.000	0.002	0.001	0.000	n/a	n/a	0.60	n/a	n/a	0.029%
1,4-Dichlorobenzene	106-46-7	147.01	0.21	0.002	0.001	0.000	0.002	0.001	0.000	5,000	800	0.09	0.00004%	0.0002%	0.28%
2-Propanol	67-63-0	60.11	6.13	0.020	0.012	0.002	0.026	0.018	0.003	3,000	n/a	n/a	0.001%	n/a	n/a
Acetone	67-64-1	58.08	18.70	0.060	0.037	0.005	0.076	0.052	0.009	60,000	30,000	n/a	0.0001%	0.0002%	n/a
Benzene	71-43-2	78.11	1.20	0.005	0.003	0.000	0.007	0.004	0.001	200	30	0.10	0.003%	0.015%	0.76%
Carbon Disulfide	75-15-0	76.14	3.39	0.014	0.009	0.001	0.018	0.012	0.002	6,000	n/a	700	0.000%	n/a	0.000%
Chlorodifluoromethane	75-45-6	86.47	3.06	0.015	0.009	0.001	0.018	0.013	0.002	n/a	50,000	n/a	n/a	0.00003%	n/a
cis-1,2-Dichloroethene	156-59-2	96.94	0.55	0.003	0.002	0.000	0.004	0.003	0.000	3,000	1,000	n/a	0.0001%	0.0003%	n/a
Cyclohexane	110-82-7	84.16	2.12	0.010	0.006	0.001	0.012	0.009	0.001	n/a	6,000	n/a	n/a	0.000%	n/a
Ethylbenzene	100-41-4	106.16	6.67	0.039	0.024	0.003	0.049	0.034	0.006	n/a	1,000	n/a	n/a	0.003%	n/a
Hexane	110-54-3	86.17	3.49	0.017	0.010	0.001	0.021	0.014	0.002	n/a	n/a	200	n/a	n/a	0.001%
Methylene Chloride	75-09-2	89.94	0.57	0.003	0.002	0.000	0.004	0.002	0.000	2,000	1,000	2.00	0.0002%	0.0002%	0.021%
Methylethyl Ketone	78-93-3	72.11	9.63	0.038	0.024	0.003	0.049	0.033	0.006	10,000	5,000	n/a	0.0005%	0.001%	n/a
Methylisobutyl ketone	108-10-1	100.16	0.77	0.004	0.003	0.000	0.005	0.004	0.001	n/a	3,000	n/a	n/a	0.0001%	n/a
Styrene	100-42-5	104.20	0.66	0.004	0.002	0.000	0.005	0.003	0.001	20,000	1,000	100	0.00002%	0.0003%	0.001%
Tetrachloroethylene	127-18-4	165.83	0.87	0.008	0.005	0.001	0.010	0.007	0.001	1,000	n/a	0.20	0.0010%	n/a	0.58%
Toluene	108-88-3	92.13	32.47	0.164	0.101	0.013	0.209	0.143	0.024	4,000	400	300	0.005%	0.036%	0.008%
Trichloroethylene	79-01-6	131.40	0.49	0.004	0.002	0.0003	0.004	0.003	0.001	10,000	500	0.50	0.000%	0.001%	0.10%
Trichlorofluoromethane	75-69-4	137.38	1.56	0.012	0.007	0.0010	0.015	0.010	0.002	n/a	1,000	n/a	n/a	0.0010%	n/a
Vinyl Chloride	75-01-4	62.47	0.68	0.002	0.001	0.0002	0.003	0.002	0.000	1,000	100	0.20	0.0003%	0.002%	0.17%
Xylenes	1330-20-7	106.16	17.78	0.104	0.064	0.008	0.132	0.090	0.015	4,000	3,000	100	0.003%	0.003%	0.015%
Hydrogen Chloride	7647-01-0	36.46	12.79	1.280	n/a	0.105	1.523	n/a	0.135	2,000	n/a	9.00	0.076%	n/a	1.5%
Hydrogen Sulfide	7783-06-4	34.08	100	0.187	n/a	0.015	0.238	n/a	0.028	40	n/a	10	0.59%	n/a	0.28%
Mercury	7439-97-6	200.61	2.92E-04	0.00016	0.00010	0.00001	0.00020	0.00014	0.00002	2	0.3	0.009	0.010%	0.047%	0.22%
Ammonia	7664-41-7	17.03	n/a	15.324	n/a	1.253	15.324	n/a	1.253	1,000	n/a	100	1.5%	n/a	1.3%

Notes:
1. Landfill gas emissions were modeled using methane as a surrogate and multiplying the methane modeling results by the ratio of the emissions of the individual constituents to the emissions of methane.
2. "n/a" indicates that there is no AAL for that averaging period.

TABLE 14
VEGETATION IMPACTS OF PROJECT

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Pollutant	Averaging Time	Screening Concentration ($\mu g/m^3$)	Maximum Modeled Impact of Turbines ($\mu g/m^3$)	Maximum Ambient Impacts (All Sources) ($\mu g/m^3$)	Exceeds Screening Threshold?
SO_2	1-hour	917	17.2	194	No
SO_2	3-hour	786	15.9	174	No
SO_2	Annual	18	1.3	23	Yes
NO_2	4-Hour	3,760	35.1	398	No
NO_2	8-Hour	3,760	29.5	309	No
H_2S	4-Hour	28,000	0.19	0.24	No
NH_3	24-hour	270	9.5	9.5	No
NH_3	Annual	8	1.25	1.25	No

Notes:
1. The maximum ambient impacts include all modeled sources plus backgroud concentrations from ***Table 12*** , except for NH_3, which includes only the proposed turbines.
2. SO_2, NO_2, and H_2S screening levels based on the minimum concentration at which adverse growth effects occur in sensitive species as reported in *A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals* (EPA 1980).
3. NH_3 screening levels based on the Critical Exposure Levels for NH_3 as reported by S. Krupa in "Effects of Ammonia on Terrestrial Vegetation" at the Ammonia Workshop held in conjunction with the annual meeting of the National Atmospheric Deposition Program, December 2003.
4. NO_2 impacts reflect the default NO_2/NO_X ratio of 0.75.
5. Short-term SO_2 of all sources and short-term NO_2 impacts of turbines reflect the highest, second high concentration.
6. Short-term NO_2 impacts for all sources were estimated from annual impacts by multiplying by a factor of 10 to adjust from annual to 1-hour, and then by multiplying by a factor of 0.9 to adjust to four-hour impacts or 0.7 to adjust to eight-hour impacts.
7. Although the annual SO_2 impacts for all sources exceed the screening level, it should be noted that due to the landfill gas being used as fuel in this project must be combusted in flares if not used to generate power, and the proposed project will reduce SO_2 impacts because sulfur will be removed from the gas prior to combustion.

FIGURES

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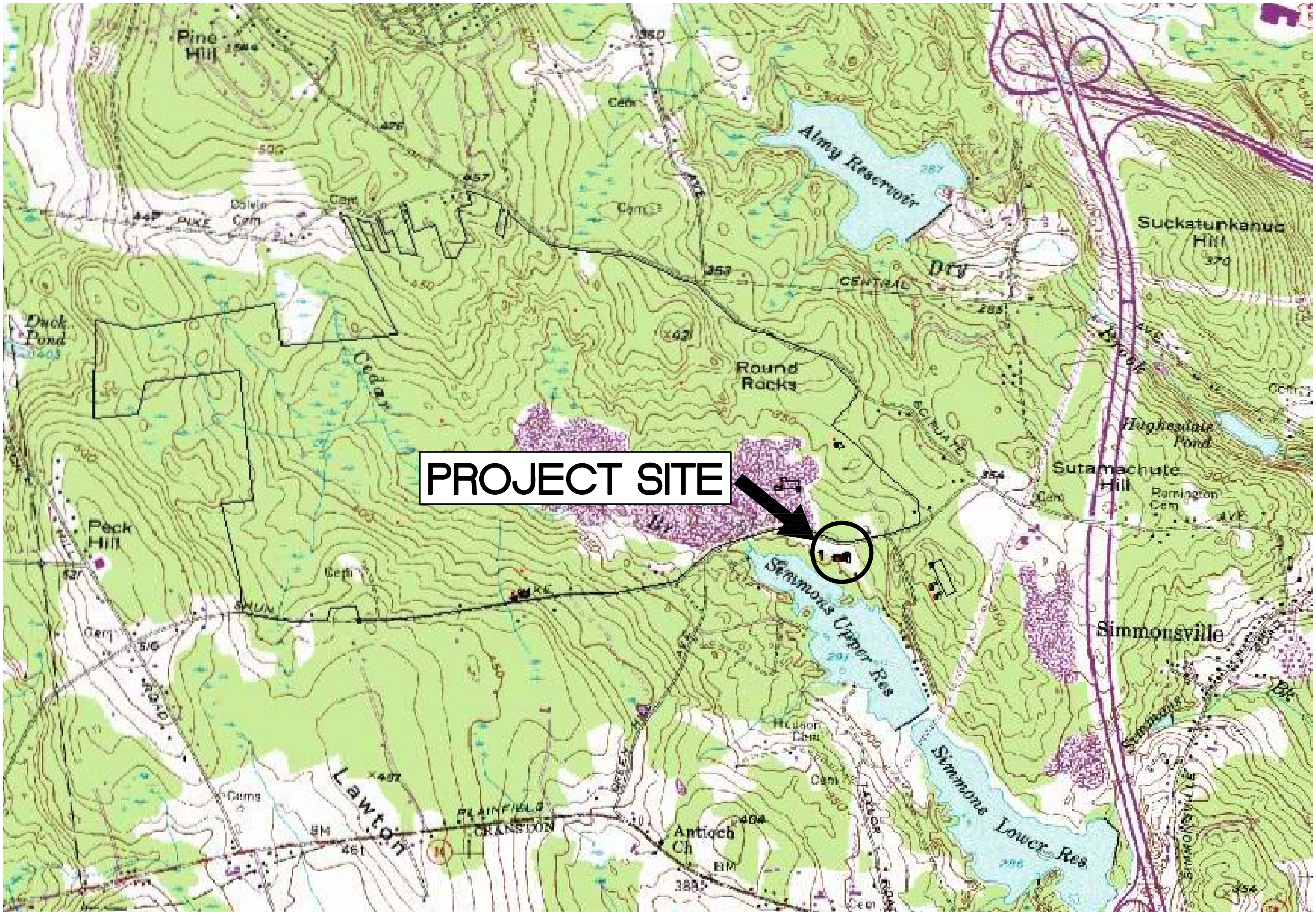


PROJECT No.: 24461.00	SHEET No.: 1

PROPOSED LANDFILL GAS-FIRED COMBINED CYCLE POWER PLANT

RIDGEWOOD POWER MANAGEMENT

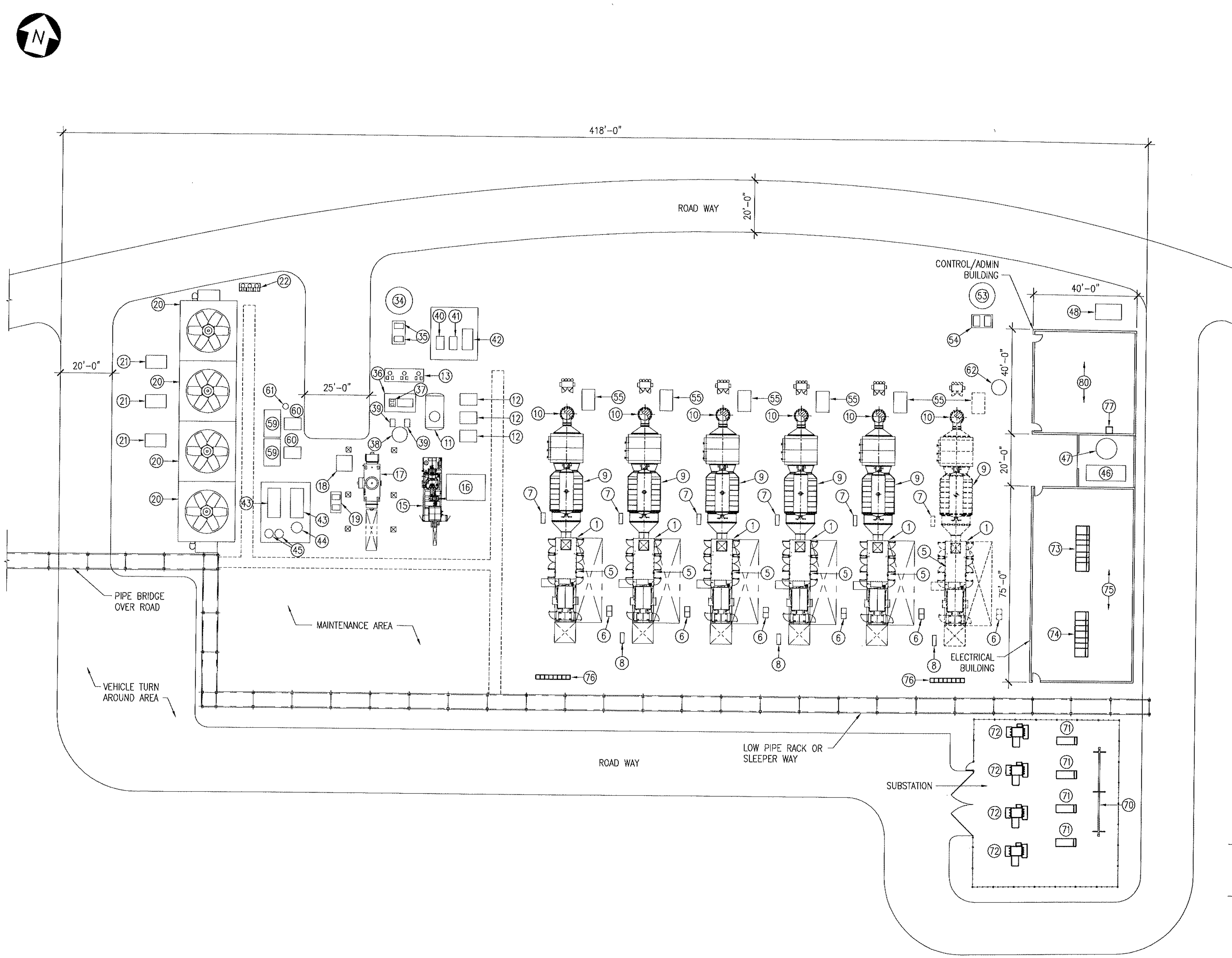
JOHNSTON, RHODE ISLAND

LOCUS PLAN

DES'D BY	: MPN
CHK'D BY	: MPN
APP'D BY	: MPN
DRAWN BY	: MPN
SCALE	: 1"=2000'
DATE	: NOV. 2007

GRAPHIC SCALE
2,000' 0' 2,000' 4,000'

GZA
GeoEnvironmental, Inc.
Engineers and Scientists
380 HARVEY ROAD
MANCHESTER, NEW HAMPSHIRE 03103
(603) 623-3600



MECHANICAL EQUIPMENT KEYNOTES:

1. SOLAR TAURUS 60 CTG
2. LANDFILL GAS POLISHING SYSTEM WITH INLET MOISTURE SEPERATOR & FREE STANDING CONTROL CABINET
3. CTG INLET AIR FILTER, MOUNTED ABOVE UNIT (NOT SHOWN)
4. CTG INLET AIR ANTI-ICING PROTECTION UNIT (NOT SHOWN)
5. CTG LUBE OIL COOLER
6. CTG START MOTOR VFD'S
7. CTG CO2 CYLINDER RACK
8. CTG WATER WASH UNIT
9. HRSG, HORIZONTAL UNIT
10. HRSG STACK
11. DEARATOR & BOILER FEED WATER STORAGE TANK
12. BOILER FEEDWATER PUMP
13. HRSG CHEMICAL TREATMENT
14. AIR COOLED LANDFILL GAS COOLER
15. STEAM TURBINE GENERATOR (STG)
16. STG LUBE OIL SKID
17. STG SURFACE CONDENSER
18. SURFACE CONDENSER STEAM JET AIR REMOVAL SKID
19. STG CONDENSATE PUMP
20. MAIN COOLING TOWER
21. MAIN COOLING WATER CIRCULATING PUMP
22. COOLING WATER TREATMENT UNIT
23. LANDFILL GAS CENTRIFUGAL CHILLER
24. CHILLED WATER PUMP
25. CHILLED WATER CHEMICAL TREATMENT UNIT
26. CHILLED WATER EXPANSION TANK
27. LANDFILL GAS KNOCK-OUT VESSEL
28. LANDFILL GAS BOOSTER BLOWER
29. LANDFILL GAS COMPRESSOR SKID WITH FREE STANDING CONTROL CABINET
30. LANDFILL GAS COMPRESSOR INTER & AFTER COOLERS
31. FIRST STAGE LANDFILL GAS SILOXANE REMOVAL SKID
32. LANDFILL GAS CONDENSATE COLLECTION STORAGE TANK
33. LANDFILL GAS CONDENSATE TRANSFER PUMP
34. COMBINED FIRE WATER/RAW WATER TANK
35. RAW WATER PUMP
36. REVERSE OSMOSIS BANK
37. REVERSE OSMOSIS BOOSTER PUMP
38. REVERSE OSMOSIS STORAGE TANK
39. REVERSE OSMOSIS TRANSFER PUMP
40. FIRE WATER JOCKEY PUMP
41. FIRE WATER MOTOR DRIVEN MAIN PUMP
42. FIRE WATER DIESEL DRIVEN PUMP
43. AIR COMPRESSOR
44. AIR RECEIVER
45. AIR DRYER UNIT, DESICCANT TYPE
46. EMERGENCY DIESEL GENERATOR UNIT
47. DIESEL FUEL OIL STORAGE TANK, HORIZONTAL, DOUBLE WALL, BELOW GROUND
48. WASTE WATER SUMP WITH SUMP PUMP & OIL WATER SEPARATOR, BELOW GROUND
49. AUXILIARY COOLING TOWER
50. AUXILIARY COOLING WATER CIRCULATING PUMP
51. DELETED
52. DELETED
53. AQUEOUS AMMONIA STORAGE TANK
54. AQUEOUS AMMONIA TRANSFER PUMP
55. AMMONIA FLOW CONTROL SKID
56. FLARE COMBUSTOR STACK WITH ASSIST AIR BLOWER
57. LANDFILL GAS COOLING COIL
58. LANDFILL GAS COMPRESSOR CO2 CYLINDER RACK
59. CLOSED LOOP COOLING WATER HEAT EXCHANGE
60. CLOSED LOOP COOLING WATER PUMP
61. CLOSED LOOP COOLING ESPANSIONS TANK
62. BLOWDOWN TANK
63. LANDFILL GAS HYDROGEN REMOVAL SKID
64. LANDFILL GAS BLOWER DISCHARGE MOISTURE SEPARATOR

ELECTRICAL EQUIPMENT KEYNOTES:

70. HIGH VOLTAGE DEAD-END STRUCTURE
71. SUBSTATION DISCONNECT SWITCH
72. STEP-UP TRANSFORMER
73. HIGH VOLTAGE SWITCHGEAR
74. MEDIUM VOLTAGE SWITCHGEAR
75. MEDIUM VOLTAGE UNIT SUBSTATION
76. MOTOR CONTROL CENTER, DISTRIBUTED OUTDOOR IN PLANT, WEATHER ENCLOSURE
77. UPS SYSTEM
78. TRANSFORMER

INSTRUMENTATION & CONTROLS KEYNOTES:

80. PLANT CONTROL SYSTEM
81. CEMS (IF REQUIRED, NOT SHOWN)

0 20 40 60
GRAPHIC SCALE: 1" = 20'-0"

No.	DESCRIPTION	BY	CHKD	APPVD.	DATE
C	ISSUED FOR CLIENT REVIEW	CS	ID	EBJ	12-20-07
B	ISSUED FOR CLIENT REVIEW	PPP	ID	EBJ	12-05-07
A	ISSUED FOR APPROVAL	PPP	ID	EBJ	09-20-07

REVISION

SEAL

CONSTRUCTION ISSUE
DISCIPLINE BY DATE
DRAWN:
CHECKED:
ENGINEER:
LEAD ENGINEER:
PROJECT ENGINEER:
PROJECT MANAGER:

CUSTOMER JOB No. XXXX

Carter::Burgess
CARTER & BURGESS, INC.

CARTER & BURGESS, INC. JOB No. 170365.010.001.0001

RIDGEWOOD JOHNSTON LANDFILL
Repowering Power Project
GENERAL ARRANGEMENT
GROUND FLOOR LEVEL

SCALE: 1"=20'-0" | C&B No. 170365 | DWG. No.: SK-003 | REV. C

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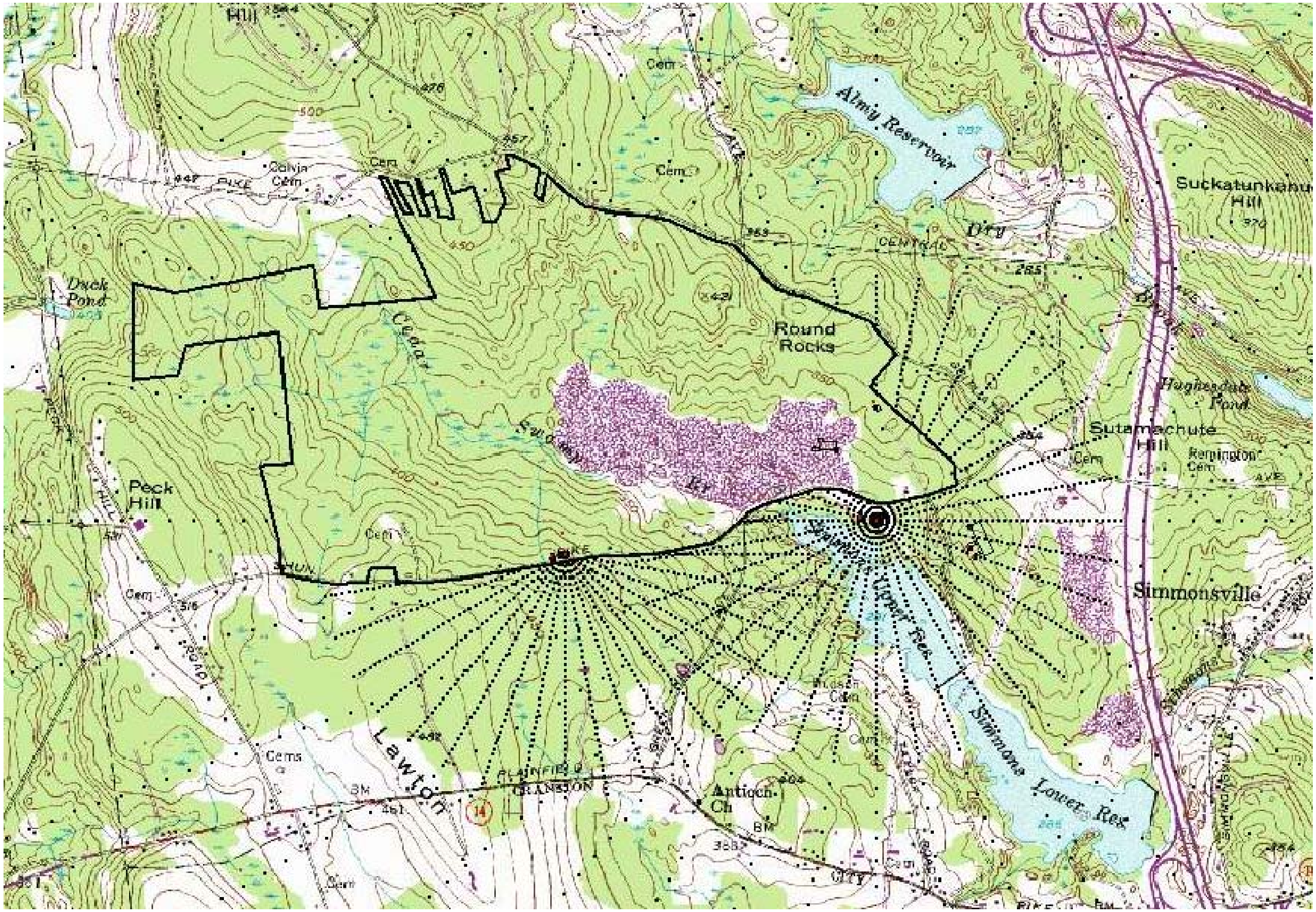

PROPOSED LANDFILL GAS-FIRED COMBINED CYCLE POWER PLANT	
RIDGEWOOD POWER MANAGEMENT	DES'D BY : MPN
JOHNSTON, RHODE ISLAND	CHK'D BY : MPN
RECEPTOR PLAN	APP'D BY : MPN
	DRAWN BY: MPN
	SCALE : 1"=2000'
	DATE : NOV. 2007

PROJECT No.: 24461.00

SHEET No.: 3

GRAPHIC SCALE 2,000' 0' 2,000' 4,000'

GZA GeoEnvironmental, Inc.
Engineers and Scientists
380 HARVEY ROAD
MANCHESTER, NEW HAMPSHIRE 03103
(603) 623-3600

APPENDIX A

APPLICATION FORMS

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

AIR POLLUTION CONTROL PERMIT FEES

The Department's rules and regulations require the payment of fees for air pollution permits. All application fees must be submitted to:

RI Department of Environmental Management
Office of Management Services
235 Promenade Street
Providence, RI 02908

THE APPLICATION FORM AND ANY ACCOMPANYING DOCUMENTS SHOULD BE SUBMITTED TO THE OFFICE OF AIR RESOURCES AT THE ADDRESS SHOWN ON THE APPLICATION FORM.

Please complete this form, attach it to the check or money order and submit it to the Office of Management Services. Payment should be made payable to General Treasurer, State of Rhode Island. The information requested below must be provided to coordinate the filing of your fee with your application(s). This fee is a filing fee and therefore it must be paid before we can begin review of your application(s).

APPLICANT'S NAME: *Rhode Island Central Genco, LLC*

GENERAL DESCRIPTION OF PROCESS FROM WHICH POLLUTANTS ARISE:

Landfill gas-fired combustion turbine

Combined cycle power plant

FEE SUBMITTED:

Major Source or Major Modification @ $25,410 each	*$25,410*
Complex Minor source or Modification @ $4,620.00 each	
Minor source or Modification @ $ 1,271.00 each	
TOTAL	*$25,410*

FOR OFFICE USE ONLY:
Fee Amount Received: $ ___________
Date Received: ____________________
Received By: ____________________
For Deposit into Account 1752-80600

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

APPLICATION FOR APPROVAL OF PLANS TO CONSTRUCT, INSTALL, OR MODIFY FUEL BURNING EQUIPMENT

Return to: RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES
235 PROMENADE STREET
PROVIDENCE, RI 02908

Section A

1. FULL BUSINESS NAME *Rhode Island Central Genco, LLC* PHONE *401-943-5560*
2. ADDRESS OF EQUIPMENT LOCATION *65 Shun Pike, Johnston, Rhode Island 02919*
   SIC CODE *4911* # EMPLOYEES *15*
3. LOCATION ON PREMISES (BLDG., DEPT., AREA, ETC.) *Across from entrance to Central Landfill.*
4. NATURE OF BUSINESS *Electric power generation from landfill gas.*

Section B

APPROVAL REQUESTED FOR:

1. CONSTRUCTION ☒ INSTALLATION ☐ MODIFICATION ☐
2. ESTIMATED STARTING DATE *11/08* ESTIMATED COMPLETION DATE *5/09*

Section C

TYPE OF FUELS USED

1. FUEL: OIL ☐ GRADE: 2 ☐ 4 ☐ 6 ☐
   NAT. GAS ☐
   OTHER ✕ *Landfill Gas (LFG)*
2. ANNUAL USAGE: OIL ________ GALS.
   NAT. GAS ________ FT^3
   OTHER *1.28 mm ft^3/year per turbine*
3. MAXIMUM FIRING RATE: OIL ________ GALS/HR.
   NAT. GAS ________ FT^3/HR.
   OTHER *2668 mm ft^3/min at 50% methane and 0ºF*
4. MAXIMUM HEAT INPUT: OIL ________ BTU/HR.
   NAT. GAS ________ BTU/HR.
   OTHER *80.04 mm* BTU/HR. *at 0ºF*
5. SEASONAL USE: OIL ________ TO ________ (MONTHS)
   NAT. GAS ________ TO ________ (MONTHS)
   OTHER *January* TO *December* (MONTHS)
6. FUEL SUPPLIER: OIL ________
   NAT. GAS ________
   OTHER *Central Landfill*

Section D

BOILER

1. MANUFACTURER:________________ MODEL NO.:________________
2. BOILER TYPE: ☐ WATER TUBE ☐ FIRE TUBE ☐ PACKAGE ☐ OTHER (SPECIFY)________________
3. SIZE: ____________HP ____________BTU/HR
4. TYPE OF BURNER: ☐ STEAM ATOMIZER ☐ AIR ATOMIZER ☐ TANG. FIRED ☐ OTHER (SPECIFY)
5. ARE OIL HEATERS USED? ☐ YES ☐ NO TYPE: ☐ ELECTRICAL ☐ STEAM
6. BURNER MANUFACTURER:________________ BURNER CAPACITY:____________(GPH)

   NO. OF BURNERS:____________

COMBUSTION TURBINE

1. MANUFACTURER: *Solar* MODEL NO.: *Taurus 60-7901*
2. SIZE: *6.9 at 0ºF* MW MAXIMUM HEAT INPUT: *80.04 at 0ºF* BTU/HR
3. STEAM OR WATER INJECTION: ☐ YES ☒ NO
4. INJECTION RATIO: ____________LB/LB

INTERNAL COMBUSTION ENGINES

1. MANUFACTURER:________________ MODEL NO.:________________
2. SIZE:____________HP ☐ RICH BURN ☐ LEAN BURN

** IF THE FUEL BURNING EQUIPMENT DOES NOT FALL INTO ANY OF THESE CATEGORIES, PROVIDE ENOUGH INFORMATION TO ADEQUATELY DESCRIBE THE EQUIPMENT.

Section E

CONTINUOUS EMISSION MONITORS

MANUFACTURER/MODEL NO.

- ☐ OPACITY ________________
- ☐ OXYGEN ________________
- ☐ CO_2 ________________
- ☐ NO_x ________________
- ☐ SO_2 ________________
- ☐ CO ________________

Section F

STACK INFORMATION:

1. STACK EXIT DIMENSIONS I.D. *48* INCHES OR ______INCHES X ______ INCHES
2. STACK HEIGHT ABOVE GROUND *75* FEET
3. VOLUME OF GAS DISCHARGED INTO OPEN AIR *61,556* ACFM @ *250* ^{o}F
4. IS STACK EQUIPPED WITH A RAIN HAT? YES ☐ NO ☒
5. DISTANCE FROM DISCHARGE TO NEAREST PROPERTY LINE *140* FEET

Section G

EMISSIONS INFORMATION:

POLLUTANT	EMISSIONS BEFORE CONTROL EQUIPMENT	AFTER
See Table 2		

INDICATE METHOD USED TO DETERMINE EMISSIONS *See Calculation in Appendix B*

This application is submitted in accordance with the provisions of Chapter 23-23 of the General Laws, as amended, Regulation 9, and to the best of my knowledge and belief is true and correct.

____________________________ Signature

____________________________ Title

____________________________ Printed Name

____________________________ Date

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

APPLICATION FOR APPROVAL OF PLANS TO CONSTRUCT, INSTALL, OR MODIFY AIR POLLUTION CONTROL EQUIPMENT

Return to: RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES
235 PROMENADE STREET
PROVIDENCE, RI 02908

Section A

1. FULL BUSINESS NAME *Ridgewood Power Management* PHONE *401-943-5560*
2. ADDRESS OF EQUIPMENT LOCATION *65 Shun Pike, Johnston, Rhode Island 02919*
   ______ SIC CODE ______ # EMPLOYEES *15*
3. LOCATION ON PREMISES (BLDG., DEPT., AREA, ETC.) *Across from Central Landfill entrance.*
4. NATURE OF BUSINESS *Electric power generation from landfill gas.*

Section B

1. APPROVAL REQUESTED FOR: ☒ CONSTRUCTION ☐ MODIFICATION *11/08*
2. TYPE OF EQUIPMENT: ☐ BAGHOUSE ☐ SCRUBBER ☐ AFTERBURNER ☒ SCR ☐ CARBON ADSORBER ☐ OTHER (SPECIFY)
3. MAKE AND MODEL NO.: *Not determined*
4. ESTIMATED STARTING DATE: *11/08* ESTIMATED COMPLETION DATE: *5/09*

Section C

1. GENERAL DESCRIPTION OF PROCESS FROM WHICH POLLUTANTS ARISE *Combination of landfill gas in turbines.*
2. PROCESS EQUIPMENT USED IN OPERATION *Turbines*
3. OPERATING PROCEDURE: ☒ CONTINUOUS *24* HRS/DAY *7* DAYS/WEEK *52* WEEKS/YEAR
   ☐ BATCH ______ HRS/BATCH ______ BATCHES/WEEK ______ WEEKS/YEAR
4. LIST THE TYPE AND QUANTITY OF RAW MATERIALS USED PER HOUR OR PER BATCH ON AN ATTACHED SHEET.

Section D

EMISSIONS INFORMATION:

POLLUTANT	EMISSIONS BEFORE CONTROL EQUIPMENT	AFTER
NOx	*42 ppmv*	*25*

INDICATE METHOD USED TO DETERMINE EMISSIONS ______

AP-CE

Section E

EMISSION STREAM CHARACTERISTICS

1. MAXIMUM FLOW RATE (SCFM)____________________
2. TEMPERATURE (^{o}F)____ *950 ±* ______________________
3. MOISTURE CONTENT____ *6-10%* ________________%
4. HALOGENATED ORGANICS: ☐ YES ☐ NO
5. HEAT CONTENT (IF APPLICABLE)___ *500 (typ)* ______________BTU/SCF

Section F

SCRUBBER

1. WET:SCRUBBING LIQUID
   - (A) COMPOSITION________
   - (B) FLOW RATE (GAL/MIN)_________________
   - (C) INJECTION RATE (PSI)_______________
   - (D) MAKE-UP RATE IF RE-CIRCULATED (GAL/MIN)_____________

   PACKING-IF APPLICABLE
   - (A) TYPE______________________
   - (B) DEPTH OF BED______________(FEET)
   - (C) PACKING SURFACE___________(FT^2)
2. DRY:SCRUBBING REAGENT:_________________________ USAGE_____________LB/HR.
   INJECTION RATIO:_________________________( )
   MIXING METHOD____
3. PRESSURE DROP ACROSS CONTROL UNIT:______________INCHES WATER

BAGHOUSE/FABRIC FILTER

1. BAG/FILTER MATERIAL___________________________ 2. NUMBER OF BAGS_________
3. AIR/CLOTH RATIO_______________ FEET/MINUTE
4. METHOD OF CLEANING: (A) ☐ SHAKER ☐ PULSE ☐ REVERSE AIR ☐ OTHER-SPECIFY
   (B) FREQUENCY OF CLEANING______________________
   (C) IS CLEANING AUTOMATIC OR MANUAL____________

CARBON ADSORBER

1. VOLUME OF EACH CARBON BED ________________________(FT^3)
2. NUMBER OF BEDS______________
3. DIAMETER OF EACH BED _________________(FT)
4. DEPTH OF EACH BED_____________________(FT)
5. ADSORBTION CAPACITY OF CARBON (LB/100 LB CARBON)_______________________
6. ADSORBTION CYCLE TIME ___________________(HR)
7. REGENERATION CYCLE TIME ___________________(HR)
8. STEAM RATIO (LB STEAM/LB CARBON)______________________
9. STEAM SOURCE____
10. REMOVAL EFFICIENCY (%)________________________________

INCINERATION

1. THERMAL AFTERBURNER
   - A. VOLUME OF COMBUSTION CHAMBER ______________________(FT^3)
   - B. MINIMUM OPERATING TEMPERATURE______________________(^{o}F)
   - C. RESIDENCE TIME ________________________________(SECONDS)
   - D. EXCESS AIR ____________________________________%
2. CATALYTIC INCINERATION
   - A. TYPE OF CATALYST____________________________________
   - B. VOLUME OF CATALYST_____________________________(FT^3)
   - C. SPACE VELOCITY ________________________________(HR^{-1})
   - D. CATALYST OPERATING TEMPERATURE______________________(^{o}F)

INCINERATION (CONT.)

3. BURNER MAKE AND MODEL NO.____
   CAPACITY (BTU/HR)______________________________________
4. HEAT RECOVERY: ☐ YES ☐ NO
   TYPE:_______________________________________EFFICIENCY:______________%
4. DESTRUCTION EFFICIENCY:_____________________%

Section G

OPERATING CONDITIONS

1. GAS VOLUME THROUGH CONTROL SYSTEM: NORMAL______ACFM @ ______°F *113,000 at 950*
   MAXIMUM_____ACFM @ ______°F *122,000 at 950*
2. GAS TEMPERATURE: INLET *950* °F OUTLET *950* °F
3. STACK INFORMATION: (A) I.D. *48* INCHES OR _____INCHES X _____INCHES
   (B) STACK HEIGHT ABOVE GROUND *75* FEET
   (C) CFM EXHAUSTED _______
   (D) IS STACK EQUIPPED WITH RAIN HAT? ☐ YES ☒ NO
5. DISTANCE FROM DISCHARGE TO NEAREST PROPERTY LINE *140* FEET.

Section H

COLLECTION DATA

1. DESCRIPTION OF COLLECTED MATERIAL *None*
2. AMOUNT COLLECTED (LBS/DAY; GAL/DAY; ETC.)____
3. ULTIMATE DISPOSITION OF COLLECTED MATERIAL____

Section I

IN ADDITION TO THE ABOVE INFORMATION, THE FOLLOWING INFORMATION IS <u>REQUIRED</u>:

1. FLOW DIAGRAM SHOWING RELATIVE LOCATION OF EQUIPMENT ATTACHED TO THIS CONTROL SYSTEM.
2. MANUFACTURER'S LITERATURE FOR THE CONTROL EQUIPMENT.
3. ENGINEERING DRAWINGS FOR THE CONTROL EQUIPMENT WITH PHYSICAL DIMENSIONS.
4. PARTICULATE COLLECTION EQUIPMENT SHOULD HAVE SIZE EFFICIENCY CURVES. ABSORPTION AND ADSORPTION EQUIPMENT SHOULD HAVE SIZING CALCULATIONS, GRAPHS, EQUILIBRIUM DATA, ETC.

This application is submitted in accordance with the provisions of Chapter 23-23 of the General Laws, as amended, Regulation 9, and to the best of my knowledge and belief is true and correct.

______________________________ ______________________________
Signature Title

______________________________ ______________________________
Printed Name Date

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR RESOURCES

AIR POLLUTION CONTROL PERMIT FEES

The Department's rules and regulations require the payment of fees for air pollution permits. All application fees must be submitted to:

RI Department of Environmental Management
Office of Management Services
235 Promenade Street
Providence, RI 02908

THE APPLICATION FORM AND ANY ACCOMPANYING DOCUMENTS SHOULD BE SUBMITTED TO THE OFFICE OF AIR RESOURCES AT THE ADDRESS SHOWN ON THE APPLICATION FORM.

Please complete this form, attach it to the check or money order and submit it to the Office of Management Services. Payment should be made payable to General Treasurer, State of Rhode Island. The information requested below must be provided to coordinate the filing of your fee with your application(s). This fee is a filing fee and therefore it must be paid before we can begin review of your application(s).

APPLICANT'S NAME: ______________________________

GENERAL DESCRIPTION OF PROCESS FROM WHICH POLLUTANTS ARISE:

____

____

FEE SUBMITTED:

Major Source or Major Modification @ $25,410 each ____________
Complex Minor source or Modification @ $4,620.00 each ____________
Minor source or Modification @ $ 1,271.00 each ____________

TOTAL ____________

FOR OFFICE USE ONLY:
Fee Amount Received: $ ___________
Date Received: ___________________
Received By: ___________________
For Deposit into Account 1752-80600

APPENDIX B

SUPPORTING CALCULATIONS

SUPPORTING CALCULATIONS
TURBINE EMISSION RATE CALCULATIONS
Rhode Island Central Genco, LLC
Johnston, Rhode Island

The heat input rate of a turbine varies with ambient temperature. Data provided by Solar indicate heat input ratings for individual turbines ranging from 62.36 MMBTU/hr (HHV) at 100ºF to 80.04 MMBTU/hr (HHV) at 0ºF. For modeling purposes, the maximum hourly emission rates are based on the heat input rating at 0ºF (80.04 MMBTU/hr, HHV). For the purposes of calculating potential emissions, the heat input rating at 40ºF was used, which is reasonably conservative in that the annual average temperature is approximately 51ºF (73.12 MMBTU/hr, HHV). Emissions based on gas consumption are based on a landfill gas heating value of 500 BTU/scf (HHV). All calculations below are per turbine. For calculations using F-Factors, the temperature (527.9 R) and gas constant (0.7302 ft^3-atm/lb mol -R) have been lumped into a single factor of 385.5 ft^3-atm/lb mol.

Landfill Gas Consumption Rate

Max. Hourly		80.04 MMBTU/hr	x	1,000,000	÷	500 BTU/scf	=	160,080 scf/hr	÷	60 min/hr	
	=	2,668 scf/min									
Max. Annual		73.12 MMBTU/hr	x	1,000,000	÷	500 BTU/scf	=	146,240 scf/hr	x	8,760 hr/yr	
	÷	1,000,000	=	1,281.1 MMscf/yr							

NO_X

Max. Hourly		25 ppmvd	x	46.01 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	x	385.5	=	0.099 lb/MMBTU	x	80.04 MMBTU/hr	=	7.95 lb/hr		
	x	0.126 gm-hr/lb-sec	=	1.002 gm/sec						
Max. Annual		25 ppmvd	x	46.01 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	x	385.5	=	0.099 lb/MMBTU	x	73.12 MMBTU/hr	=	7.26 lb/hr	x	8,760 hr/yr
	÷	2,000 lb/ton	=	31.82 tons/yr						

NOTE ON CO AND VOC EMISSIONS

CO and VOC levels increase at loads below 100 percent. Potential emissions have been based on the expected emission rate for less than full load conditions, which is double the emission rate (in ppm) guaranteed for full load operation for each pollutant. Potential emissions have been based on 90% load.

CO

Max. Hourly		200 ppmvd	x	28.01 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	x	385.5	=	0.484 lb/MMBTU	x	80.04 MMBTU/hr	x	90%	=	34.86 lb/hr
		34.86 lb/hr	x	0.126 gm-hr/lb-sec	=	4.392 gm/sec				
Max. Annual		200 ppmvd	x	28.01 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	x	385.5	=	0.484 lb/MMBTU	x	73.12 MMBTU/hr	x	90%	=	31.84 lb/hr
	x	8,760 hr/yr	÷	2,000 lb/ton	=	139.47 tons/yr				

VOC

Max. Hourly		20 ppmvd	x	16.03 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	x	385.5	=	0.028 lb/MMBTU	x	80.04 MMBTU/hr	x	90%	=	1.99 lb/hr
Max. Annual		20 ppmvd	x	16.03 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	x	385.5	=	0.028 lb/MMBTU	x	73.12 MMBTU/hr	x	90%	=	1.82 lb/hr
	x	8,760 hr/yr	÷	2,000 lb/ton	=	7.98 tons/yr				

H_2S

Max. Hourly		2,668 ft3/min	x	60 min/hr	x	100 ppmv	x	34.07 lb/mol	x	(1 - 98%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	0.03 lb/hr	x	0.126 gm-hr/lb-sec	=	0.0036 gm/sec
Max. Annual		146,240 scf/hr	x	100 ppmv	x	34.07 lb/mol	x	(1 - 98%)	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	0.03 lb/hr	x	8,760 hr/yr	÷	2,000 lb/ton	=	0.12 tons/yr

SO_2

Max. Hourly		2,668 ft3/min	x	60 min/hr	x	100 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	2.70 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.34 gm/sec		
Max. Annual		146,240 scf/hr	x	100 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R	÷	519.7 R
	=	2.47 lb/hr	x	8,760 hr/yr	÷	2,000 lb/ton	=	10.81 tons/yr		

NH_3

Max. Hourly		20 ppmvd	x	17.03 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	=	0.029 lb/MMBTU	x	80.04 MMBTU/hr	=	2.35 lb/hr	x	0.126 gm-hr/lb-sec	=	0.297 gm/sec
Max. Annual		20 ppmvd	x	17.03 lb/mol	x	9400 dscf/MMBTU	x	20.9%O2 / (20.9%O2 - 15.00%O2)		
	=	0.029 lb/MMBTU	x	73.12 MMBTU/hr	=	2.15 lb/hr	x	8,760 hr/yr	÷	2,000 lb/ton
	=	9.42 tons/yr								

Hg

Max. Hourly		2,668 ft3/min	x	60 min/hr	x	2.92E-04 ppmv	x	200.59 lb/mol	x	(1 - 0%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	2.47E-05 lb/hr	x	0.126 gm-hr/lb-sec	=	3.11E-06 gm/sec
Max. Annual		146,240 scf/hr	x	2.92E-04 ppmv	x	200.59 lb/mol	÷	0.7302 ft3-atm/mol-R	÷	519.7 R
	=	0.000023 lb/hr	x	8,760 hr/yr	÷	2,000 lb/ton	=	0.000099 tons/yr		

HCl

Max. Hourly		2,668 ft3/min	x	60 min/hr	x	12.79 ppmv	x	36.46 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	0.197 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.025 gm/sec		
Max. Annual		146,240 scf/hr	x	12.79 ppmv	x	36.46 lb/mol	÷	0.7302 ft3-atm/mol-R	÷	519.7 R
	=	0.180 lb/hr	x	8,760 hr/yr	÷	2,000 lb/ton	=	0.787 tons/yr		

Methane (for modeling other Landfill Gas Constituents)

Max. Hourly		2,668 ft3/min	x	60 min/hr	x	50%	x	16.03 lb/mol	x	(1 - 98%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	67.62 lb/hr	x	0.126 gm-hr/lb-sec	=	8.5201 gm/sec

Ammonium Salts

SO_2 is converted to SO_3. NH_3 and SO_3 react to form ammonium sulfate or ammonium bisulfate as follows:
$SO_2 \rightarrow SO_3$ (1% conversion in turbine, 3% conversion in SCR catalyst)
$SO_3 + H_2O + NH_3 \rightarrow (NH_4)HSO_4$ MW = 115.11
$SO_3 + H_2O + 2NH_3 \rightarrow (NH_4)_2SO_4$ MW = 132.14

Max. Hourly		2.70 lbs/hr	x	4%	x	132.14 lb/mol	÷	64.07 lb/mol	=	0.22 lbs/hr
Max. Annual		2.47 lbs/hr	x	4%	x	132.14 lb/mol	÷	64.07 lb/mol	=	0.20 lbs/hr
	x	8,760 hr/yr	÷	2,000 lb/ton	=	0.89 tons/yr				

PM_{10} from Turbine

Max. Hourly		0.021 lb/MMBTU	x	80.04 MMBTU/hr	=	1.68 lb/hr	x	0.126 gm-hr/lb-sec	=	0.212 gm/sec
Max. Annual		0.021 lb/MMBTU	x	73.12 MMBTU/hr	=	1.54 lb/hr	x	8,760 hr/yr	÷	2,000 lb/ton
	=	6.73 tons/yr								

Total PM_{10} (turbine + ammonium salts)

Max. Hourly		0.22 lb/hr	+	1.68 lb/hr	=	1.90 lb/hr	x	0.126 gm-hr/lb-sec	=	0.240 gm/sec
		1.90 lb/hr	÷	80.04 lb/hr	=	0.0238 lb/MMBTU				
Max. Annual		0.89 tons/yr	+	6.73 tons/yr	=	7.62 tons/yr				

SUPPORTING CALCULATIONS
POINT SOURCE EMISSION RATES FOR MODELING
Rhode Island Central Genco, LLC
Johnston, Rhode Island

Emission Rates

ULE Flare

NO_X		6,000 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.025 lb/MMBTU
	=	4.95 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.624 gm/sec				
CO		6,000 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.060 lb/MMBTU
	=	11.88 lbs/hr	x	0.126 gm-hr/lb-sec	=	1.497 gm/sec				
SO_2		6,000 ft3/min	x	60 min/hr	x	100 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	6.08 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.77 gm/sec		
PM		9.90 lbs/hr	x	0.126 gm-hr/lb-sec	=	1.25 gm/sec		(from stack test)		

Remote Flare 1

NO_X		400 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.068 lb/MMBTU
	=	0.90 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.113 gm/sec				
CO		400 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.37 lb/MMBTU
	=	4.88 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.615 gm/sec				
SO_2		400 ft3/min	x	60 min/hr	x	3,000 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	12.16 lbs/hr	x	0.126 gm-hr/lb-sec	=	1.53 gm/sec		
PM		400 ft3/min	x	60 min/hr	÷	1,000,000	x	9.28 lb/MMscf	=	0.22 lbs/hr
	x	0.126 gm-hr/lb-sec	=	0.028 gm/sec						

Remote Flare 2

NO_X		2,000 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.068 lb/MMBTU
	=	4.49 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.565 gm/sec				
CO		2,000 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.37 lb/MMBTU
	=	24.42 lbs/hr	x	0.126 gm-hr/lb-sec	=	3.077 gm/sec				
SO_2		2,000 ft3/min	x	60 min/hr	x	600 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	12.16 lbs/hr	x	0.126 gm-hr/lb-sec	=	1.53 gm/sec		
PM		2,000 ft3/min	x	60 min/hr	÷	1,000,000	x	9.28 lb/MMscf	=	1.11 lbs/hr
	x	0.126 gm-hr/lb-sec	=	0.140 gm/sec						

Remote Flare 3

NO_X		2,000 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.068 lb/MMBTU
	=	4.49 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.565 gm/sec				
CO		2,000 ft3/min	x	60 min/hr	x	550 BTU/scf	÷	1,000,000	x	0.37 lb/MMBTU
	=	24.42 lbs/hr	x	0.126 gm-hr/lb-sec	=	3.077 gm/sec				
SO_2		2,000 ft3/min	x	60 min/hr	x	2,000 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	40.52 lbs/hr	x	0.126 gm-hr/lb-sec	=	5.11 gm/sec		
PM		2,000 ft3/min	x	60 min/hr	÷	1,000,000	x	9.28 lb/MMscf	=	1.11 lbs/hr
	x	0.126 gm-hr/lb-sec	=	0.140 gm/sec						

SUPPORTING CALCULATIONS
POINT SOURCE EMISSION RATES FOR MODELING
Rhode Island Central Genco, LLC
Johnston, Rhode Island

Ridgewood Rhode Island Generation Stage 1 Deutz Engines

Methane		820 ft3/min	x	60 min/hr	x	50%	x	16.03 lb/mol	x	(1 - 98%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	20.78 lb/hr	x	0.126 gm-hr/lb-sec	=	2.6186 gm/sec
H_2S		820 ft3/min	x	60 min/hr	x	100 ppmv	x	34.07 lb/mol	x	(1 - 98%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	0.009 lb/hr	x	0.126 gm-hr/lb-sec	=	0.0011 gm/sec
Hg		820 ft3/min	x	60 min/hr	x	2.92E-04 ppmv	x	200.59 lb/mol	x	(1 - 0%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	7.59E-06 lb/hr	x	0.126 gm-hr/lb-sec	=	9.57E-07 gm/sec
HCl		820 ft3/min	x	60 min/hr	x	12.79 ppmv	x	36.46 lb/mol	x	(1 - 0%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	0.06 lb/hr	x	0.126 gm-hr/lb-sec	=	0.0076 gm/sec
NO_X		0.6 g/bhp-hr	x	2229 bhp	÷	453.6 g/lb	=	2.95 lb/hr	x	2 engines
	=	5.90 lb/hr	x	0.126 gm-hr/lb-sec	=	0.7430 gm/sec				
CO		2.5 g/bhp-hr	x	2229 bhp	÷	453.6 g/lb	=	12.29 lb/hr	x	2 engines
	=	24.57 lb/hr	x	0.126 gm-hr/lb-sec	=	3.0958 gm/sec				
SO_2		820 ft3/min	x	60 min/hr	x	100 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	0.83 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.10 gm/sec		
PM_{10}		0.10 g/bhp-hr	x	2229 bhp	÷	453.6 g/lb	=	0.49 lb/hr	x	2 engines
	=	0.98 lb/hr	x	0.126 gm-hr/lb-sec	=	0.1238 gm/sec				

Ridgewood Rhode Island Generation Stage 2 Caterpillar Engines

Methane		2,032 ft3/min	x	60 min/hr	x	50%	x	16.03 lb/mol	x	(1 - 98%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	51.50 lb/hr	x	0.126 gm-hr/lb-sec	=	6.4891 gm/sec
H_2S		2,032 ft3/min	x	60 min/hr	x	100 ppmv	x	34.07 lb/mol	x	(1 - 98%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	0.02 lb/hr	x	0.126 gm-hr/lb-sec	=	0.0028 gm/sec
Hg		2,032 ft3/min	x	60 min/hr	x	2.92E-04 ppmv	x	200.59 lb/mol	x	(1 - 0%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	1.88E-05 lb/hr	x	0.126 gm-hr/lb-sec	=	2.37E-06 gm/sec
HCl		2,032 ft3/min	x	60 min/hr	x	12.79 ppmv	x	36.46 lb/mol	x	(1 - 0%)
	÷	0.7302 ft3-atm/mol-R	÷	519.7 R	=	0.15 lb/hr	x	0.126 gm-hr/lb-sec	=	0.0189 gm/sec
NO_X		0.5 g/bhp-hr	x	2229 bhp	÷	453.6 g/lb	=	2.46 lb/hr	x	4 engines
	=	9.83 lb/hr	x	0.126 gm-hr/lb-sec	=	1.2383 gm/sec				
CO		2.75 g/bhp-hr	x	2229 bhp	÷	453.6 g/lb	=	13.51 lb/hr	x	4 engines
	=	54.05 lb/hr	x	0.126 gm-hr/lb-sec	=	6.8108 gm/sec				
SO_2		2,032 ft3/min	x	60 min/hr	x	100 ppmv	x	64.07 lb/mol	÷	0.7302 ft3-atm/mol-R
	÷	519.7 R	=	2.06 lbs/hr	x	0.126 gm-hr/lb-sec	=	0.26 gm/sec		
PM_{10}		0.10 g/bhp-hr	x	2229 bhp	÷	453.6 g/lb	=	0.49 lb/hr	x	4 engines
	=	1.97 lb/hr	x	0.126 gm-hr/lb-sec	=	0.2477 gm/sec				

SUPPORTING CALCULATIONS
FLARE MODELING PARAMETERS
Rhode Island Central Genco, LLC
Johnston, Rhode Island

MODELING PARAMETERS

Flares were modeled with AERMOD using the default parameters generated by the SCREEN3 model. The SCREEN3 model uses an assumed temperature of 1273ºK (1832ºF) and an assumed exit velocity of 20 m/sec. The effective stack diameter is $9.88 \times 10^{-4} (Q_H)^{0.5}$, where Q_H is the sensible heat release rate in cal/sec. The sensible heat release rate is estimated to be 45 percent of the total heat release (55 percent of the heat is estimated to be released as radiation). SCREEN3 also calculates an effective release height based as the top of the flame based on the flame being inclined by 45 degrees. For this study, the flare height and heat release rate in MMBTU/hr were input to SCREEN3 to obtain the effective release height and total heat release rate in cal/sec. The effective diameter was calculated as above.

Flare	Heat Rate (MMBTU/hr)	Heat Rate (cal/sec)	Sensible Heat Rate (cal/sec)	Actual Height (m)	Effective Release Height (m)	Effective Release Height (ft)	Effective Stack Diameter (m)	Effective Stack Diameter (ft)
RF 1	13.20	924,000	415,800	4.57	7.81	25.62	0.64	2.09
RF 2	66.00	4,620,000	2,079,000	9.68	16.68	54.72	1.42	4.67
RF 3	66.00	4,620,000	2,079,000	9.36	16.35	53.64	1.42	4.67

Effective Heights are at 100% load

SUPPORTING CALCULATIONS
OFFSET REQUIREMENT CALCULATION

Rhode Island Central Genco, LLC
Johnston, Rhode Island

For the purposes of determining the net emissions increase/decrease the only contemporaneous increase/decrease considered was the removal of the existing RPPP plant. In 2005, the Stage 2 facility began operation. However, because the Stage 2 facility was issued a major source permit, the emissions increase from from the Stage 1 and Stage 2 facilities were considered in the issuance of the major source permit for Stage 2 and are not included in the net emissions increase for this project.

Existing Emissions from RPPP Plant

Pollutant	2005	2006	Average	
NO_X	64.243	66.68	65.46	as reported to RIDEM
CO	321.95	315.87	318.91	as reported to RIDEM
VOC	12.32	11.28	11.80	as reported to RIDEM
PM	24.35	24.94	24.65	as reported to ISO
SO_2	45.60	121.74	83.67	as reported to ISO

Emissions offsets in the form of ERCs must be obtained for NO_X emissions at a ratio of 1.2 to 1 for the net emissions increase, which accounts for the decrease from the removal of the RPPP facility.

Pollutant	Emissions from Proposed Plant	Decreases from Removal of RPPP Facility	Net Increase	Offset Requirement
NO_X	159.10	-65.46	93.64	113
VOC	39.91	-11.80	28.11	34

SUPPORTING CALCULATIONS
MISCELLANEOUS CALCULATIONS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Comparison of NO_X Emission: Turbines vs. Engines

Existing Cat 3520 Engine

	2.46 lbs/hr	÷	1.60 MW	=	1.54 lb/MW-hr

Proposed Turbines (40º F)

Simple cycle	7.26 lbs/hr	÷	6.18 MW	=	1.17 lb/MW-hr
Five turbines, combined cycle	36.30 lbs/hr	÷	41.91 MW	=	0.87 lb/MW-hr

Sulfur Content in lb/MMBTU

	146,240 scf/hr	x	100 ppmv	x	32.06 lb/mol	÷	0.7302 ft3-atm/mol-R	÷	519.7 R
=	1.24 lb/hr	÷	73.12 MMBTU/hr	=	0.017 lb/MMBTU				

Cooling Tower Emissions

Main Cooling Tower

Circulation Rate/Cell: 5,500 gal/min
Number of Cells: 4
Solids Concentration: 1,000 mg/l
Drift Rate: 0.002%

5,500 gal/min	x	4 cells	x	60 min/hr	x	3.785 l/gal	x	0.002%	x	1,000 mg/l
	÷	453,600 mg/lb	=	0.220 lbs/hr	x	0.126	=	0.0278 gm/sec		
0.220 lbs/hr	x	8,760 hr/yr	÷	2,000 lb/ton	=	0.965 tons/yr				

Auxiliary Cooling Tower

Circulation Rate/Cell: 5,500 gal/min
Number of Cells: 1
Solids Concentration: 1,000 mg/l
Drift Rate: 0.002%

5,500 gal/min	x	1 cells	x	60 min/hr	x	3.785 l/gal	x	0.002%	x	1,000 mg/l
	÷	453,600 mg/lb	=	0.055 lbs/hr	x	0.126	=	0.0069 gm/sec		
0.055 lbs/hr	x	8,760 hr/yr	÷	2,000 lb/ton	=	0.241 tons/yr				

Total Cooling Tower PM Emissions

0.220 lbs/hr	+	0.055 lbs/hr	=	0.275 lbs/hr
0.965 tons/yr	+	0.241 tons/yr	=	1.206 tons/yr

Existing Facility - Potential VOC Emissions

In accordance with RIAPC Regulation 9.4.2(a)(3), a major modification to an existing facility which has potential emissions greater than 50 tons, but less than 100 tons, BACT is required instead of LAER. As calculated below, the existing Ridgewood facilities have potential VOC emissions in this range. Therefore, for a major VOC modification, LAER is not required.

RPPP Facility:	40.7 tons/yr
Stage 1 Facility:	5.4 tons/yr
Stage 2 Facility:	13.4 tons/yr
Total:	59.5 tons/yr

SUPPORTING CALCULATIONS

Rhode Island Central Genco, LLC

Johnston, Rhode Island

FLUE GAS VOLUME CALCULATIONS USING F-FACTOR METHOD

Device	Fuel	Heat Input Rating (MMBTU/hr)	F-Factor (wscf/ MMBTU)	Oxygen Content (%, wet basis)	Water in Air (volume basis)	Temp (F)	Estimated Flow Rate (acfm)
Turbine	LFG	80.04	11,538	13.6	1.3%	250	61,556
Turbine	LFG	73.12	11,538	13.7	1.3%	250	57,046
Caterpillar	LFG	15.36	11,538	6.3	1.3%	941	11,436
Deutz	LFG	12.40	11,538	6.0	1.3%	880	8,649
Boiler	#2 oil	6.65	10,320	3.0	1.3%	400	2,209

Notes:

1. Flue gas volume = [F-Factor x heat rating x 20.9] x [temperature + 459.7/ 527.7] / [20.9 x (1-moisture content) - oxygen content].
2. F-factors and calculation method are as reported in 40 CFR 60, Appendix A, Method 19.
3. Air moisture content of 1.3% corresponds to 50% relative humidity at 70 F.

APPENDIX C

WORST-CASE LOAD MODEL RESULTS

TABLE C-1
WORST-CASE LOAD MODELING SUMMARY FOR TURBINES

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Simple Terrain 1986 (μg/m³)	Simple Terrain 1987 (μg/m³)	Simple Terrain 1988 (μg/m³)	Simple Terrain 1989 (μg/m³)	Simple Terrain 2000 (μg/m³)	Maximum (μg/m³)
100% Load - 75-Foot Stack						
3- Hour	8.70	9.03	**9.14**	9.07	8.95	9.14
24-Hour	4.84	4.62	5.52	4.67	**5.59**	5.59
Annual	0.70	0.68	**0.75**	0.72	0.66	0.75
1- Hour	9.77	9.97	**10.02**	9.89	9.85	10.02
8-Hour	6.77	7.57	7.13	**7.94**	7.14	7.94
80% Load - 75-Foot Stack						
3- Hour	7.44	7.53	**7.84**	7.57	7.61	7.84
24-Hour	4.21	4.09	**4.84**	4.18	4.83	4.84
Annual	0.64	0.64	**0.69**	0.65	0.60	0.69
1- Hour	8.35	**8.51**	8.45	8.31	8.28	8.51
8-Hour	5.90	6.50	6.09	**6.91**	6.13	6.91
70% Load - 75-Foot Stack						
3- Hour	6.93	6.89	**7.11**	7.01	6.87	7.11
24-Hour	3.92	3.85	**4.47**	3.90	4.43	4.47
Annual	0.60	0.61	**0.65**	0.61	0.57	0.65
1- Hour	7.56	7.69	**7.70**	7.66	7.47	7.70
8-Hour	5.54	6.01	5.62	**6.29**	5.65	6.29
60% Load - 75-Foot Stack						
3- Hour	6.29	6.25	**6.39**	6.33	6.27	6.39
24-Hour	3.63	3.56	4.08	3.83	**4.13**	4.13
Annual	0.56	0.57	**0.60**	0.57	0.53	0.60
1- Hour	7.05	7.16	**7.18**	7.17	6.83	7.18
8-Hour	5.14	5.44	5.17	**5.68**	5.14	5.68
50% Load - 75-Foot Stack						
3- Hour	5.73	5.76	5.70	**5.82**	5.57	5.82
24-Hour	3.29	3.32	3.71	3.46	**3.96**	3.96
Annual	0.53	0.54	**0.57**	0.54	0.49	0.57
1- Hour	6.45	6.61	**6.74**	6.60	6.38	6.74
8-Hour	4.79	5.03	4.89	**5.05**	4.67	5.05

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
1	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	ANNUAL	S75L100	1ST	0.7031	290544.41	4630657	104	1 YRS	CLF_86.SFC	15	15	756
2	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	ANNUAL	S75L80	1ST	0.64023	290544.41	4630657	104	1 YRS	CLF_86.SFC	15	15	756
3	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	ANNUAL	S75L70	1ST	0.60288	290544.41	4630657	104	1 YRS	CLF_86.SFC	15	15	756
4	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	ANNUAL	S75L60	1ST	0.56322	290501.12	4630682	99	1 YRS	CLF_86.SFC	15	15	756
5	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	ANNUAL	S75L50	1ST	0.53222	290501.12	4630682	99	1 YRS	CLF_86.SFC	15	15	756
6	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L100	1ST	9.97728	290501.12	4630682	99	86070721	CLF_86.SFC	15	15	756
7	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L100	2ND	9.77306	290515.84	4630713.5	98	86080922	CLF_86.SFC	15	15	756
8	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L80	1ST	8.47987	290457.81	4630707	95	86070721	CLF_86.SFC	15	15	756
9	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L80	2ND	8.35137	290457.81	4630707	95	86082406	CLF_86.SFC	15	15	756
10	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L70	1ST	7.78031	290457.81	4630707	95	86070721	CLF_86.SFC	15	15	756
11	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L70	2ND	7.56459	290457.81	4630707	95	86082406	CLF_86.SFC	15	15	756
12	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L60	1ST	7.45065	290231.5	4630897	93	86071708	CLF_86.SFC	15	15	756
13	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L60	2ND	7.05369	290457.81	4630707	95	86082406	CLF_86.SFC	15	15	756
14	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L50	1ST	7.03558	290231.5	4630897	93	86071708	CLF_86.SFC	15	15	756
15	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	1-HR	S75L50	2ND	6.4508	290186.94	4630833.5	96	86041509	CLF_86.SFC	15	15	756
16	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L100	1ST	9.34334	290481.12	4630910.5	101	86061603	CLF_86.SFC	15	15	756
17	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L100	2ND	8.6994	290481.12	4630653.5	99	86031121	CLF_86.SFC	15	15	756
18	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L80	1ST	7.78662	290481.12	4630910.5	101	86061603	CLF_86.SFC	15	15	756
19	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L80	2ND	7.44209	290456.47	4630629	95	86081203	CLF_86.SFC	15	15	756
20	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L70	1ST	7.14741	290477.91	4630782	99	86082503	CLF_86.SFC	15	15	756
21	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L70	2ND	6.93033	290456.47	4630629	95	86081203	CLF_86.SFC	15	15	756
22	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L60	1ST	6.60645	290468.88	4630730.5	98	86082421	CLF_86.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
23	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L60	2ND	6.28525	290456.47	4630629	95	86031621	CLF_86.SFC	15	15	756
24	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L50	1ST	5.96246	290468.88	4630730.5	98	86082421	CLF_86.SFC	15	15	756
25	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	3-HR	S75L50	2ND	5.7254	290442.81	4630685.5	94	86031121	CLF_86.SFC	15	15	756
26	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L100	1ST	8.24041	290515.84	4630713.5	98	86082424	CLF_86.SFC	15	15	756
27	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L100	2ND	6.76553	290327.91	4630582	92	86051208	CLF_86.SFC	15	15	756
28	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L80	1ST	6.84446	290515.84	4630713.5	98	86082424	CLF_86.SFC	15	15	756
29	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L80	2ND	5.90389	290327.91	4630582	92	86101808	CLF_86.SFC	15	15	756
30	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L70	1ST	6.28498	290468.88	4630730.5	98	86082424	CLF_86.SFC	15	15	756
31	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L70	2ND	5.54251	290327.91	4630582	92	86101808	CLF_86.SFC	15	15	756
32	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L60	1ST	5.87078	290468.88	4630730.5	98	86082424	CLF_86.SFC	15	15	756
33	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L60	2ND	5.13504	290327.91	4630582	92	86101808	CLF_86.SFC	15	15	756
34	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L50	1ST	5.33686	290468.88	4630730.5	98	86082424	CLF_86.SFC	15	15	756
35	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	8-HR	S75L50	2ND	4.79133	290327.91	4630582	92	86101808	CLF_86.SFC	15	15	756
36	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L100	1ST	5.58987	290481.12	4630653.5	99	86032024	CLF_86.SFC	15	15	756
37	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L100	2ND	4.83598	290227.91	4630609	89	86041824	CLF_86.SFC	15	15	756
38	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L80	1ST	4.88243	290481.12	4630653.5	99	86032024	CLF_86.SFC	15	15	756
39	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L80	2ND	4.20931	290227.91	4630609	89	86041824	CLF_86.SFC	15	15	756
40	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L70	1ST	4.52928	290481.12	4630653.5	99	86032024	CLF_86.SFC	15	15	756
41	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L70	2ND	3.91653	290227.91	4630609	89	86042524	CLF_86.SFC	15	15	756
42	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L60	1ST	4.25852	290442.81	4630685.5	94	86032024	CLF_86.SFC	15	15	756
43	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L60	2ND	3.6272	290457.81	4630707	95	86030724	CLF_86.SFC	15	15	756
44	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L50	1ST	4.00658	290442.81	4630685.5	94	86032024	CLF_86.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
45	AERMOD	turbine worst case load_86_UNIT.USF	UNIT	24-HR	S75L50	2ND	3.2895	290457.81	4630707	95	86030724	CLF_86.SFC	15	15	756
46	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	ANNUAL	S75L100	1ST	0.68109	290488.59	4630590.5	94	1 YRS	CLF_87.SFC	15	15	756
47	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	ANNUAL	S75L80	1ST	0.63756	290488.59	4630590.5	94	1 YRS	CLF_87.SFC	15	15	756
48	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	ANNUAL	S75L70	1ST	0.6085	290488.59	4630590.5	94	1 YRS	CLF_87.SFC	15	15	756
49	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	ANNUAL	S75L60	1ST	0.57459	290488.59	4630590.5	94	1 YRS	CLF_87.SFC	15	15	756
50	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	ANNUAL	S75L50	1ST	0.53589	290488.59	4630590.5	94	1 YRS	CLF_87.SFC	15	15	756
51	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L100	1ST	10.00941	290457.81	4630707	95	87071823	CLF_87.SFC	15	15	756
52	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L100	2ND	9.96576	290457.81	4630707	95	87082302	CLF_87.SFC	15	15	756
53	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L80	1ST	8.52143	290457.81	4630707	95	87071823	CLF_87.SFC	15	15	756
54	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L80	2ND	8.50511	290457.81	4630707	95	87082302	CLF_87.SFC	15	15	756
55	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L70	1ST	7.94599	290379.22	4630923	102	87061309	CLF_87.SFC	15	15	756
56	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L70	2ND	7.69443	290457.81	4630707	95	87082302	CLF_87.SFC	15	15	756
57	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L60	1ST	7.64277	290379.22	4630923	102	87061309	CLF_87.SFC	15	15	756
58	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L60	2ND	7.15687	290457.81	4630707	95	87071823	CLF_87.SFC	15	15	756
59	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L50	1ST	7.19257	290379.22	4630923	102	87061309	CLF_87.SFC	15	15	756
60	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	1-HR	S75L50	2ND	6.60954	290379.22	4630923	102	87060808	CLF_87.SFC	15	15	756
61	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L100	1ST	9.49005	290501.12	4630882	99	87081621	CLF_87.SFC	15	15	756
62	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L100	2ND	9.03027	290293.19	4630979	104	87033021	CLF_87.SFC	15	15	756
63	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L80	1ST	8.09979	290456.47	4630629	95	87081824	CLF_87.SFC	15	15	756
64	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L80	2ND	7.52966	290293.19	4630979	104	87033021	CLF_87.SFC	15	15	756
65	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L70	1ST	7.39599	290456.47	4630629	95	87081824	CLF_87.SFC	15	15	756
66	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L70	2ND	6.89463	290293.19	4630979	104	87033021	CLF_87.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
67	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L60	1ST	6.61933	290456.47	4630629	95	87081824	CLF_87.SFC	15	15	756
68	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L60	2ND	6.25033	290301.84	4630929.5	98	87080306	CLF_87.SFC	15	15	756
69	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L50	1ST	5.85209	290456.47	4630629	95	87081824	CLF_87.SFC	15	15	756
70	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	3-HR	S75L50	2ND	5.75886	290301.84	4630929.5	98	87080306	CLF_87.SFC	15	15	756
71	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L100	1ST	7.79224	290456.47	4630629	95	87112124	CLF_87.SFC	15	15	756
72	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L100	2ND	7.56954	290501.12	4630682	99	87112208	CLF_87.SFC	15	15	756
73	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L80	1ST	6.70092	290293.19	4630979	104	87080308	CLF_87.SFC	15	15	756
74	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L80	2ND	6.50381	290501.12	4630682	99	87112208	CLF_87.SFC	15	15	756
75	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L70	1ST	6.15397	290456.47	4630629	95	87112124	CLF_87.SFC	15	15	756
76	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L70	2ND	6.01043	290501.12	4630682	99	87082324	CLF_87.SFC	15	15	756
77	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L60	1ST	5.59908	290501.12	4630682	99	87112208	CLF_87.SFC	15	15	756
78	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L60	2ND	5.43931	290501.12	4630682	99	87082324	CLF_87.SFC	15	15	756
79	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L50	1ST	5.18225	290457.81	4630707	95	87082324	CLF_87.SFC	15	15	756
80	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	8-HR	S75L50	2ND	5.03014	290457.81	4630707	95	87112208	CLF_87.SFC	15	15	756
81	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L100	1ST	5.89175	290456.47	4630629	95	87112124	CLF_87.SFC	15	15	756
82	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L100	2ND	4.61625	290327.91	4630532	89	87012624	CLF_87.SFC	15	15	756
83	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L80	1ST	5.16261	290396.31	4630594	94	87031724	CLF_87.SFC	15	15	756
84	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L80	2ND	4.09044	290501.12	4630682	99	87112224	CLF_87.SFC	15	15	756
85	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L70	1ST	4.86169	290396.31	4630594	94	87031724	CLF_87.SFC	15	15	756
86	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L70	2ND	3.84922	290501.12	4630682	99	87112224	CLF_87.SFC	15	15	756
87	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L60	1ST	4.54527	290396.31	4630594	94	87031724	CLF_87.SFC	15	15	756
88	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L60	2ND	3.55614	290327.91	4630582	92	87012624	CLF_87.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
89	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L50	1ST	4.16183	290396.31	4630594	94	87031724	CLF_87.SFC	15	15	756
90	AERMOD	turbine worst case load_87_UNIT.USF	UNIT	24-HR	S75L50	2ND	3.32035	290327.91	4630582	92	87012624	CLF_87.SFC	15	15	756
91	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	ANNUAL	S75L100	1ST	0.75275	290544.41	4630657	104	1 YRS	CLF_88.SFC	15	15	756
92	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	ANNUAL	S75L80	1ST	0.68542	290544.41	4630657	104	1 YRS	CLF_88.SFC	15	15	756
93	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	ANNUAL	S75L70	1ST	0.64551	290544.41	4630657	104	1 YRS	CLF_88.SFC	15	15	756
94	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	ANNUAL	S75L60	1ST	0.6014	290544.41	4630657	104	1 YRS	CLF_88.SFC	15	15	756
95	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	ANNUAL	S75L50	1ST	0.56608	290501.12	4630682	99	1 YRS	CLF_88.SFC	15	15	756
96	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L100	1ST	10.26387	290456.47	4630629	95	88081520	CLF_88.SFC	15	15	756
97	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L100	2ND	10.02123	290456.47	4630629	95	88060523	CLF_88.SFC	15	15	756
98	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L80	1ST	8.57083	290456.47	4630629	95	88081520	CLF_88.SFC	15	15	756
99	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L80	2ND	8.45247	290456.47	4630629	95	88081524	CLF_88.SFC	15	15	756
100	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L70	1ST	7.73004	290327.91	4630932	101	88052309	CLF_88.SFC	15	15	756
101	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L70	2ND	7.69566	290424.31	4630667	95	88081520	CLF_88.SFC	15	15	756
102	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L60	1ST	7.29302	290327.91	4630932	101	88052309	CLF_88.SFC	15	15	756
103	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L60	2ND	7.17912	290327.91	4630932	101	88073008	CLF_88.SFC	15	15	756
104	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L50	1ST	6.87784	290327.91	4630932	101	88073008	CLF_88.SFC	15	15	756
105	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	1-HR	S75L50	2ND	6.73915	290327.91	4630932	101	88052309	CLF_88.SFC	15	15	756
106	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L100	1ST	9.57946	290515.84	4630850.5	101	88081006	CLF_88.SFC	15	15	756
107	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L100	2ND	9.13711	290515.84	4630850.5	101	88061521	CLF_88.SFC	15	15	756
108	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L80	1ST	8.03677	290481.12	4630910.5	101	88081021	CLF_88.SFC	15	15	756
109	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L80	2ND	7.83784	290515.84	4630850.5	101	88061521	CLF_88.SFC	15	15	756
110	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L70	1ST	7.23791	290515.84	4630850.5	101	88081006	CLF_88.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
111	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L70	2ND	7.11036	290515.84	4630850.5	101	88061521	CLF_88.SFC	15	15	756
112	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L60	1ST	6.57703	290457.81	4630707	95	88112106	CLF_88.SFC	15	15	756
113	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L60	2ND	6.39411	290515.84	4630850.5	101	88061521	CLF_88.SFC	15	15	756
114	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L50	1ST	5.94868	290468.88	4630833.5	101	88081006	CLF_88.SFC	15	15	756
115	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	3-HR	S75L50	2ND	5.70372	290457.81	4630707	95	88031921	CLF_88.SFC	15	15	756
116	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L100	1ST	7.9556	290327.91	4630582	92	88041024	CLF_88.SFC	15	15	756
117	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L100	2ND	7.12724	290481.12	4630653.5	99	88032024	CLF_88.SFC	15	15	756
118	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L80	1ST	6.75147	290327.91	4630582	92	88041024	CLF_88.SFC	15	15	756
119	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L80	2ND	6.0908	290481.12	4630653.5	99	88032024	CLF_88.SFC	15	15	756
120	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L70	1ST	6.1874	290327.91	4630582	92	88041024	CLF_88.SFC	15	15	756
121	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L70	2ND	5.62362	290481.12	4630653.5	99	88030124	CLF_88.SFC	15	15	756
122	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L60	1ST	5.6331	290327.91	4630582	92	88041024	CLF_88.SFC	15	15	756
123	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L60	2ND	5.16523	290481.12	4630653.5	99	88030124	CLF_88.SFC	15	15	756
124	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L50	1ST	5.00878	290442.81	4630685.5	94	88032024	CLF_88.SFC	15	15	756
125	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	8-HR	S75L50	2ND	4.88718	290442.81	4630685.5	94	88032108	CLF_88.SFC	15	15	756
126	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L100	1ST	6.15152	290481.12	4630653.5	99	88032124	CLF_88.SFC	15	15	756
127	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L100	2ND	5.51854	290501.12	4630882	99	88081024	CLF_88.SFC	15	15	756
128	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L80	1ST	5.42196	290481.12	4630653.5	99	88032124	CLF_88.SFC	15	15	756
129	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L80	2ND	4.84304	290501.12	4630882	99	88081024	CLF_88.SFC	15	15	756
130	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L70	1ST	5.02862	290481.12	4630653.5	99	88032124	CLF_88.SFC	15	15	756
131	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L70	2ND	4.46907	290501.12	4630882	99	88081024	CLF_88.SFC	15	15	756
132	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L60	1ST	4.60564	290481.12	4630653.5	99	88032124	CLF_88.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
133	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L60	2ND	4.07713	290501.12	4630882	99	88081024	CLF_88.SFC	15	15	756
134	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L50	1ST	4.1986	290353.97	4630634.5	93	88041024	CLF_88.SFC	15	15	756
135	AERMOD	turbine worst case load_88_UNIT.USF	UNIT	24-HR	S75L50	2ND	3.7064	290456.47	4630629	95	88032224	CLF_88.SFC	15	15	756
136	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	ANNUAL	S75L100	1ST	0.71848	290544.41	4630657	104	1 YRS	CLF_89.SFC	15	15	756
137	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	ANNUAL	S75L80	1ST	0.65208	290544.41	4630657	104	1 YRS	CLF_89.SFC	15	15	756
138	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	ANNUAL	S75L70	1ST	0.61313	290544.41	4630657	104	1 YRS	CLF_89.SFC	15	15	756
139	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	ANNUAL	S75L60	1ST	0.57058	290501.12	4630682	99	1 YRS	CLF_89.SFC	15	15	756
140	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	ANNUAL	S75L50	1ST	0.5391	290501.12	4630682	99	1 YRS	CLF_89.SFC	15	15	756
141	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L100	1ST	10.05909	290456.47	4630629	95	89080722	CLF_89.SFC	15	15	756
142	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L100	2ND	9.88859	290396.31	4630594	94	89062905	CLF_89.SFC	15	15	756
143	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L80	1ST	8.46275	290457.81	4630707	95	89083021	CLF_89.SFC	15	15	756
144	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L80	2ND	8.31201	290396.31	4630594	94	89071120	CLF_89.SFC	15	15	756
145	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L70	1ST	7.67722	290457.81	4630707	95	89060224	CLF_89.SFC	15	15	756
146	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L70	2ND	7.65664	290457.81	4630707	95	89083021	CLF_89.SFC	15	15	756
147	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L60	1ST	7.27955	290477.91	4630782	99	89072209	CLF_89.SFC	15	15	756
148	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L60	2ND	7.17072	290424.31	4630897	101	89090810	CLF_89.SFC	15	15	756
149	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L50	1ST	6.7226	290477.91	4630782	99	89072209	CLF_89.SFC	15	15	756
150	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	1-HR	S75L50	2ND	6.60016	290468.88	4630833.5	101	89090809	CLF_89.SFC	15	15	756
151	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L100	1ST	9.51387	290396.31	4630594	94	89072906	CLF_89.SFC	15	15	756
152	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L100	2ND	9.06577	290396.31	4630594	94	89072824	CLF_89.SFC	15	15	756
153	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L80	1ST	7.96099	290396.31	4630594	94	89072906	CLF_89.SFC	15	15	756
154	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L80	2ND	7.56952	290396.31	4630594	94	89072821	CLF_89.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
155	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L70	1ST	7.12799	290396.31	4630594	94	89072906	CLF_89.SFC	15	15	756
156	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L70	2ND	7.01034	290396.31	4630594	94	89072821	CLF_89.SFC	15	15	756
157	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L60	1ST	6.52877	290402.91	4630652	94	89072824	CLF_89.SFC	15	15	756
158	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L60	2ND	6.32582	290396.31	4630594	94	89072821	CLF_89.SFC	15	15	756
159	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L50	1ST	6.0419	290379.22	4630641	94	89072906	CLF_89.SFC	15	15	756
160	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	3-HR	S75L50	2ND	5.82137	290379.22	4630641	94	89072824	CLF_89.SFC	15	15	756
161	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L100	1ST	7.99698	290396.31	4630594	94	89072908	CLF_89.SFC	15	15	756
162	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L100	2ND	7.93894	290396.31	4630594	94	89072824	CLF_89.SFC	15	15	756
163	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L80	1ST	7.03742	290396.31	4630594	94	89072824	CLF_89.SFC	15	15	756
164	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L80	2ND	6.90783	290396.31	4630594	94	89072908	CLF_89.SFC	15	15	756
165	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L70	1ST	6.49389	290396.31	4630594	94	89072824	CLF_89.SFC	15	15	756
166	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L70	2ND	6.29151	290396.31	4630594	94	89072908	CLF_89.SFC	15	15	756
167	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L60	1ST	5.91947	290396.31	4630594	94	89072824	CLF_89.SFC	15	15	756
168	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L60	2ND	5.6772	290396.31	4630594	94	89072908	CLF_89.SFC	15	15	756
169	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L50	1ST	5.30263	290396.31	4630594	94	89072824	CLF_89.SFC	15	15	756
170	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	8-HR	S75L50	2ND	5.04741	290396.31	4630594	94	89072908	CLF_89.SFC	15	15	756
171	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L100	1ST	5.48367	290501.12	4630682	99	89040124	CLF_89.SFC	15	15	756
172	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L100	2ND	4.6727	290501.12	4630682	99	89112124	CLF_89.SFC	15	15	756
173	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L80	1ST	4.87373	290501.12	4630682	99	89040124	CLF_89.SFC	15	15	756
174	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L80	2ND	4.18283	290515.84	4630713.5	98	89061124	CLF_89.SFC	15	15	756
175	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L70	1ST	4.54824	290501.12	4630682	99	89040124	CLF_89.SFC	15	15	756
176	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L70	2ND	3.89819	290515.84	4630713.5	98	89061124	CLF_89.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
177	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L60	1ST	4.20275	290501.12	4630682	99	89040124	CLF_89.SFC	15	15	756
178	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L60	2ND	3.82731	290457.81	4630707	95	89112124	CLF_89.SFC	15	15	756
179	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L50	1ST	3.81529	290293.19	4630585	90	89101824	CLF_89.SFC	15	15	756
180	AERMOD	turbine worst case load_89_UNIT.USF	UNIT	24-HR	S75L50	2ND	3.45637	290457.81	4630707	95	89112124	CLF_89.SFC	15	15	756
181	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	ANNUAL	S75L100	1ST	0.66077	290519.41	4630942.5	104	1 YRS	CLF_90.SFC	15	15	756
182	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	ANNUAL	S75L80	1ST	0.60062	290519.41	4630942.5	104	1 YRS	CLF_90.SFC	15	15	756
183	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	ANNUAL	S75L70	1ST	0.565	290519.41	4630942.5	104	1 YRS	CLF_90.SFC	15	15	756
184	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	ANNUAL	S75L60	1ST	0.52574	290519.41	4630942.5	104	1 YRS	CLF_90.SFC	15	15	756
185	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	ANNUAL	S75L50	1ST	0.49074	290456.47	4630935	103	1 YRS	CLF_90.SFC	15	15	756
186	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L100	1ST	9.84719	290427.91	4630609	96	90080119	CLF_90.SFC	15	15	756
187	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L100	2ND	9.8452	290427.91	4630609	96	90060420	CLF_90.SFC	15	15	756
188	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L80	1ST	8.32006	290524.88	4630816.5	105	90080320	CLF_90.SFC	15	15	756
189	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L80	2ND	8.27712	290396.31	4630970	105	90061819	CLF_90.SFC	15	15	756
190	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L70	1ST	7.94929	290402.91	4630652	94	90101113	CLF_90.SFC	15	15	756
191	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L70	2ND	7.47376	290524.88	4630816.5	105	90070505	CLF_90.SFC	15	15	756
192	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L60	1ST	7.53962	290402.91	4630652	94	90101113	CLF_90.SFC	15	15	756
193	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L60	2ND	6.83002	290424.31	4630667	95	90060424	CLF_90.SFC	15	15	756
194	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L50	1ST	7.0121	290402.91	4630652	94	90101113	CLF_90.SFC	15	15	756
195	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	1-HR	S75L50	2ND	6.37927	290198	4630857	97	90071407	CLF_90.SFC	15	15	756
196	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L100	1ST	9.38022	290524.88	4630747.5	103	90060721	CLF_90.SFC	15	15	756
197	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L100	2ND	8.94698	290501.12	4630882	99	90081821	CLF_90.SFC	15	15	756
198	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L80	1ST	7.98709	290524.88	4630747.5	103	90060721	CLF_90.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
199	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L80	2ND	7.61165	290501.12	4630882	99	90081821	CLF_90.SFC	15	15	756
200	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L70	1ST	7.21807	290524.88	4630747.5	103	90060721	CLF_90.SFC	15	15	756
201	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L70	2ND	6.87496	290501.12	4630882	99	90081821	CLF_90.SFC	15	15	756
202	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L60	1ST	6.51448	290457.81	4630707	95	90051121	CLF_90.SFC	15	15	756
203	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L60	2ND	6.27435	290442.81	4630685.5	94	90032321	CLF_90.SFC	15	15	756
204	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L50	1ST	5.93173	290457.81	4630707	95	90051121	CLF_90.SFC	15	15	756
205	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	3-HR	S75L50	2ND	5.56787	290457.81	4630707	95	90111303	CLF_90.SFC	15	15	756
206	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L100	1ST	7.72472	290456.47	4630935	103	90070824	CLF_90.SFC	15	15	756
207	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L100	2ND	7.13529	290456.47	4630935	103	90112824	CLF_90.SFC	15	15	756
208	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L80	1ST	6.62433	290456.47	4630935	103	90070824	CLF_90.SFC	15	15	756
209	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L80	2ND	6.12634	290456.47	4630935	103	90112824	CLF_90.SFC	15	15	756
210	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L70	1ST	6.03275	290456.47	4630935	103	90070824	CLF_90.SFC	15	15	756
211	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L70	2ND	5.64922	290456.47	4630935	103	90112824	CLF_90.SFC	15	15	756
212	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L60	1ST	5.52999	290442.81	4630685.5	94	90032324	CLF_90.SFC	15	15	756
213	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L60	2ND	5.14325	290456.47	4630935	103	90042108	CLF_90.SFC	15	15	756
214	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L50	1ST	5.18666	290442.81	4630685.5	94	90032324	CLF_90.SFC	15	15	756
215	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	8-HR	S75L50	2ND	4.66693	290457.81	4630707	95	90032324	CLF_90.SFC	15	15	756
216	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L100	1ST	6.34302	290515.84	4630713.5	98	90111224	CLF_90.SFC	15	15	756
217	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L100	2ND	5.59007	290501.12	4630682	99	90111224	CLF_90.SFC	15	15	756
218	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L80	1ST	5.46413	290515.84	4630713.5	98	90111224	CLF_90.SFC	15	15	756
219	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L80	2ND	4.83322	290501.12	4630682	99	90111224	CLF_90.SFC	15	15	756
220	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L70	1ST	5.00283	290515.84	4630713.5	98	90111224	CLF_90.SFC	15	15	756

TABLE C-2
WORST-CASE LOAD MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Time	Met File	Sources	Groups	Rec.
221	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L70	2ND	4.43254	290501.12	4630682	99	90111224	CLF_90.SFC	15	15	756
222	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L60	1ST	4.56509	290293.19	4630979	104	90080724	CLF_90.SFC	15	15	756
223	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L60	2ND	4.1313	290457.81	4630707	95	90111324	CLF_90.SFC	15	15	756
224	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L50	1ST	4.14217	290293.19	4630979	104	90080724	CLF_90.SFC	15	15	756
225	AERMOD	turbine worst case load_90_UNIT.USF	UNIT	24-HR	S75L50	2ND	3.95697	290457.81	4630707	95	90111324	CLF_90.SFC	15	15	756

APPENDIX D

BOUNDARY LAYER INPUT PARAMETERS

ALBEDO INPUT DATA CALCULATION FOR AERMET

Rhode Island Central Genco, LLC
Johnston, Rhode Island

LAND USE BY QUADRANT

Quadrant	Deciduous Forest	Suburban Development	Open Water	Grassland	Cultivated	Swamp	Landfill/ Disturbed	Highway
NE	50.6%	20.3%	5.4%	2.1%	1.6%	2.7%	2.1%	15.1%
SE	35.2%	47.2%	5.5%	3.4%	1.8%	0.0%	2.6%	4.2%
SW	56.2%	16.9%	0.0%	0.0%	13.0%	7.8%	6.0%	0.0%
NW	52.0%	23.2%	7.4%	3.1%	1.5%	10.9%	1.9%	0.0%

ALBEDO BY LAND USE

Season	Deciduous Forest	Suburban Development	Open Water	Grassland	Cultivated	Swamp	Landfill/ Disturbed	Highway
Spring	0.12	0.15 *	0.12	0.18	0.14	0.12	0.16 **	0.16 ***
Summer	0.12	0.15 *	0.10	0.18	0.20	0.14	0.19 **	0.17 ***
Autumn	0.12	0.17 *	0.14	0.20	0.18	0.16	0.19 **	0.19 ***
Winter	0.50	0.48 *	0.20	0.60	0.60	0.30	0.60 **	0.48 ***

Note: Albedo values are from Table 4-1 of the AERMET User's Guide, with the qualifications described below.

* Albedo for suburban development is the average of deciduous forest, grassland, and urban from Table 4-1 of the AERMET User's Guide.

** Albedo for Landfill/Disturbed is the average of grassland and cultivated land from Table 4-1 of the AERMET User's Guide.

*** Albedo for highway is the average of urban and grassland from Table 4-1 of the AERMET User's Guide.

ALBEDO BY QUADRANT

Season	NE	SE	SW	NW
Spring	0.13	0.14	0.13	0.13
Summer	0.14	0.14	0.14	0.13
Autumn	0.15	0.15	0.14	0.14
Winter	0.48	0.48	0.50	0.46

BOWEN RATIO INPUT DATA CALCULATION FOR AERMET

Rhode Island Central Genco, LLC
Johnston, Rhode Island

LAND USE BY QUADRANT

Quadrant	Deciduous Forest	Suburban Development	Open Water	Grassland	Cultivated	Swamp	Landfill/ Disturbed	Highway
NE	50.6%	20.3%	5.4%	2.1%	1.6%	2.7%	2.1%	15.1%
SE	35.2%	47.2%	5.5%	3.4%	1.8%	0.0%	2.6%	4.2%
SW	56.2%	16.9%	0.0%	0.0%	13.0%	7.8%	6.0%	0.0%
NW	52.0%	23.2%	7.4%	3.1%	1.5%	10.9%	1.9%	0.0%

BOWEN RATIO BY LAND USE

Season	Deciduous Forest	Suburban Development	Open Water	Grassland	Cultivated	Swamp	Landfill/ Disturbed	Highway
Spring	0.70	0.70 *	0.10	0.40	0.30	0.10	0.35 **	0.70 ***
Summer	0.30	1.03 *	0.10	0.80	0.50	0.10	0.65 **	1.40 ***
Autumn	1.00	1.33 *	0.10	1.00	0.70	0.10	0.85 **	1.50 ***
Winter	1.50	1.50 *	1.50	1.50	1.50	1.50	1.50 **	1.50 ***

Note: Bowen ratio values are from Table 4-2b of the AERMET User's Guide, with the qualifications described below.

* Bowen ratio for suburban development is the average of deciduous forest, grassland, and urban from Table 4-2b of the AERMET User's Guide.

** Bowen Ratio for Landfill/Disturbed is the average of grassland and cultivated land from Table 4-2b of the AERMET User's Guide.

*** Bowen Ratio for highway is the average of urban and grassland from Table 4-2b of the AERMET User's Guide.

BOWEN RATIO

Season	NE	SE	SW	NW
Spring	0.63	0.64	0.58	0.57
Summer	0.62	0.71	0.46	0.46
Autumn	1.06	1.12	0.94	0.91
Winter	1.50	1.50	1.50	1.50

SURFACE ROUGHNESS INPUT DATA CALCULATION FOR AERMET

Rhode Island Central Genco, LLC
Johnston, Rhode Island

LAND USE BY QUADRANT

Quadrant	Deciduous Forest	Suburban Development	Open Water	Grassland	Cultivated	Swamp	Landfill/ Disturbed	Highway
NE	50.6%	20.3%	5.4%	2.1%	1.6%	2.7%	2.1%	15.1%
SE	35.2%	47.2%	5.5%	3.4%	1.8%	0.0%	2.6%	4.2%
SW	56.2%	16.9%	0.0%	0.0%	13.0%	7.8%	6.0%	0.0%
NW	52.0%	23.2%	7.4%	3.1%	1.5%	10.9%	1.9%	0.0%

SURFACE ROUGHNESS BY LAND USE

Season	Deciduous Forest	Suburban Development	Open Water	Grassland	Cultivated	Swamp	Landfill/ Disturbed	Highway
Spring	1.00	1.00 *	0.0001	0.05	0.03	0.20	0.050 **	0.05 ***
Summer	1.30	1.15 *	0.0001	0.10	0.20	0.20	0.10 **	0.10 ***
Autumn	0.80	0.90 *	0.0001	0.01	0.05	0.20	0.01 **	0.01 ***
Winter	0.50	0.75 *	0.0001	0.001	0.01	0.05	0.001 **	0.001 ***

Note: Surface Roughness values are from Table 4-3 of the AERMET User's Guide, with the qualifications described below.

* Surface roughness ratio for suburban development is the average of deciduous forest and urban from Table 4-3 of the AERMET User's Guide.

** Surface roughness for Landfill/Disturbed is the same as grassland from Table 4-3 of the AERMET User's Guide.

*** Surface roughness for highway is the same as grassland from Table 4-3 of the AERMET User's Guide.

SURFACE ROUGHNESS RATIO

Season	NE	SE	SW	NW
Spring	0.73	0.83	0.75	0.78
Summer	0.92	1.01	0.97	0.97
Autumn	0.60	0.71	0.62	0.65
Winter	0.41	0.53	0.41	0.44

BOUNDARY LAYER CHARACTERISTICS FOR AERMET INPUT

Rhode Island Central Genco, LLC
Johnston, Rhode Island

Season	Quadrant	Albedo	Bowen Ratio	Surface Roughness
Winter	NE	0.48	1.50	0.41
Winter	SE	0.48	1.50	0.53
Winter	SW	0.50	1.50	0.41
Winter	NW	0.46	1.50	0.44
Spring	NE	0.13	0.63	0.73
Spring	SE	0.14	0.64	0.83
Spring	SW	0.13	0.58	0.75
Spring	NW	0.13	0.57	0.78
Summer	NE	0.14	0.62	0.92
Summer	SE	0.14	0.71	1.01
Summer	SW	0.14	0.46	0.97
Summer	NW	0.13	0.46	0.97
Autumn	NE	0.15	1.06	0.60
Autumn	SE	0.15	1.12	0.71
Autumn	SW	0.14	0.94	0.62
Autumn	NW	0.14	0.91	0.65

APPENDIX E

BPIP-PRIME OUTPUT

BEE-Line Software Version: 9.95

Input File - Ridgewood Criteria.PRW
Input File - Ridgewood Criteria.PIP
Output File - Ridgewood Criteria.TAB
Output File - Ridgewood Criteria.SUM
Output File - Ridgewood Criteria.SO

BPIP (Dated: 04274)

DATE : 12/14/2007
TIME : 05:06:17 PM
N:\24461\Ridgewood criteria.BST BEESTWin BPIP-Prime Files 12/14/2007 5:06:16 P

============================
BPIP PROCESSING INFORMATION:
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The P flag has been set for preparing downwash related data for a model run utilizing the PRIME algorithm.

Inputs entered in METERS will be converted to meters using a conversion factor of 1.0000. Output will be in meters.

The UTMP variable is set to UTMY. The input is assumed to be in UTM coordinates. BPIP will move the UTM origin to the first pair of UTM coordinates read. The UTM coordinates of the new origin will be subtracted from all the other UTM coordinates entered to form this new local coordinate system.

Plant north is set to 0.00 degrees with respect to True North.

N:\24461\Ridgewood criteria.BST BEESTWin BPIP-Prime Files 12/14/2007 5:06:16 P

PRELIMINARY* GEP STACK HEIGHT RESULTS TABLE
(Output Units: meters)

Stack Name	Stack Height	Stack-Building Base Elevation Differences	GEP** EQN1	Preliminary* GEP Stack Height Value
ULEFLR	18.29	N/A	0.00	65.00
ULEFLR50	18.29	N/A	0.00	65.00
REMOTE1	7.81	N/A	0.00	65.00
REMOTE2	16.68	N/A	0.00	65.00
REMOTE3	16.35	N/A	0.00	65.00
DEUTZ100	7.62	0.00	7.24	65.00
DEUTZ75	7.62	0.00	7.24	65.00
CAT100	11.81	0.00	10.29	65.00
BOILER	10.30	0.02	19.03	65.00
FPL1	53.34	0.00	80.01	80.01
FPL2	53.34	0.00	80.01	80.01
TURBINES	22.86	0.00	15.24	65.00

CG#1	3.96	N/A	0.00	65.00
CG#2	4.14	N/A	0.00	65.00
RECOVMAT	3.05	0.31	22.55	65.00
MCOOLTWR	7.62	0.00	19.05	65.00
ACOOLTWR	7.62	0.00	19.05	65.00

* Results are based on Determinants 1 & 2 on pages 1 & 2 of the GEP Technical Support Document. Determinant 3 may be investigated for additional stack height credit. Final values result after Determinant 3 has been taken into consideration.

** Results were derived from Equation 1 on page 6 of GEP Technical Support Document. Values have been adjusted for any stack-building base elevation differences.

Note: Criteria for determining stack heights for modeling emission limitations for a source can be found in Table 3.1 of the GEP Technical Support Document.

BPIP (Dated: 04274)

DATE : 12/14/2007
TIME : 05:06:17 PM

N:\24461\Ridgewood criteria.BST BEESTWin BPIP-Prime Files 12/14/2007 5:06:16 P

BPIP output is in meters

SO	BUILDHGT	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00

SO YBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR	0.00	0.00	0.00	0.00	0.00	0.00

SO BUILDHGT	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO XBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ULEFLR50	0.00	0.00	0.00	0.00	0.00	0.00

SO BUILDHGT	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDHGT	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDWID	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00
SO BUILDLEN	REMOTE1	0.00	0.00	0.00	0.00	0.00	0.00

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SO XBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE1    0.00    0.00    0.00    0.00    0.00    0.00

SO BUILDHGT  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN  REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ     REMOTE2    0.00    0.00    0.00    0.00    0.00    0.00

SO BUILDHGT  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID  REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
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SO BUILDWID REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    REMOTE3    0.00    0.00    0.00    0.00    0.00    0.00
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SO BUILDHGT DEUTZ100    2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ100    2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ100    2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ100    2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ100    2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ100    2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDWID DEUTZ100    8.90   11.66   14.06   16.04   17.53   18.49
SO BUILDWID DEUTZ100   18.88   18.71   18.87   18.72   18.00   16.73
SO BUILDWID DEUTZ100   14.95   12.72   10.10    7.18    4.04    5.87
SO BUILDWID DEUTZ100    8.90   11.66   14.06   16.04   17.53   18.49
SO BUILDWID DEUTZ100   18.88   18.71   18.87   18.72   18.00   16.73
SO BUILDWID DEUTZ100   14.95   12.72   10.10    7.18    4.04    5.87
SO BUILDLEN DEUTZ100   18.73   18.00   16.74   14.96   12.73   10.11
SO BUILDLEN DEUTZ100    7.18    4.04    5.88    8.91   11.67   14.07
SO BUILDLEN DEUTZ100   16.05   17.54   18.49   18.89   18.71   18.88
SO BUILDLEN DEUTZ100   18.73   18.00   16.74   14.96   12.73   10.11
SO BUILDLEN DEUTZ100    7.18    4.04    5.88    8.91   11.67   14.07
SO BUILDLEN DEUTZ100   16.05   17.54   18.49   18.89   18.71   18.88
SO XBADJ    DEUTZ100  -12.32  -12.28  -11.85  -11.07   -9.95   -8.53
SO XBADJ    DEUTZ100   -6.85   -4.96    1.16   -0.13   -1.42   -2.67
SO XBADJ    DEUTZ100   -3.83   -4.88   -5.78   -6.50   -7.27   -6.88
SO XBADJ    DEUTZ100   -6.40   -5.73   -4.88   -3.89   -2.78   -1.58
SO XBADJ    DEUTZ100   -0.33    0.92   -7.04   -8.78  -10.25  -11.41
SO XBADJ    DEUTZ100  -12.22  -12.66  -12.72  -12.39  -11.43  -12.00
SO YBADJ    DEUTZ100    2.06    1.52    0.92    0.30   -0.33   -0.94
SO YBADJ    DEUTZ100   -1.54   -2.08   -1.65   -0.91   -0.15    0.62
SO YBADJ    DEUTZ100    1.37    2.08    2.72    3.29   -2.94   -2.54
SO YBADJ    DEUTZ100   -2.06   -1.52   -0.92   -0.30    0.33    0.94
SO YBADJ    DEUTZ100    1.54    2.08    1.65    0.91    0.15   -0.62
SO YBADJ    DEUTZ100   -1.37   -2.08   -2.72   -3.29    2.94    2.54
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SO BUILDHGT DEUTZ75     2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ75     2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ75     2.90    2.90    2.90    2.90    2.90    2.90
SO BUILDHGT DEUTZ75     2.90    2.90    2.90    2.90    2.90    2.90
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SO	BUILDHGT	DEUTZ75	2.90	2.90	2.90	2.90	2.90	2.90
SO	BUILDHGT	DEUTZ75	2.90	2.90	2.90	2.90	2.90	2.90
SO	BUILDWID	DEUTZ75	8.90	11.66	14.06	16.04	17.53	18.49
SO	BUILDWID	DEUTZ75	18.88	18.71	18.87	18.72	18.00	16.73
SO	BUILDWID	DEUTZ75	14.95	12.72	10.10	7.18	4.04	5.87
SO	BUILDWID	DEUTZ75	8.90	11.66	14.06	16.04	17.53	18.49
SO	BUILDWID	DEUTZ75	18.88	18.71	18.87	18.72	18.00	16.73
SO	BUILDWID	DEUTZ75	14.95	12.72	10.10	7.18	4.04	5.87
SO	BUILDLEN	DEUTZ75	18.73	18.00	16.74	14.96	12.73	10.11
SO	BUILDLEN	DEUTZ75	7.18	4.04	5.88	8.91	11.67	14.07
SO	BUILDLEN	DEUTZ75	16.05	17.54	18.49	18.89	18.71	18.88
SO	BUILDLEN	DEUTZ75	18.73	18.00	16.74	14.96	12.73	10.11
SO	BUILDLEN	DEUTZ75	7.18	4.04	5.88	8.91	11.67	14.07
SO	BUILDLEN	DEUTZ75	16.05	17.54	18.49	18.89	18.71	18.88
SO	XBADJ	DEUTZ75	-12.32	-12.28	-11.85	-11.07	-9.95	-8.53
SO	XBADJ	DEUTZ75	-6.85	-4.96	1.16	-0.13	-1.42	-2.67
SO	XBADJ	DEUTZ75	-3.83	-4.88	-5.78	-6.50	-7.27	-6.88
SO	XBADJ	DEUTZ75	-6.40	-5.73	-4.88	-3.89	-2.78	-1.58
SO	XBADJ	DEUTZ75	-0.33	0.92	-7.04	-8.78	-10.25	-11.41
SO	XBADJ	DEUTZ75	-12.22	-12.66	-12.72	-12.39	-11.43	-12.00
SO	YBADJ	DEUTZ75	2.06	1.52	0.92	0.30	-0.33	-0.94
SO	YBADJ	DEUTZ75	-1.54	-2.08	-1.65	-0.91	-0.15	0.62
SO	YBADJ	DEUTZ75	1.37	2.08	2.72	3.29	-2.94	-2.54
SO	YBADJ	DEUTZ75	-2.06	-1.52	-0.92	-0.30	0.33	0.94
SO	YBADJ	DEUTZ75	1.54	2.08	1.65	0.91	0.15	-0.62
SO	YBADJ	DEUTZ75	-1.37	-2.08	-2.72	-3.29	2.94	2.54

SO	BUILDHGT	CAT100	4.11	4.11	4.11	4.11	4.11	4.11
SO	BUILDHGT	CAT100	4.11	4.11	4.11	4.11	4.11	4.11
SO	BUILDHGT	CAT100	4.11	4.11	4.11	4.11	4.11	4.11
SO	BUILDHGT	CAT100	4.11	4.11	4.11	4.11	4.11	4.11
SO	BUILDHGT	CAT100	4.11	4.11	4.11	4.11	4.11	4.11
SO	BUILDHGT	CAT100	4.11	4.11	4.11	4.11	4.11	4.11
SO	BUILDWID	CAT100	7.93	9.58	10.94	11.96	12.62	12.90
SO	BUILDWID	CAT100	12.79	12.29	12.69	12.91	12.74	12.18
SO	BUILDWID	CAT100	11.26	9.99	8.41	6.59	4.56	6.04
SO	BUILDWID	CAT100	7.93	9.58	10.94	11.96	12.62	12.90
SO	BUILDWID	CAT100	12.79	12.29	12.69	12.91	12.74	12.18
SO	BUILDWID	CAT100	11.26	9.99	8.41	6.59	4.56	6.04
SO	BUILDLEN	CAT100	12.91	12.74	12.18	11.26	9.99	8.41
SO	BUILDLEN	CAT100	6.59	4.56	6.03	7.92	9.57	10.93
SO	BUILDLEN	CAT100	11.96	12.62	12.90	12.79	12.29	12.69
SO	BUILDLEN	CAT100	12.91	12.74	12.18	11.26	9.99	8.41
SO	BUILDLEN	CAT100	6.59	4.56	6.03	7.92	9.57	10.93
SO	BUILDLEN	CAT100	11.96	12.62	12.90	12.79	12.29	12.69
SO	XBADJ	CAT100	-6.14	-6.15	-5.99	-13.14	-5.11	-4.44
SO	XBADJ	CAT100	-3.63	-2.70	-23.30	-23.49	-14.18	-13.93
SO	XBADJ	CAT100	-6.64	-6.96	-7.07	-6.96	-6.64	-6.76
SO	XBADJ	CAT100	-6.78	-6.59	-6.20	1.88	-4.87	-3.98
SO	XBADJ	CAT100	-2.96	-1.85	7.38	6.09	4.61	3.00
SO	XBADJ	CAT100	1.29	-5.67	-5.84	-5.83	-5.65	-5.93
SO	YBADJ	CAT100	0.57	0.62	0.65	7.27	0.65	0.61
SO	YBADJ	CAT100	0.56	0.50	-2.58	-6.06	-4.57	-6.14
SO	YBADJ	CAT100	-0.01	-0.12	-0.23	-0.33	-0.43	-0.51
SO	YBADJ	CAT100	-0.57	-0.62	-0.65	-7.27	-0.65	-0.61
SO	YBADJ	CAT100	-0.56	-0.50	1.08	2.87	4.57	6.14

SO	YBADJ	CAT100	7.51	0.12	0.23	0.33	0.43	0.51

SO	BUILDHGT	BOILER	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	BOILER	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	BOILER	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	BOILER	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	BOILER	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	BOILER	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDWID	BOILER	99.22	95.85	89.57	84.21	80.37	74.09
SO	BUILDWID	BOILER	65.57	55.04	50.53	57.46	70.33	83.22
SO	BUILDWID	BOILER	93.58	101.10	105.55	106.79	104.79	99.60
SO	BUILDWID	BOILER	99.22	95.85	89.57	84.21	80.37	74.09
SO	BUILDWID	BOILER	65.57	55.04	50.53	57.46	70.33	83.22
SO	BUILDWID	BOILER	93.58	101.10	105.55	106.79	104.79	99.60
SO	BUILDLEN	BOILER	57.46	70.33	83.22	93.58	101.10	105.55
SO	BUILDLEN	BOILER	106.79	104.79	99.60	99.22	95.85	89.57
SO	BUILDLEN	BOILER	84.21	80.37	74.09	65.57	55.04	50.53
SO	BUILDLEN	BOILER	57.46	70.33	83.22	93.58	101.10	105.55
SO	BUILDLEN	BOILER	106.79	104.79	99.60	99.22	95.85	89.57
SO	BUILDLEN	BOILER	84.21	80.37	74.09	65.57	55.04	50.53
SO	XBADJ	BOILER	-34.29	-39.13	-42.77	-45.12	-46.10	-45.68
SO	XBADJ	BOILER	-43.87	-40.72	-36.34	-33.32	-29.30	-24.40
SO	XBADJ	BOILER	-22.40	-23.80	-24.48	-24.41	-23.60	-22.08
SO	XBADJ	BOILER	-23.17	-31.20	-40.45	-48.46	-55.00	-59.87
SO	XBADJ	BOILER	-62.93	-64.07	-63.26	-65.91	-66.55	-65.17
SO	XBADJ	BOILER	-61.81	-56.57	-49.62	-41.15	-31.44	-28.45
SO	YBADJ	BOILER	-16.29	-18.62	-20.39	-19.71	-16.39	-12.57
SO	YBADJ	BOILER	-8.37	-3.92	-3.18	-5.56	-3.96	-1.16
SO	YBADJ	BOILER	1.67	4.45	7.10	9.53	11.67	13.46
SO	YBADJ	BOILER	16.29	18.62	20.39	19.71	16.39	12.57
SO	YBADJ	BOILER	8.37	3.92	3.18	5.56	3.96	1.16
SO	YBADJ	BOILER	-1.67	-4.45	-7.10	-9.53	-11.67	-13.46

SO	BUILDHGT	FPL1	32.00	32.00	32.00	32.00	32.00	32.00
SO	BUILDHGT	FPL1	32.00	32.00	32.00	32.00	32.00	18.29
SO	BUILDHGT	FPL1	18.29	18.29	18.29	18.29	32.00	32.00
SO	BUILDHGT	FPL1	32.00	32.00	32.00	32.00	32.00	32.00
SO	BUILDHGT	FPL1	32.00	32.00	32.00	32.00	32.00	18.29
SO	BUILDHGT	FPL1	18.29	18.29	18.29	18.29	32.00	32.00
SO	BUILDWID	FPL1	117.31	131.75	142.20	148.32	149.93	146.99
SO	BUILDWID	FPL1	147.78	150.27	148.20	141.62	130.75	26.03
SO	BUILDWID	FPL1	26.71	26.58	25.65	25.21	78.27	99.30
SO	BUILDWID	FPL1	117.31	131.75	142.20	148.32	149.93	146.99
SO	BUILDWID	FPL1	147.78	150.27	148.20	141.62	130.75	26.03
SO	BUILDWID	FPL1	26.71	26.58	25.65	25.21	78.27	99.30
SO	BUILDLEN	FPL1	141.62	130.75	115.89	97.52	76.19	52.54
SO	BUILDLEN	FPL1	54.87	78.27	99.30	117.31	131.75	21.76
SO	BUILDLEN	FPL1	18.88	15.43	11.51	11.97	150.27	148.20
SO	BUILDLEN	FPL1	141.62	130.75	115.89	97.52	76.19	52.54
SO	BUILDLEN	FPL1	54.87	78.27	99.30	117.31	131.75	21.76
SO	BUILDLEN	FPL1	18.88	15.43	11.51	11.97	150.27	148.20
SO	XBADJ	FPL1	5.82	14.15	22.06	29.30	35.65	40.91
SO	XBADJ	FPL1	31.26	9.22	-13.10	-35.02	-55.88	0.32
SO	XBADJ	FPL1	-1.12	-2.53	-3.86	-7.34	-139.14	-145.50
SO	XBADJ	FPL1	-147.44	-144.90	-137.96	-126.82	-111.83	-93.45

SO XBADJ	FPL1	-86.13	-87.50	-86.20	-82.29	-75.87	-22.07
SO XBADJ	FPL1	-17.76	-12.90	-7.66	-4.63	-11.13	-2.70
SO YBADJ	FPL1	-23.63	-9.99	3.95	17.77	31.05	43.39
SO YBADJ	FPL1	54.66	64.00	71.40	76.63	79.53	15.72
SO YBADJ	FPL1	17.46	18.68	19.32	19.14	48.36	36.55
SO YBADJ	FPL1	23.63	9.99	-3.95	-17.77	-31.05	-43.39
SO YBADJ	FPL1	-54.66	-64.00	-71.40	-76.63	-79.53	-15.72
SO YBADJ	FPL1	-17.46	-18.68	-19.32	-19.14	-48.36	-36.55

SO BUILDHGT	FPL2	32.00	32.00	32.00	32.00	32.00	32.00
SO BUILDHGT	FPL2	32.00	32.00	32.00	32.00	32.00	32.00
SO BUILDHGT	FPL2	32.00	18.29	18.29	18.29	18.29	32.00
SO BUILDHGT	FPL2	32.00	32.00	32.00	32.00	32.00	32.00
SO BUILDHGT	FPL2	32.00	32.00	32.00	32.00	32.00	32.00
SO BUILDHGT	FPL2	32.00	18.29	18.29	18.29	18.29	32.00
SO BUILDWID	FPL2	117.31	131.75	142.20	148.32	149.93	146.99
SO BUILDWID	FPL2	147.78	150.27	148.20	141.62	130.75	115.89
SO BUILDWID	FPL2	97.52	26.58	25.65	25.21	26.09	99.30
SO BUILDWID	FPL2	117.31	131.75	142.20	148.32	149.93	146.99
SO BUILDWID	FPL2	147.78	150.27	148.20	141.62	130.75	115.89
SO BUILDWID	FPL2	97.52	26.58	25.65	25.21	26.09	99.30
SO BUILDLEN	FPL2	141.62	130.75	115.89	97.52	76.19	52.54
SO BUILDLEN	FPL2	54.87	78.27	99.30	117.31	131.75	142.20
SO BUILDLEN	FPL2	148.32	15.43	11.51	11.97	15.94	148.20
SO BUILDLEN	FPL2	141.62	130.75	115.89	97.52	76.19	52.54
SO BUILDLEN	FPL2	54.87	78.27	99.30	117.31	131.75	142.20
SO BUILDLEN	FPL2	148.32	15.43	11.51	11.97	15.94	148.20
SO XBADJ	FPL2	-30.76	-17.29	-3.30	10.80	24.56	37.59
SO XBADJ	FPL2	35.80	21.47	6.50	-8.67	-23.58	-37.77
SO XBADJ	FPL2	-50.81	-2.53	-3.86	-7.34	-12.67	-104.90
SO XBADJ	FPL2	-110.86	-113.45	-112.60	-108.32	-100.75	-90.12
SO XBADJ	FPL2	-90.66	-99.75	-105.80	-108.64	-108.18	-104.43
SO XBADJ	FPL2	-97.50	-56.60	-52.62	-4.63	-3.27	-43.30
SO YBADJ	FPL2	-49.98	-42.30	-33.33	-23.34	-12.65	-1.57
SO YBADJ	FPL2	9.81	20.62	30.80	40.05	48.08	54.65
SO YBADJ	FPL2	59.56	18.68	19.32	19.14	18.60	56.15
SO YBADJ	FPL2	49.98	42.30	33.33	23.34	12.65	1.57
SO YBADJ	FPL2	-9.81	-20.62	-30.80	-40.05	-48.08	-54.65
SO YBADJ	FPL2	-59.56	-7.59	-16.00	-19.14	-18.60	-56.15

SO BUILDHGT	TURBINES	6.10	6.10	6.10	6.10	6.10	6.10
SO BUILDHGT	TURBINES	6.10	6.10	6.10	6.10	6.10	6.10
SO BUILDHGT	TURBINES	6.10	6.10	6.10	6.10	6.10	6.10
SO BUILDHGT	TURBINES	6.10	6.10	6.10	6.10	6.10	6.10
SO BUILDHGT	TURBINES	6.10	6.10	6.10	6.10	6.10	6.10
SO BUILDHGT	TURBINES	6.10	6.10	6.10	6.10	6.10	6.10
SO BUILDWID	TURBINES	7.60	11.08	14.21	16.92	19.11	20.72
SO BUILDWID	TURBINES	21.70	22.02	21.67	22.02	21.70	20.72
SO BUILDWID	TURBINES	19.11	16.92	14.21	11.08	7.60	3.90
SO BUILDWID	TURBINES	7.60	11.08	14.21	16.92	19.11	20.72
SO BUILDWID	TURBINES	21.70	22.02	21.67	22.02	21.70	20.72
SO BUILDWID	TURBINES	19.11	16.92	14.21	11.08	7.60	3.90
SO BUILDLEN	TURBINES	22.02	21.70	20.72	19.11	16.92	14.21
SO BUILDLEN	TURBINES	11.08	7.60	3.91	7.60	11.08	14.21
SO BUILDLEN	TURBINES	16.92	19.11	20.72	21.70	22.02	21.67

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SO BUILDLEN TURBINES   22.02   21.70   20.72   19.11   16.92   14.21
SO BUILDLEN TURBINES   11.08    7.60    3.90    7.60   11.08   14.21
SO BUILDLEN TURBINES   16.92   19.11   20.72   21.70   22.02   21.67
SO XBADJ    TURBINES  -14.99  -14.64  -18.41  -24.38  -25.04    6.75
SO XBADJ    TURBINES   10.30  -22.48    7.23  -21.07  -21.30   10.79
SO XBADJ    TURBINES    8.18    5.33   -6.84   -7.03   -7.02   -6.79
SO XBADJ    TURBINES   -7.03   -7.06   -6.88    5.28    8.12   10.72
SO XBADJ    TURBINES  -21.38  -21.15  -20.28  -22.56  -24.15  -25.00
SO XBADJ    TURBINES  -25.10  -24.43  -13.88  -14.66  -15.00  -14.88
SO YBADJ    TURBINES   -0.74   -1.42    5.86   11.38    8.63  -12.67
SO YBADJ    TURBINES  -10.07   -0.81   -4.04   -7.15  -10.04    5.66
SO YBADJ    TURBINES    8.68   11.44   -1.99   -1.35   -0.66    0.04
SO YBADJ    TURBINES    0.74    1.42    2.06  -11.38   -8.63   -5.62
SO YBADJ    TURBINES   10.07    7.17    4.04    0.80   -2.47   -5.66
SO YBADJ    TURBINES   -8.68  -11.44    1.99    1.35    0.66   -0.04

SO BUILDHGT CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDLEN CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO XBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00
SO YBADJ    CG#1        0.00    0.00    0.00    0.00    0.00    0.00

SO BUILDHGT CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDHGT CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#2        0.00    0.00    0.00    0.00    0.00    0.00
SO BUILDWID CG#2        0.00    0.00    0.00    0.00    0.00    0.00
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SO	BUILDWID	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	CG#2	0.00	0.00	0.00	0.00	0.00	0.00

SO	BUILDHGT	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	RECOVMAT	0.00	0.00	0.00	0.00	0.00	9.14
SO	BUILDHGT	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDHGT	RECOVMAT	0.00	0.00	0.00	0.00	0.00	9.14
SO	BUILDHGT	RECOVMAT	9.14	9.14	9.14	9.14	9.14	0.00
SO	BUILDWID	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	RECOVMAT	0.00	0.00	0.00	0.00	0.00	27.94
SO	BUILDWID	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDWID	RECOVMAT	0.00	0.00	0.00	0.00	0.00	27.94
SO	BUILDWID	RECOVMAT	26.30	23.86	20.69	22.59	25.43	0.00
SO	BUILDLEN	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	RECOVMAT	0.00	0.00	0.00	0.00	0.00	28.57
SO	BUILDLEN	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	BUILDLEN	RECOVMAT	0.00	0.00	0.00	0.00	0.00	28.57
SO	BUILDLEN	RECOVMAT	27.17	24.95	21.98	23.33	25.91	0.00
SO	XBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	17.23
SO	XBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	XBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	-45.80
SO	XBADJ	RECOVMAT	-47.73	-48.21	-47.23	-47.31	-46.92	0.00
SO	YBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	-17.89
SO	YBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	RECOVMAT	0.00	0.00	0.00	0.00	0.00	17.89
SO	YBADJ	RECOVMAT	12.14	6.03	-0.27	-6.56	-12.64	0.00

SO	BUILDHGT	MCOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62

SO	BUILDHGT	MCOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	MCOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	MCOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	MCOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	MCOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDWID	MCOOLTWR	11.80	16.22	20.16	23.48	26.09	27.90
SO	BUILDWID	MCOOLTWR	28.87	28.96	28.17	28.96	28.87	27.90
SO	BUILDWID	MCOOLTWR	26.09	23.48	20.16	16.22	11.80	7.01
SO	BUILDWID	MCOOLTWR	11.80	16.22	20.16	23.48	26.09	27.90
SO	BUILDWID	MCOOLTWR	28.87	28.96	28.17	28.96	28.87	27.90
SO	BUILDWID	MCOOLTWR	26.09	23.48	20.16	16.22	11.80	7.01
SO	BUILDLEN	MCOOLTWR	28.96	28.87	27.90	26.09	23.48	20.16
SO	BUILDLEN	MCOOLTWR	16.22	11.80	7.01	11.80	16.22	20.16
SO	BUILDLEN	MCOOLTWR	23.48	26.09	27.90	28.87	28.96	28.17
SO	BUILDLEN	MCOOLTWR	28.96	28.87	27.90	26.09	23.48	20.16
SO	BUILDLEN	MCOOLTWR	16.22	11.80	7.01	11.80	16.22	20.16
SO	BUILDLEN	MCOOLTWR	23.48	26.09	27.90	28.87	28.96	28.17
SO	XBADJ	MCOOLTWR	-14.47	-14.43	-13.94	-13.04	-11.73	-10.07
SO	XBADJ	MCOOLTWR	-8.10	-5.89	-3.50	-5.89	-8.11	-10.08
SO	XBADJ	MCOOLTWR	-11.74	-13.04	-13.95	-14.44	-14.48	-14.09
SO	XBADJ	MCOOLTWR	-14.49	-14.44	-13.96	-13.05	-11.75	-10.08
SO	XBADJ	MCOOLTWR	-8.12	-5.90	-3.51	-5.90	-8.11	-10.08
SO	XBADJ	MCOOLTWR	-11.74	-13.04	-13.95	-14.43	-14.48	-14.08
SO	YBADJ	MCOOLTWR	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	MCOOLTWR	0.00	0.00	0.00	0.01	0.01	0.01
SO	YBADJ	MCOOLTWR	0.01	0.01	0.01	0.01	0.01	0.01
SO	YBADJ	MCOOLTWR	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	MCOOLTWR	0.00	0.00	0.00	-0.01	-0.01	-0.01
SO	YBADJ	MCOOLTWR	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01

SO	BUILDHGT	ACOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	ACOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	ACOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	ACOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	ACOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDHGT	ACOOLTWR	7.62	7.62	7.62	7.62	7.62	7.62
SO	BUILDWID	ACOOLTWR	11.80	16.22	20.16	23.48	26.09	27.90
SO	BUILDWID	ACOOLTWR	28.87	28.96	28.17	28.96	28.87	27.90
SO	BUILDWID	ACOOLTWR	26.09	23.48	20.16	16.22	11.80	7.01
SO	BUILDWID	ACOOLTWR	11.80	16.22	20.16	23.48	26.09	27.90
SO	BUILDWID	ACOOLTWR	28.87	28.96	28.17	28.96	28.87	27.90
SO	BUILDWID	ACOOLTWR	26.09	23.48	20.16	16.22	11.80	7.01
SO	BUILDLEN	ACOOLTWR	28.96	28.87	27.90	26.09	23.48	20.16
SO	BUILDLEN	ACOOLTWR	16.22	11.80	7.01	11.80	16.22	20.16
SO	BUILDLEN	ACOOLTWR	23.48	26.09	27.90	28.87	28.96	28.17
SO	BUILDLEN	ACOOLTWR	28.96	28.87	27.90	26.09	23.48	20.16
SO	BUILDLEN	ACOOLTWR	16.22	11.80	7.01	11.80	16.22	20.16
SO	BUILDLEN	ACOOLTWR	23.48	26.09	27.90	28.87	28.96	28.17
SO	XBADJ	ACOOLTWR	-14.47	-14.43	-13.94	-13.04	-11.73	-10.07
SO	XBADJ	ACOOLTWR	-8.10	-5.89	-3.50	-5.89	-8.11	-10.08
SO	XBADJ	ACOOLTWR	-11.74	-13.04	-13.95	-14.44	-14.48	-14.09
SO	XBADJ	ACOOLTWR	-14.49	-14.44	-13.96	-13.05	-11.75	-10.08
SO	XBADJ	ACOOLTWR	-8.12	-5.90	-3.51	-5.90	-8.11	-10.08
SO	XBADJ	ACOOLTWR	-11.74	-13.04	-13.95	-14.43	-14.48	-14.08
SO	YBADJ	ACOOLTWR	0.00	0.00	0.00	0.00	0.00	0.00
SO	YBADJ	ACOOLTWR	0.00	0.00	0.00	0.01	0.01	0.01

SO YBADJ	ACOOLTWR	0.01	0.01	0.01	0.01	0.01	0.01
SO YBADJ	ACOOLTWR	0.00	0.00	0.00	0.00	0.00	0.00
SO YBADJ	ACOOLTWR	0.00	0.00	0.00	-0.01	-0.01	-0.01
SO YBADJ	ACOOLTWR	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01

APPENDIX F

AMBIENT BACKGROUND DATA

TABLE F-1
RHODE ISLAND AMBIENT AIR MONITORING DATA SUMMARY
CALENDAR YEARS 2004 - 2006

Pollutant	City/Town	Location	Year	Interval	Units	High	2nd High	Mean	In $\mu g/m^3$
CO	Providence	76 Dorrance	2004	1-hour	ppm	3.7	3.5	0.61	
CO	Providence	76 Dorrance	2005	1-hour	ppm	10.1	7.9	0.61	
CO	Providence	76 Dorrance	2006	1-hour	ppm	11.9	9.7	0.64	
CO	East Providence	Frances School	2004	1-hour	ppm	4.2	2.4	0.41	
CO	East Providence	Frances School	2005	1-hour	ppm	2.9	2.8	0.37	
CO	East Providence	Frances School	2006	1-hour	ppm	2.5	2.5	0.38	
CO	Providence	76 Dorrance	2004	8-hour	ppm	2.5	2.5		
CO	Providence	76 Dorrance	2005	8-hour	ppm	3.4	2.5		
CO	Providence	76 Dorrance	2006	8-hour	ppm	3.8	2.5		
CO	East Providence	Frances School	2004	8-hour	ppm	2.1	1.7		
CO	East Providence	Frances School	2005	8-hour	ppm	1.8	1.6		
CO	East Providence	Frances School	2006	8-hour	ppm	1.6	1.6		
		Highest, 2nd High, 1-Hour					9.7		11,106
		Highest 2nd High, 8-Hour					2.5		2,862

TABLE F-1
RHODE ISLAND AMBIENT AIR MONITORING DATA SUMMARY
CALENDAR YEARS 2004 - 2006

Pollutant	City/Town	Location	Year	Interval	Units	High	2nd High	Mean	In μg/m^3
SO_2	Providence	Rockefeller Library	2004	1-hour	ppm	0.06	0.047	0.007	
SO_2	Providence	76 Dorrance	2004	1-hour	ppm	0.061	0.044	0.0052	
SO_2	Providence	Rockefeller Library	2005	1-hour	ppm	0.066	0.064	0.0059	
SO_2	Providence	76 Dorrance	2005	1-hour	ppm	0.064	0.052	0.0045	
SO_2	Providence	Rockefeller Library	2006	1-hour	ppm	0.046	0.039	0.0046	
SO_2	Providence	76 Dorrance	2006	1-hour	ppm	0.044	0.035	0.0036	
SO_2	Providence	Rockefeller Library	2004	24-hour	ppm	0.024	0.024		
SO_2	Providence	76 Dorrance	2004	24-hour	ppm	0.021	0.018		
SO_2	Providence	Rockefeller Library	2005	24-hour	ppm	0.026	0.023		
SO_2	Providence	76 Dorrance	2005	24-hour	ppm	0.027	0.019		
SO_2	Providence	Rockefeller Library	2006	24-hour	ppm	0.024	0.02		
SO_2	Providence	76 Dorrance	2006	24-hour	ppm	0.017	0.017		
SO_2	Providence	Rockefeller Library	2004	3-hour	ppm	0.041	0.037		
SO_2	Providence	76 Dorrance	2004	3-hour	ppm	0.035	0.034		
SO_2	Providence	Rockefeller Library	2005	3-hour	ppm	0.051	0.048		
SO_2	Providence	76 Dorrance	2005	3-hour	ppm	0.051	0.036		
SO_2	Providence	Rockefeller Library	2006	3-hour	ppm	0.031	0.03		
SO_2	Providence	76 Dorrance	2006	3-hour	ppm	0.034	0.026		
		Highest, 2nd High, 3-Hour					0.048		126
		Highest, 2nd High, 24-Hour					0.024		63
		Highest Annual Mean						0.007	18

TABLE F-1
RHODE ISLAND AMBIENT AIR MONITORING DATA SUMMARY
CALENDAR YEARS 2004 - 2006

Pollutant	City/Town	Location	Year	Interval	Units	High	2nd High	Mean	In $\mu g/m^3$
NO_2	West Greenwich	Alton Jones Campus	2004	1-hour	ppm	0.01	0.009	0.0024	
NO_2	Providence	Rockefeller Library	2004	1-hour	ppm	0.058	0.054	0.0178	
NO_2	East Providence	Frances School	2004	1-hour	ppm	0.035	0.035	0.0078	
NO_2	West Greenwich	Alton Jones Campus	2005	1-hour	ppm	0.013	0.012	0.0024	
NO_2	Providence	Rockefeller Library	2005	1-hour	ppm	0.073	0.07	0.0173	
NO_2	East Providence	Frances School	2005	1-hour	ppm	0.035	0.031	0.0078	
NO_2	West Greenwich	Alton Jones Campus	2006	1-hour	ppm	0.014	0.014	0.002	
NO_2	Providence	Rockefeller Library	2006	1-hour	ppm	0.057	0.054	0.0152	
NO_2	East Providence	Frances School	2006	1-hour	ppm	0.028	0.027	0.0073	
			Highest Annual Mean					0.0178	33

TABLE F-1
RHODE ISLAND AMBIENT AIR MONITORING DATA SUMMARY
CALENDAR YEARS 2004 - 2006

Pollutant	City/Town	Location	Year	Interval	Units	High	2nd High	Mean	In $\mu g/m^3$
PM_{10}	West Greenwich	Alton Jones Campus	2004	24-hour	ug/m3	38	24	9.5	
PM_{10}	Providence	Prairie Avenue	2004	24-hour	ug/m3	53	37	16.4	
PM_{10}	Pawtucket	Vernon Street	2004	24-hour	ug/m3	50	45	21.2	
PM_{10}	Providence	111 Dorrance Street	2004	24-hour	ug/m3	50	37	17.9	
PM_{10}	Providence	111 Dorrance Street	2004	24-hour	ug/m3	40	36	17.2	
PM_{10}	Providence	Westminster Street	2004	24-hour	ug/m3	50	42	17.2	
PM_{10}	West Greenwich	Alton Jones Campus	2005	24-hour	ug/m3	40	38	11.3	
PM_{10}	Providence	Prairie Avenue	2005	24-hour	ug/m3	48	46	18.3	
PM_{10}	Providence	Prairie Avenue	2005	24-hour	ug/m3	48	46	19.3	
PM_{10}	Pawtucket	Vernon Street	2005	24-hour	ug/m3	55	54	24.1	
PM_{10}	Providence	111 Dorrance Street	2005	24-hour	ug/m3	49	42	20.2	
PM_{10}	Providence	111 Dorrance Street	2005	24-hour	ug/m3	24	21	21.3	
PM_{10}	Providence	Westminster Street	2005	24-hour	ug/m3	31	26	19.4	
PM_{10}	West Greenwich	Alton Jones Campus	2006	24-hour	ug/m3	38	26	11	
PM_{10}	Providence	Prairie Avenue	2006	24-hour	ug/m3	54	47	17.7	
PM_{10}	Providence	Prairie Avenue	2006	24-hour	ug/m3	48	48	17.6	
PM_{10}	Pawtucket	Vernon Street	2006	24-hour	ug/m3	46	44	21	
PM_{10}	Providence	111 Dorrance Street	2006	24-hour	ug/m3	55	50	20.5	
			Highest, 2nd High, 24-Hour				54		54
			Highest Annual Mean					24.1	24.1

Notes:
1. All data obtained from USEPA's AirData database.
2. Conversion from ppm to $\mu g/m^3$ is based on a temperature of 25 C.

APPENDIX G

TOXIC AND CRITERIA POLLUTANT DETAILED MODELING RESULTS

TABLE G-1
SUMMARY OF CRITERIA MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

		1986 ($\mu g/m^3$)	1987 ($\mu g/m^3$)	1988 ($\mu g/m^3$)	1989 ($\mu g/m^3$)	1990 ($\mu g/m^3$)	Maximum ($\mu g/m^3$)
Turbines and Cooling Towers							
SO2	3- Hour	15.32	14.86	**15.89**	15.48	14.77	15.89
	24-Hour	8.22	8.28	9.20	8.20	**9.49**	9.49
	Annual	1.20	1.18	**1.28**	1.22	1.09	1.28
PM	24-Hour	9.41	9.48	9.73	9.53	**11.78**	11.78
	Annual	2.88	2.82	2.99	2.74	**3.01**	3.01
NOx	Annual	3.54	3.49	**3.78**	3.61	3.22	3.78
CO	1- Hour	217.68	218.80	220.65	**222.07**	217.84	222.07
	8-Hour	151.17	166.04	161.50	**172.21**	153.12	172.21
Ridgewood Power Facilities - 100% Load							
SO2	3- Hour	21.40	**21.79**	21.01	21.04	20.79	21.79
	24-Hour	12.57	13.79	**14.37**	13.87	14.30	14.37
	Annual	2.28	**2.55**	2.33	2.09	2.04	2.55
PM	24-Hour	12.58	14.13	**14.35**	13.79	13.44	14.35
	Annual	2.94	2.88	3.05	2.79	**3.06**	3.06
NOx	Annual	12.97	**14.35**	13.54	12.04	11.75	14.35
CO	1- Hour	624.62	**633.10**	625.78	631.53	623.99	633.10
	8-Hour	473.43	519.89	511.73	**531.14**	491.50	531.14
All Sources / 100% Load							
SO2	3- Hour	44.77	44.24	47.69	46.31	**48.21**	48.21
	24-Hour	23.88	20.82	21.33	21.38	**26.01**	26.01
	Annual	4.33	**4.68**	4.27	3.96	3.78	4.68
PM	24-Hour	18.68	18.52	**18.84**	18.21	18.41	18.84
	Annual	3.16	3.13	**3.26**	3.01	3.26	3.26
NOx	Annual	13.52	**14.91**	14.03	12.53	12.23	14.91
CO	1- Hour	630.44	**634.84**	630.89	632.32	625.34	634.84
	8-Hour	476.07	521.50	518.29	**533.52**	494.50	533.52
All Sources / Worst Case Load							
SO2	3- Hour	44.70	44.10	47.42	46.09	**48.00**	48.00
	24-Hour	23.83	20.78	21.32	21.30	**25.97**	25.97
	Annual	4.25	**4.57**	4.18	3.87	3.74	4.57
PM	24-Hour	15.72	16.24	**16.89**	16.44	15.76	16.89
	Annual	3.15	3.12	**3.25**	3.00	3.25	3.25
NOx	Annual	12.62	**13.87**	12.99	11.57	11.33	13.87
CO	1- Hour	549.49	549.38	544.15	**550.36**	547.99	550.36
	8-Hour	421.11	463.62	438.39	**470.09**	437.32	470.09
Pre-Existing Increment Consumption 100% Load							
SO2	3- Hour	44.76	44.20	47.68	46.29	**48.19**	48.19
	24-Hour	23.87	20.75	21.32	21.37	**26.00**	26.00
	Annual	4.25	**4.61**	4.23	3.90	3.70	4.61
PM	24-Hour	18.67	18.52	**18.83**	18.20	18.41	18.83
	Annual	2.32	**2.57**	2.34	2.08	2.12	2.57
NOx	Annual	13.31	**14.71**	13.89	12.32	12.01	14.71
CO	1- Hour	630.29	**634.64**	630.74	631.57	625.07	634.64
	8-Hour	473.82	520.81	518.11	**532.88**	494.02	532.88

TABLE G-1
SUMMARY OF CRITERIA MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

		1986 (μg/m³)	1987 (μg/m³)	1988 (μg/m³)	1989 (μg/m³)	1990 (μg/m³)	Maximum (μg/m³)
Pre-Existing Increment Consumption Worst-Case Load							
SO2	3- Hour	44.68	44.07	47.41	46.07	**47.99**	47.99
	24-Hour	23.83	20.71	21.31	21.29	**25.96**	25.96
	Annual	4.18	**4.50**	4.13	3.80	3.66	4.50
PM	24-Hour	15.72	16.24	**16.88**	16.42	15.75	16.88
	Annual	2.27	**2.51**	2.24	2.06	2.11	2.51
NOx	Annual	12.41	**13.66**	12.84	11.37	11.11	13.66
CO	1- Hour	548.40	548.15	542.97	**549.61**	546.69	549.61
	8-Hour	418.54	462.81	438.13	**469.44**	436.97	469.44
ULE Flare 100% Load							
SO2	3- Hour	7.68	**9.89**	8.28	7.34	7.62	9.89
	24-Hour	3.76	**3.81**	3.66	2.85	3.14	3.81
	Annual	0.28	**0.31**	0.28	0.23	0.24	0.31
PM	24-Hour	6.12	**6.20**	5.95	4.64	5.12	6.20
	Annual	0.45	**0.50**	0.46	0.37	0.39	0.50
NOx	Annual	0.23	**0.25**	0.23	0.19	0.19	0.25
CO	1- Hour	20.06	**24.72**	21.46	21.48	22.78	24.72
	8-Hour	10.89	**16.32**	9.59	12.56	11.79	16.32
ULE Flare 50% (Worst-Case) Load							
SO2	3- Hour	**7.62**	7.44	7.17	6.90	7.20	7.62
	24-Hour	4.17	**4.57**	4.34	3.09	3.16	4.57
	Annual	0.36	**0.41**	0.35	0.29	0.30	0.41
PM	24-Hour	6.79	**7.45**	7.08	5.03	5.15	7.45
	Annual	0.59	**0.67**	0.58	0.47	0.49	0.67
NOx	Annual	0.30	**0.33**	0.29	0.23	0.25	0.33
CO	1- Hour	17.03	**17.20**	17.14	16.61	16.57	17.20
	8-Hour	11.77	**12.15**	11.92	11.00	11.69	12.15
Turbines, Unit Emission Rate							
Unit	3- Hour	9.01	8.74	**9.35**	9.10	8.69	9.35
	24-Hour	4.84	4.87	5.41	4.82	**5.58**	5.58
	Annual	0.71	0.70	**0.75**	0.72	0.64	0.75
	1- Hour	9.91	9.96	10.05	**10.11**	9.92	10.11
	8-Hour	6.88	7.56	7.35	**7.84**	6.97	7.84

TABLE G-2
AIR TOXICS MODELING RESULTS

Rhode Island Central Genco, LLC
Johnston, Rhode Island

	1972 ($\mu g/m^3$)	1976 ($\mu g/m^3$)	1980 ($\mu g/m^3$)	1984 ($\mu g/m^3$)	1988 ($\mu g/m^3$)	Maximum ($\mu g/m^3$)
Turbines, Hydrogen Chloride						
1- Hour	1.28	1.22	1.25	1.27	1.25	1.28
Annual	0.08	0.10	0.10	0.09	0.09	0.10
Ridgewood, 100% Load,Hydrogen Chloride						
1- Hour	1.52	1.47	1.52	1.51	1.51	1.52
Annual	0.12	0.11	0.11	0.13	0.10	0.13
Ridgewood, Worst-Case Load						
1- Hour	1.28	1.23	1.25	1.27	1.25	1.28
Annual	0.11	0.11	0.10	0.12	0.09	0.12
Ridgewood, 100% Load, Mercury,						
1- Hour	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
24-Hour	0.00013	0.00006	0.00014	0.00014	0.00014	0.00014
Annual	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
Ridgewood, Worst-Case Load, Mercury						
1- Hour	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018
24-Hour	0.00012	0.00006	0.00012	0.00012	0.00012	0.00012
Annual	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
Turbines, Mercury						
1- Hour	0.00016	0.00015	0.00016	0.00016	0.00016	0.00016
24-Hour	0.00009	0.00004	0.00010	0.00010	0.00010	0.00010
Annual	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Ridgewood, 100% Load, Hydrogen Sulfide						
1- Hour	0.24	0.24	0.23	0.24	0.23	0.24
Annual	0.02	0.02	0.03	0.03	0.02	0.03
Ridgewood,Worst-Case Load, Hydrogen Sulfide						
1- Hour	0.21	0.21	0.21	0.21	0.21	0.21
Annual	0.02	0.02	0.02	0.03	0.02	0.03
Turbines, Hydrogen Sulfide						
1- Hour	0.19	0.18	0.18	0.19	0.18	0.19
Annual	0.011	0.015	0.015	0.013	0.014	0.015
Ridgewood, 100% Load, Methane						
1- Hour	559.8	559.3	552.9	559.5	550.9	559.8
24-Hour	345.4	173.1	383.9	371.4	373.4	383.9
Annual	54.8	57.5	60.3	64.9	56.1	64.9
Ridgewood, Worst-Case Load, Methane						
1- Hour	490.1	493.2	489.6	493.3	490.7	493.3
24-Hour	320.0	155.6	339.7	332.0	327.6	339.7
Annual	52.2	53.8	56.4	61.5	52.2	61.5
Turbines, Methane						
1- Hour	440.0	419.6	428.8	435.5	430.2	440.0
24-Hour	249.6	114.0	266.0	259.7	271.9	271.9
Annual	26.2	36.0	34.1	30.9	32.1	36.0
Turbines, Unit Emission Rate						
1- Hour	10.33	9.85	10.07	10.22	10.10	10.33
24-Hour	5.86	2.68	6.25	6.10	6.38	6.38
Annual	0.62	0.84	0.80	0.72	0.75	0.84

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
1	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	TURBINES	1ST	226.295	290415.41	4630610.5	95.38	95.38	86071521	CLF_86.SFC	15	10
2	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	TURBINES	2ND	217.68205	290415.41	4630610.5	95.38	95.38	86062503	CLF_86.SFC	15	10
3	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	100PCT	1ST	632.7868	288983.19	4630578.5	133.17	149	86021821	CLF_86.SFC	15	10
4	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	100PCT	2ND	630.44318	288983.19	4630578.5	133.17	149	86021819	CLF_86.SFC	15	10
5	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	ULE100	1ST	24.60462	289031.91	4630586.5	130.21	149	86121910	CLF_86.SFC	15	10
6	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	ULE100	2ND	20.06006	289002.69	4630581.5	131.78	149	86042502	CLF_86.SFC	15	10
7	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	CAT	1ST	488.71033	289075	4630578.5	134.86	138	86011404	CLF_86.SFC	15	10
8	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	CAT	2ND	488.04514	289075	4630578.5	134.86	138	86121917	CLF_86.SFC	15	10
9	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	WCLOAD	1ST	549.66241	288954	4630574	136.28	149	86050619	CLF_86.SFC	15	10
10	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	WCLOAD	2ND	549.49207	288954	4630574	136.28	149	86110518	CLF_86.SFC	15	10
11	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	EXIST100	1ST	632.63721	288983.19	4630578.5	133.17	149	86021821	CLF_86.SFC	15	10
12	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	EXIST100	2ND	630.29352	288983.19	4630578.5	133.17	149	86021819	CLF_86.SFC	15	10
13	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	RIDGE100	1ST	627.73053	288954	4630574	136.28	149	86110518	CLF_86.SFC	15	10
14	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	RIDGE100	2ND	624.6156	288963.69	4630575.5	135.17	149	86110523	CLF_86.SFC	15	10
15	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	EXISTWC	1ST	548.53156	288954	4630574	136.28	149	86110518	CLF_86.SFC	15	10
16	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	EXISTWC	2ND	548.40472	288954	4630574	136.28	149	86050619	CLF_86.SFC	15	10
17	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	ULE50	1ST	17.47351	289080.59	4630594.5	133.21	138	86121916	CLF_86.SFC	15	10
18	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	ULE50	2ND	17.03427	289080.59	4630594.5	133.21	138	86011409	CLF_86.SFC	15	10
19	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	RIDGEWC	1ST	548.61902	288954	4630574	136.28	149	86050619	CLF_86.SFC	15	10
20	AERMOD	Ridgewood criteria_86_CO.USF	CO	1-HR	RIDGEWC	2ND	548.43237	288954	4630574	136.28	149	86110518	CLF_86.SFC	15	10
21	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	TURBINES	1ST	188.63878	290492.34	4630702	96.68	108	86082424	CLF_86.SFC	15	10
22	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	TURBINES	2ND	151.17485	290500.25	4630731.5	98.14	107	86082508	CLF_86.SFC	15	10
23	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	100PCT	1ST	584.63434	288983.19	4630578.5	133.17	149	86021824	CLF_86.SFC	15	10
24	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	100PCT	2ND	476.06812	288963.69	4630575.5	135.17	149	86110524	CLF_86.SFC	15	10
25	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	ULE100	1ST	13.70052	288983.19	4630578.5	133.17	149	86042508	CLF_86.SFC	15	10
26	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	ULE100	2ND	10.8899	289058.69	4630573	133.97	138	86032108	CLF_86.SFC	15	10
27	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	CAT	1ST	431.039	289075	4630578.5	134.86	138	86011408	CLF_86.SFC	15	10
28	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	CAT	2ND	366.19131	289075.66	4630551.5	137.51	137.51	86121924	CLF_86.SFC	15	10
29	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	WCLOAD	1ST	481.56271	288983.19	4630578.5	133.17	149	86021824	CLF_86.SFC	15	10
30	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	WCLOAD	2ND	421.11401	288963.69	4630575.5	135.17	149	86110524	CLF_86.SFC	15	10
31	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	EXIST100	1ST	584.47717	288983.19	4630578.5	133.17	149	86021824	CLF_86.SFC	15	10
32	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	EXIST100	2ND	473.81741	288963.69	4630575.5	135.17	149	86061224	CLF_86.SFC	15	10
33	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	RIDGE100	1ST	574.68628	288983.19	4630578.5	133.17	149	86021824	CLF_86.SFC	15	10
34	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	RIDGE100	2ND	473.43433	288963.69	4630575.5	135.17	149	86110524	CLF_86.SFC	15	10
35	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	EXISTWC	1ST	481.40558	288983.19	4630578.5	133.17	149	86021824	CLF_86.SFC	15	10
36	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	EXISTWC	2ND	418.54468	288963.69	4630575.5	135.17	149	86110524	CLF_86.SFC	15	10
37	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	ULE50	1ST	12.52253	289061.19	4630591	130.82	138	86032108	CLF_86.SFC	15	10
38	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	ULE50	2ND	11.76939	289070.91	4630592.5	132.2	138	86032108	CLF_86.SFC	15	10
39	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	RIDGEWC	1ST	468.33435	288983.19	4630578.5	133.17	149	86021824	CLF_86.SFC	15	10
40	AERMOD	Ridgewood criteria_86_CO.USF	CO	8-HR	RIDGEWC	2ND	417.6405	288963.69	4630575.5	135.17	Hill	86110524	CLF_86.SFC	15	10
41	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	TURBINES	1ST	3.53644	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	15	10
42	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	100PCT	1ST	13.52398	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
43	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	ULE100	1ST	0.22519	289080.59	4630594.5	133.21	138	1 YRS	CLF_86.SFC	15	10
44	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	CAT	1ST	6.23482	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_86.SFC	15	10
45	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	WCLOAD	1ST	12.61906	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
46	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	EXIST100	1ST	13.31303	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
47	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	RIDGE100	1ST	12.9668	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
48	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	EXISTWC	1ST	12.40812	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
49	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	ULE50	1ST	0.29657	289080.59	4630594.5	133.21	138	1 YRS	CLF_86.SFC	15	10
50	AERMOD	Ridgewood criteria_86_NOX.USF	NOX	ANNUAL	RIDGEWC	1ST	12.00815	289075	4630578.5	134.86	Hill	1 YRS	CLF_86.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
51	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	TURBINES	1ST	2.88026	290254.03	4630775	94.35	101	1 YRS	CLF_86.SFC	17	10
52	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	100PCT	1ST	3.15507	290254.03	4630775	94.35	101	1 YRS	CLF_86.SFC	17	10
53	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	ULE100	1ST	0.45003	289080.59	4630594.5	133.21	138	1 YRS	CLF_86.SFC	17	10
54	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	CAT	1ST	0.62449	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_86.SFC	17	10
55	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	WCLOAD	1ST	3.1509	290254.03	4630775	94.35	101	1 YRS	CLF_86.SFC	17	10
56	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	EXIST100	1ST	2.32112	288983.19	4630578.5	133.17	149	1 YRS	CLF_86.SFC	17	10
57	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	RIDGE100	1ST	2.93641	290254.03	4630775	94.35	101	1 YRS	CLF_86.SFC	17	10
58	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	EXISTWC	1ST	2.27208	288983.19	4630578.5	133.17	149	1 YRS	CLF_86.SFC	17	10
59	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	ULE50	1ST	0.59315	289080.59	4630594.5	133.21	138	1 YRS	CLF_86.SFC	17	10
60	AERMOD	Ridgewood criteria_86_PM.USF	PM	ANNUAL	RIDGEWC	1ST	2.93063	290254.03	4630775	94.35	101	1 YRS	CLF_86.SFC	17	10
61	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	TURBINES	1ST	11.85158	290257.41	4630787.5	96.79	101	86080724	CLF_86.SFC	17	10
62	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	TURBINES	2ND	9.40867	290257.41	4630787.5	96.79	101	86042124	CLF_86.SFC	17	10
63	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	100PCT	1ST	19.75253	288973.5	4630577	134.23	149	86042324	CLF_86.SFC	17	10
64	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	100PCT	2ND	18.68088	288973.5	4630577	134.23	149	86042524	CLF_86.SFC	17	10
65	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	ULE100	1ST	6.72035	288973.5	4630577	134.23	149	86042524	CLF_86.SFC	17	10
66	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	ULE100	2ND	6.11519	288963.69	4630575.5	135.17	149	86042324	CLF_86.SFC	17	10
67	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	CAT	1ST	5.25123	289075	4630578.5	134.86	138	86011424	CLF_86.SFC	17	10
68	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	CAT	2ND	4.81648	289075.66	4630551.5	137.51	137.51	86022524	CLF_86.SFC	17	10
69	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	WCLOAD	1ST	17.09859	288973.5	4630577	134.23	149	86042324	CLF_86.SFC	17	10
70	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	WCLOAD	2ND	15.72396	288983.19	4630578.5	133.17	149	86042524	CLF_86.SFC	17	10
71	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	EXIST100	1ST	19.74556	288973.5	4630577	134.23	149	86042324	CLF_86.SFC	17	10
72	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	EXIST100	2ND	18.67433	288973.5	4630577	134.23	149	86042524	CLF_86.SFC	17	10
73	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	RIDGE100	1ST	13.68313	288973.5	4630577	134.23	149	86042324	CLF_86.SFC	17	10
74	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	RIDGE100	2ND	12.58468	288983.19	4630578.5	133.17	149	86042324	CLF_86.SFC	17	10
75	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	EXISTWC	1ST	17.09162	288973.5	4630577	134.23	149	86042324	CLF_86.SFC	17	10
76	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	EXISTWC	2ND	15.71725	288983.19	4630578.5	133.17	149	86042524	CLF_86.SFC	17	10
77	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	ULE50	1ST	6.93911	289090.41	4630596	131.7	138	86011424	CLF_86.SFC	17	10
78	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	ULE50	2ND	6.79179	289080.59	4630594.5	133.21	138	86011424	CLF_86.SFC	17	10
79	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	RIDGEWC	1ST	11.86002	290257.41	4630787.5	96.79	101	86080724	CLF_86.SFC	17	10
80	AERMOD	Ridgewood criteria_86_PM.USF	PM	24-HR	RIDGEWC	2ND	11.38574	288983.19	4630578.5	133.17	Hill	86021824	CLF_86.SFC	17	10
81	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	TURBINES	1ST	1.19999	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	15	10
82	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	100PCT	1ST	4.32515	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
83	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	ULE100	1ST	0.27644	289080.59	4630594.5	133.21	138	1 YRS	CLF_86.SFC	15	10
84	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	CAT	1ST	1.30438	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_86.SFC	15	10
85	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	WCLOAD	1ST	4.24706	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
86	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	EXIST100	1ST	4.2536	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
87	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	RIDGE100	1ST	2.27861	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_86.SFC	15	10
88	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	EXISTWC	1ST	4.1755	289075	4630578.5	134.86	138	1 YRS	CLF_86.SFC	15	10
89	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	ULE50	1ST	0.36406	289080.59	4630594.5	133.21	138	1 YRS	CLF_86.SFC	15	10
90	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	ANNUAL	RIDGEWC	1ST	2.13478	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_86.SFC	15	10
91	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	TURBINES	1ST	16.31016	290468.84	4630710.5	95.38	107	86082421	CLF_86.SFC	15	10
92	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	TURBINES	2ND	15.31585	290481.12	4630633.5	96.5	108	86031121	CLF_86.SFC	15	10
93	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	100PCT	1ST	46.41408	289276.19	4632014	120.02	128	86032621	CLF_86.SFC	15	10
94	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	100PCT	2ND	44.77328	289360.09	4632008	122.48	122.48	86060421	CLF_86.SFC	15	10
95	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	ULE100	1ST	10.2356	289041.69	4630588	129.69	149	86121912	CLF_86.SFC	15	10
96	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	ULE100	2ND	7.67745	289070.91	4630592.5	132.2	138	86032103	CLF_86.SFC	15	10
97	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	CAT	1ST	17.09299	289075	4630578.5	134.86	138	86123106	CLF_86.SFC	15	10
98	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	CAT	2ND	16.77802	289075	4630578.5	134.86	138	86022521	CLF_86.SFC	15	10
99	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	WCLOAD	1ST	46.15681	289276.19	4632014	120.02	128	86032621	CLF_86.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
100	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	WCLOAD	2ND	44.69966	289360.09	4632008	122.48	122.48	86060421	CLF_86.SFC	15	10
101	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	EXIST100	1ST	46.40253	289276.19	4632014	120.02	128	86032621	CLF_86.SFC	15	10
102	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	EXIST100	2ND	44.75645	289360.09	4632008	122.48	122.48	86060421	CLF_86.SFC	15	10
103	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	RIDGE100	1ST	22.02696	288954	4630574	136.28	149	86110518	CLF_86.SFC	15	10
104	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	RIDGE100	2ND	21.39802	288954	4630574	136.28	149	86072724	CLF_86.SFC	15	10
105	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	EXISTWC	1ST	46.14526	289276.19	4632014	120.02	128	86032621	CLF_86.SFC	15	10
106	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	EXISTWC	2ND	44.68282	289360.09	4632008	122.48	122.48	86060421	CLF_86.SFC	15	10
107	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	ULE50	1ST	7.65652	289080.59	4630594.5	133.21	138	86123021	CLF_86.SFC	15	10
108	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	ULE50	2ND	7.61796	289080.59	4630594.5	133.21	138	86121918	CLF_86.SFC	15	10
109	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	RIDGEWC	1ST	19.51177	288954	4630574	136.28	149	86110518	CLF_86.SFC	15	10
110	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	3-HR	RIDGEWC	2ND	18.77302	288954	4630574	136.28	149	86072724	CLF_86.SFC	15	10
111	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	TURBINES	1ST	9.83504	290481.12	4630633.5	96.5	108	86032024	CLF_86.SFC	15	10
112	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	TURBINES	2ND	8.22117	290227.91	4630589	89	100	86041824	CLF_86.SFC	15	10
113	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	100PCT	1ST	26.00816	289180.31	4632033.5	125.25	131	86012624	CLF_86.SFC	15	10
114	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	100PCT	2ND	23.87535	289406.69	4632001.5	122.06	128	86091224	CLF_86.SFC	15	10
115	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	ULE100	1ST	4.12814	288973.5	4630577	134.23	149	86042524	CLF_86.SFC	15	10
116	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	ULE100	2ND	3.7564	288963.69	4630575.5	135.17	149	86042324	CLF_86.SFC	15	10
117	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	CAT	1ST	10.9683	289075	4630578.5	134.86	138	86011424	CLF_86.SFC	15	10
118	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	CAT	2ND	10.06024	289075.66	4630551.5	137.51	138	86022524	CLF_86.SFC	15	10
119	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	WCLOAD	1ST	25.98527	289180.31	4632033.5	125.25	131	86012624	CLF_86.SFC	15	10
120	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	WCLOAD	2ND	23.83429	289406.69	4632001.5	122.06	128	86091224	CLF_86.SFC	15	10
121	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	EXIST100	1ST	25.74521	289180.31	4632033.5	125.25	131	86012624	CLF_86.SFC	15	10
122	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	EXIST100	2ND	23.86651	289406.69	4632001.5	122.06	128	86091224	CLF_86.SFC	15	10
123	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	RIDGE100	1ST	13.97753	288963.69	4630575.5	135.17	149	86041724	CLF_86.SFC	15	10
124	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	RIDGE100	2ND	12.57375	288973.5	4630577	134.23	149	86061224	CLF_86.SFC	15	10
125	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	EXISTWC	1ST	25.72232	289180.31	4632033.5	125.25	131	86012624	CLF_86.SFC	15	10
126	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	EXISTWC	2ND	23.82545	289406.69	4632001.5	122.06	128	86091224	CLF_86.SFC	15	10
127	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	ULE50	1ST	4.2591	289090.41	4630596	131.7	138	86011424	CLF_86.SFC	15	10
128	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	ULE50	2ND	4.16868	289080.59	4630594.5	133.21	138	86011424	CLF_86.SFC	15	10
129	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	RIDGEWC	1ST	12.30258	288963.69	4630575.5	135.17	149	86041724	CLF_86.SFC	15	10
130	AERMOD	Ridgewood criteria_86_SO2.USF	SO2	24-HR	RIDGEWC	2ND	11.35301	288973.5	4630577	134.23	Hill	86061224	CLF_86.SFC	15	10
131	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	ANNUAL	TURBINES	1ST	0.70588	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	1	5
132	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	ANNUAL	100PCT	1ST	0.70588	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	1	5
133	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	ANNUAL	WCLOAD	1ST	0.70588	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	1	5
134	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	ANNUAL	RIDGE100	1ST	0.70588	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	1	5
135	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	ANNUAL	RIDGEWC	1ST	0.70588	290519.41	4630601.5	98.06	108	1 YRS	CLF_86.SFC	1	5
136	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	TURBINES	1ST	10.30487	290415.41	4630610.5	95.38	95.38	86071521	CLF_86.SFC	1	5
137	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	TURBINES	2ND	9.91266	290415.41	4630610.5	95.38	95.38	86062503	CLF_86.SFC	1	5
138	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	100PCT	1ST	10.30487	290415.41	4630610.5	95.38	95.38	86071521	CLF_86.SFC	1	5
139	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	100PCT	2ND	9.91266	290415.41	4630610.5	95.38	95.38	86062503	CLF_86.SFC	1	5
140	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	WCLOAD	1ST	10.30487	290415.41	4630610.5	95.38	95.38	86071521	CLF_86.SFC	1	5
141	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	WCLOAD	2ND	9.91266	290415.41	4630610.5	95.38	95.38	86062503	CLF_86.SFC	1	5
142	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	RIDGE100	1ST	10.30487	290415.41	4630610.5	95.38	95.38	86071521	CLF_86.SFC	1	5
143	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	RIDGE100	2ND	9.91266	290415.41	4630610.5	95.38	95.38	86062503	CLF_86.SFC	1	5
144	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	RIDGEWC	1ST	10.30487	290415.41	4630610.5	95.38	95.38	86071521	CLF_86.SFC	1	5
145	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	1-HR	RIDGEWC	2ND	9.91266	290415.41	4630610.5	95.38	95.38	86062503	CLF_86.SFC	1	5
146	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	TURBINES	1ST	9.59421	290468.84	4630710.5	95.38	107	86082421	CLF_86.SFC	1	5
147	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	TURBINES	2ND	9.00933	290481.12	4630633.5	96.5	108	86031121	CLF_86.SFC	1	5
148	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	100PCT	1ST	9.59421	290468.84	4630710.5	95.38	107	86082421	CLF_86.SFC	1	5

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
149	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	100PCT	2ND	9.00933	290481.12	4630633.5	96.5	108	86031121	CLF_86.SFC	1	5
150	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	WCLOAD	1ST	9.59421	290468.84	4630710.5	95.38	107	86082421	CLF_86.SFC	1	5
151	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	WCLOAD	2ND	9.00933	290481.12	4630633.5	96.5	108	86031121	CLF_86.SFC	1	5
152	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	RIDGE100	1ST	9.59421	290468.84	4630710.5	95.38	107	86082421	CLF_86.SFC	1	5
153	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	RIDGE100	2ND	9.00933	290481.12	4630633.5	96.5	108	86031121	CLF_86.SFC	1	5
154	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	RIDGEWC	1ST	9.59421	290468.84	4630710.5	95.38	107	86082421	CLF_86.SFC	1	5
155	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	3-HR	RIDGEWC	2ND	9.00933	290481.12	4630633.5	96.5	108	86031121	CLF_86.SFC	1	5
156	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	TURBINES	1ST	8.59011	290492.34	4630702	96.68	108	86082424	CLF_86.SFC	1	5
157	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	TURBINES	2ND	6.8841	290500.25	4630731.5	98.14	107	86082508	CLF_86.SFC	1	5
158	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	100PCT	1ST	8.59011	290492.34	4630702	96.68	108	86082424	CLF_86.SFC	1	5
159	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	100PCT	2ND	6.8841	290500.25	4630731.5	98.14	107	86082508	CLF_86.SFC	1	5
160	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	WCLOAD	1ST	8.59011	290492.34	4630702	96.68	108	86082424	CLF_86.SFC	1	5
161	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	WCLOAD	2ND	6.8841	290500.25	4630731.5	98.14	107	86082508	CLF_86.SFC	1	5
162	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	RIDGE100	1ST	8.59011	290492.34	4630702	96.68	108	86082424	CLF_86.SFC	1	5
163	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	RIDGE100	2ND	6.8841	290500.25	4630731.5	98.14	107	86082508	CLF_86.SFC	1	5
164	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	RIDGEWC	1ST	8.59011	290492.34	4630702	96.68	108	86082424	CLF_86.SFC	1	5
165	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	8-HR	RIDGEWC	2ND	6.8841	290500.25	4630731.5	98.14	107	86082508	CLF_86.SFC	1	5
166	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	TURBINES	1ST	5.78532	290481.12	4630633.5	96.5	108	86032024	CLF_86.SFC	1	5
167	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	TURBINES	2ND	4.83598	290227.91	4630589	89	100	86041824	CLF_86.SFC	1	5
168	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	100PCT	1ST	5.78532	290481.12	4630633.5	96.5	108	86032024	CLF_86.SFC	1	5
169	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	100PCT	2ND	4.83598	290227.91	4630589	89	100	86041824	CLF_86.SFC	1	5
170	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	WCLOAD	1ST	5.78532	290481.12	4630633.5	96.5	108	86032024	CLF_86.SFC	1	5
171	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	WCLOAD	2ND	4.83598	290227.91	4630589	89	100	86041824	CLF_86.SFC	1	5
172	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	RIDGE100	1ST	5.78532	290481.12	4630633.5	96.5	108	86032024	CLF_86.SFC	1	5
173	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	RIDGE100	2ND	4.83598	290227.91	4630589	89	100	86041824	CLF_86.SFC	1	5
174	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	RIDGEWC	1ST	5.78532	290481.12	4630633.5	96.5	108	86032024	CLF_86.SFC	1	5
175	AERMOD	Ridgewood criteria_86_UNIT.USF	UNIT	24-HR	RIDGEWC	2ND	4.83598	290227.91	4630589	89	Hill	86041824	CLF_86.SFC	1	5
176	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	TURBINES	1ST	221.78079	290379.19	4630621	94.93	94.93	87082304	CLF_87.SFC	15	10
177	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	TURBINES	2ND	218.80434	290457.81	4630687	94.85	108	87082302	CLF_87.SFC	15	10
178	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	100PCT	1ST	635.69244	288963.69	4630575.5	135.17	149	87020908	CLF_87.SFC	15	10
179	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	100PCT	2ND	634.8407	288963.69	4630575.5	135.17	149	87011018	CLF_87.SFC	15	10
180	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	ULE100	1ST	24.95454	289080.59	4630594.5	133.21	138	87020919	CLF_87.SFC	15	10
181	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	ULE100	2ND	24.71743	289070.91	4630592.5	132.2	138	87021001	CLF_87.SFC	15	10
182	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	CAT	1ST	489.97418	289075	4630578.5	134.86	138	87121708	CLF_87.SFC	15	10
183	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	CAT	2ND	479.35431	289075	4630578.5	134.86	138	87020924	CLF_87.SFC	15	10
184	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	WCLOAD	1ST	551.66119	288954	4630574	136.28	149	87091805	CLF_87.SFC	15	10
185	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	WCLOAD	2ND	549.37921	288954	4630574	136.28	149	87112906	CLF_87.SFC	15	10
186	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	EXIST100	1ST	635.49005	288963.69	4630575.5	135.17	149	87020908	CLF_87.SFC	15	10
187	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	EXIST100	2ND	634.63947	288963.69	4630575.5	135.17	149	87011018	CLF_87.SFC	15	10
188	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	RIDGE100	1ST	633.62915	288963.69	4630575.5	135.17	149	87011018	CLF_87.SFC	15	10
189	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	RIDGE100	2ND	633.10437	288963.69	4630575.5	135.17	149	87020908	CLF_87.SFC	15	10
190	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	EXISTWC	1ST	549.64032	288954	4630574	136.28	149	87091805	CLF_87.SFC	15	10
191	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	EXISTWC	2ND	548.14893	288954	4630574	136.28	149	87112906	CLF_87.SFC	15	10
192	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	ULE50	1ST	17.25243	289080.59	4630594.5	133.21	138	87121705	CLF_87.SFC	15	10
193	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	ULE50	2ND	17.19997	289070.91	4630592.5	132.2	138	87013116	CLF_87.SFC	15	10
194	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	RIDGEWC	1ST	550.94836	288954	4630574	136.28	149	87091805	CLF_87.SFC	15	10
195	AERMOD	Ridgewood criteria_87_CO.USF	CO	1-HR	RIDGEWC	2ND	548.45465	288954	4630574	136.28	149	87112906	CLF_87.SFC	15	10
196	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	TURBINES	1ST	168.17224	290522.75	4630649.5	100.46	108	87112208	CLF_87.SFC	15	10
197	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	TURBINES	2ND	166.0392	290501.12	4630662	99.12	108	87112208	CLF_87.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
198	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	100PCT	1ST	529.64038	288963.69	4630575.5	135.17	149	87091908	CLF_87.SFC	15	10
199	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	100PCT	2ND	521.50092	288963.69	4630575.5	135.17	149	87082824	CLF_87.SFC	15	10
200	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	ULE100	1ST	19.696	289080.59	4630594.5	133.21	138	87020924	CLF_87.SFC	15	10
201	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	ULE100	2ND	16.32194	289070.91	4630592.5	132.2	138	87111208	CLF_87.SFC	15	10
202	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	CAT	1ST	405.60934	289067.09	4630575	134.49	138	87020924	CLF_87.SFC	15	10
203	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	CAT	2ND	371.73862	289075	4630578.5	134.86	138	87020924	CLF_87.SFC	15	10
204	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	WCLOAD	1ST	465.48434	288963.69	4630575.5	135.17	149	87082824	CLF_87.SFC	15	10
205	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	WCLOAD	2ND	463.61731	288963.69	4630575.5	135.17	149	87091908	CLF_87.SFC	15	10
206	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	EXIST100	1ST	528.83301	288963.69	4630575.5	135.17	149	87091908	CLF_87.SFC	15	10
207	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	EXIST100	2ND	520.81232	288963.69	4630575.5	135.17	149	87032208	CLF_87.SFC	15	10
208	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	RIDGE100	1ST	527.56659	288963.69	4630575.5	135.17	149	87091908	CLF_87.SFC	15	10
209	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	RIDGE100	2ND	519.88989	288963.69	4630575.5	135.17	149	87082824	CLF_87.SFC	15	10
210	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	EXISTWC	1ST	464.14679	288963.69	4630575.5	135.17	149	87082824	CLF_87.SFC	15	10
211	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	EXISTWC	2ND	462.80994	288963.69	4630575.5	135.17	149	87091908	CLF_87.SFC	15	10
212	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	ULE50	1ST	13.08068	289090.41	4630596	131.7	138	87020924	CLF_87.SFC	15	10
213	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	ULE50	2ND	12.15291	289070.91	4630592.5	132.2	138	87020924	CLF_87.SFC	15	10
214	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	RIDGEWC	1ST	463.36038	288963.69	4630575.5	135.17	149	87082824	CLF_87.SFC	15	10
215	AERMOD	Ridgewood criteria_87_CO.USF	CO	8-HR	RIDGEWC	2ND	460.59744	288963.69	4630575.5	135.17	Hill	87091908	CLF_87.SFC	15	10
216	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	TURBINES	1ST	3.4888	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	15	10
217	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	100PCT	1ST	14.9121	289050	4630547	136.43	136.43	1 YRS	CLF_87.SFC	15	10
218	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	ULE100	1ST	0.25037	289080.59	4630594.5	133.21	138	1 YRS	CLF_87.SFC	15	10
219	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	CAT	1ST	7.27877	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
220	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	WCLOAD	1ST	13.86883	289050	4630547	136.43	136.43	1 YRS	CLF_87.SFC	15	10
221	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	EXIST100	1ST	14.70755	289050	4630547	136.43	136.43	1 YRS	CLF_87.SFC	15	10
222	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	RIDGE100	1ST	14.35017	289050	4630547	136.43	136.43	1 YRS	CLF_87.SFC	15	10
223	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	EXISTWC	1ST	13.66428	289050	4630547	136.43	136.43	1 YRS	CLF_87.SFC	15	10
224	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	ULE50	1ST	0.33277	289080.59	4630594.5	133.21	138	1 YRS	CLF_87.SFC	15	10
225	AERMOD	Ridgewood criteria_87_NOX.USF	NOX	ANNUAL	RIDGEWC	1ST	13.26871	289050	4630547	136.43	Hill	1 YRS	CLF_87.SFC	15	10
226	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	TURBINES	1ST	2.82423	290254.03	4630775	94.35	101	1 YRS	CLF_87.SFC	17	10
227	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	100PCT	1ST	3.12599	290254.03	4630775	94.35	101	1 YRS	CLF_87.SFC	17	10
228	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	ULE100	1ST	0.50034	289080.59	4630594.5	133.21	138	1 YRS	CLF_87.SFC	17	10
229	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	CAT	1ST	0.72906	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	17	10
230	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	WCLOAD	1ST	3.12145	290254.03	4630775	94.35	101	1 YRS	CLF_87.SFC	17	10
231	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	EXIST100	1ST	2.5672	288983.19	4630578.5	133.17	149	1 YRS	CLF_87.SFC	17	10
232	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	RIDGE100	1ST	2.88239	290254.03	4630775	94.35	101	1 YRS	CLF_87.SFC	17	10
233	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	EXISTWC	1ST	2.51285	288983.19	4630578.5	133.17	149	1 YRS	CLF_87.SFC	17	10
234	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	ULE50	1ST	0.66555	289080.59	4630594.5	133.21	138	1 YRS	CLF_87.SFC	17	10
235	AERMOD	Ridgewood criteria_87_PM.USF	PM	ANNUAL	RIDGEWC	1ST	2.8765	290254.03	4630775	94.35	101	1 YRS	CLF_87.SFC	17	10
236	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	TURBINES	1ST	12.79528	290254.03	4630775	94.35	101	87080424	CLF_87.SFC	17	10
237	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	TURBINES	2ND	9.47747	290254.03	4630749	93.35	101	87031024	CLF_87.SFC	17	10
238	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	100PCT	1ST	18.92664	288973.5	4630577	134.23	149	87041324	CLF_87.SFC	17	10
239	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	100PCT	2ND	18.52306	288983.19	4630578.5	133.17	149	87041324	CLF_87.SFC	17	10
240	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	ULE100	1ST	7.51322	289031.91	4630586.5	130.21	149	87031024	CLF_87.SFC	17	10
241	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	ULE100	2ND	6.19989	289017.88	4630583.5	130.94	149	87111124	CLF_87.SFC	17	10
242	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	CAT	1ST	5.38913	289082.12	4630583.5	134.52	138	87112124	CLF_87.SFC	17	10
243	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	CAT	2ND	5.25317	289075.66	4630551.5	137.51	137.51	87031724	CLF_87.SFC	17	10
244	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	WCLOAD	1ST	16.98457	288983.19	4630578.5	133.17	149	87041724	CLF_87.SFC	17	10
245	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	WCLOAD	2ND	16.24352	288993	4630580	132.22	149	87111124	CLF_87.SFC	17	10
246	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	EXIST100	1ST	18.91925	288973.5	4630577	134.23	149	87041324	CLF_87.SFC	17	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
247	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	EXIST100	2ND	18.51546	288983.19	4630578.5	133.17	149	87041324	CLF_87.SFC	17	10
248	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	RIDGE100	1ST	16.26838	288993	4630580	132.22	149	87012624	CLF_87.SFC	17	10
249	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	RIDGE100	2ND	14.12682	288973.5	4630577	134.23	149	87041624	CLF_87.SFC	17	10
250	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	EXISTWC	1ST	16.97499	288983.19	4630578.5	133.17	149	87041724	CLF_87.SFC	17	10
251	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	EXISTWC	2ND	16.23768	288993	4630580	132.22	149	87111124	CLF_87.SFC	17	10
252	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	ULE50	1ST	7.7836	289031.91	4630586.5	130.21	149	87031024	CLF_87.SFC	17	10
253	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	ULE50	2ND	7.45365	289041.69	4630588	129.69	149	87012624	CLF_87.SFC	17	10
254	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	RIDGEWC	1ST	13.41643	288993	4630580	132.22	149	87012624	CLF_87.SFC	17	10
255	AERMOD	Ridgewood criteria_87_PM.USF	PM	24-HR	RIDGEWC	2ND	11.9409	288983.19	4630578.5	133.17	Hill	87031324	CLF_87.SFC	17	10
256	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	TURBINES	1ST	1.18383	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	15	10
257	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	100PCT	1ST	4.68115	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
258	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	ULE100	1ST	0.30734	289080.59	4630594.5	133.21	138	1 YRS	CLF_87.SFC	15	10
259	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	CAT	1ST	1.52279	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
260	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	WCLOAD	1ST	4.5691	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
261	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	EXIST100	1ST	4.61007	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
262	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	RIDGE100	1ST	2.54574	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
263	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	EXISTWC	1ST	4.49804	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
264	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	ULE50	1ST	0.4085	289080.59	4630594.5	133.21	138	1 YRS	CLF_87.SFC	15	10
265	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	ANNUAL	RIDGEWC	1ST	2.39262	289075.66	4630551.5	137.51	137.51	1 YRS	CLF_87.SFC	15	10
266	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	TURBINES	1ST	16.01338	290552.91	4630762	107	107	87080424	CLF_87.SFC	15	10
267	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	TURBINES	2ND	14.8594	290481.12	4630633.5	96.5	108	87081821	CLF_87.SFC	15	10
268	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	100PCT	1ST	49.21704	289276.19	4632014	120.02	128	87111803	CLF_87.SFC	15	10
269	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	100PCT	2ND	44.23582	289228.41	4632023	120.77	131	87080306	CLF_87.SFC	15	10
270	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	ULE100	1ST	11.91887	289080.59	4630594.5	133.21	138	87020921	CLF_87.SFC	15	10
271	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	ULE100	2ND	9.89023	289080.59	4630594.5	133.21	138	87111206	CLF_87.SFC	15	10
272	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	CAT	1ST	17.20455	289075	4630578.5	134.86	138	87121709	CLF_87.SFC	15	10
273	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	CAT	2ND	16.63559	289075	4630578.5	134.86	138	87021006	CLF_87.SFC	15	10
274	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	WCLOAD	1ST	48.9106	289276.19	4632014	120.02	128	87111803	CLF_87.SFC	15	10
275	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	WCLOAD	2ND	44.10423	289228.41	4632023	120.77	131	87080306	CLF_87.SFC	15	10
276	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	EXIST100	1ST	49.20876	289276.19	4632014	120.02	128	87111803	CLF_87.SFC	15	10
277	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	EXIST100	2ND	44.19715	289228.41	4632023	120.77	131	87080306	CLF_87.SFC	15	10
278	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	RIDGE100	1ST	21.82209	288954	4630574	136.28	149	87091806	CLF_87.SFC	15	10
279	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	RIDGE100	2ND	21.79156	288954	4630574	136.28	149	87082903	CLF_87.SFC	15	10
280	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	EXISTWC	1ST	48.90231	289276.19	4632014	120.02	128	87111803	CLF_87.SFC	15	10
281	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	EXISTWC	2ND	44.06557	289228.41	4632023	120.77	131	87080306	CLF_87.SFC	15	10
282	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	ULE50	1ST	8.35407	289031.91	4630586.5	130.21	149	87012618	CLF_87.SFC	15	10
283	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	ULE50	2ND	7.43847	289090.41	4630596	131.7	138	87020921	CLF_87.SFC	15	10
284	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	RIDGEWC	1ST	19.32003	288954	4630574	136.28	149	87091806	CLF_87.SFC	15	10
285	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	3-HR	RIDGEWC	2ND	19.19276	288954	4630574	136.28	149	87082903	CLF_87.SFC	15	10
286	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	TURBINES	1ST	9.78324	290500.25	4630617.5	96.56	108	87112124	CLF_87.SFC	15	10
287	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	TURBINES	2ND	8.28063	290202.91	4630545.5	91.76	100	87050424	CLF_87.SFC	15	10
288	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	100PCT	1ST	23.9939	289190	4632031.5	123.73	131	87033124	CLF_87.SFC	15	10
289	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	100PCT	2ND	20.81859	289199.59	4632029.5	122.09	131	87033024	CLF_87.SFC	15	10
290	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	ULE100	1ST	4.61518	289031.91	4630586.5	130.21	149	87031024	CLF_87.SFC	15	10
291	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	ULE100	2ND	3.80843	289017.88	4630583.5	130.94	149	87111124	CLF_87.SFC	15	10
292	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	CAT	1ST	11.25632	289082.12	4630583.5	134.52	138	87112124	CLF_87.SFC	15	10
293	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	CAT	2ND	10.97235	289075.66	4630551.5	137.51	137.51	87031724	CLF_87.SFC	15	10
294	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	WCLOAD	1ST	23.9518	289190	4632031.5	123.73	131	87033124	CLF_87.SFC	15	10
295	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	WCLOAD	2ND	20.7824	289199.59	4632029.5	122.09	131	87033024	CLF_87.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
296	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	EXIST100	1ST	23.86979	289190	4632031.5	123.73	131	87033124	CLF_87.SFC	15	10
297	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	EXIST100	2ND	20.74895	289199.59	4632029.5	122.09	131	87033024	CLF_87.SFC	15	10
298	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	RIDGE100	1ST	14.75534	288973.5	4630577	134.23	149	87091924	CLF_87.SFC	15	10
299	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	RIDGE100	2ND	13.78782	288973.5	4630577	134.23	149	87041624	CLF_87.SFC	15	10
300	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	EXISTWC	1ST	23.82769	289190	4632031.5	123.73	131	87033124	CLF_87.SFC	15	10
301	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	EXISTWC	2ND	20.71275	289199.59	4632029.5	122.09	131	87033024	CLF_87.SFC	15	10
302	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	ULE50	1ST	4.77743	289031.91	4630586.5	130.21	149	87031024	CLF_87.SFC	15	10
303	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	ULE50	2ND	4.57492	289041.69	4630588	129.69	149	87012624	CLF_87.SFC	15	10
304	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	RIDGEWC	1ST	12.87154	289082.12	4630583.5	134.52	138	87112124	CLF_87.SFC	15	10
305	AERMOD	Ridgewood criteria_87_SO2.USF	SO2	24-HR	RIDGEWC	2ND	11.97958	288973.5	4630577	134.23	Hill	87080624	CLF_87.SFC	15	10
306	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	ANNUAL	TURBINES	1ST	0.69637	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	1	5
307	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	ANNUAL	100PCT	1ST	0.69637	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	1	5
308	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	ANNUAL	WCLOAD	1ST	0.69637	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	1	5
309	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	ANNUAL	RIDGE100	1ST	0.69637	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	1	5
310	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	ANNUAL	RIDGEWC	1ST	0.69637	290504.66	4630551.5	95.78	113	1 YRS	CLF_87.SFC	1	5
311	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	TURBINES	1ST	10.09931	290379.19	4630621	94.93	94.93	87082304	CLF_87.SFC	1	5
312	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	TURBINES	2ND	9.96377	290457.81	4630687	94.85	108	87082302	CLF_87.SFC	1	5
313	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	100PCT	1ST	10.09931	290379.19	4630621	94.93	94.93	87082304	CLF_87.SFC	1	5
314	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	100PCT	2ND	9.96377	290457.81	4630687	94.85	108	87082302	CLF_87.SFC	1	5
315	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	WCLOAD	1ST	10.09931	290379.19	4630621	94.93	94.93	87082304	CLF_87.SFC	1	5
316	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	WCLOAD	2ND	9.96377	290457.81	4630687	94.85	108	87082302	CLF_87.SFC	1	5
317	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	RIDGE100	1ST	10.09931	290379.19	4630621	94.93	94.93	87082304	CLF_87.SFC	1	5
318	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	RIDGE100	2ND	9.96377	290457.81	4630687	94.85	108	87082302	CLF_87.SFC	1	5
319	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	RIDGEWC	1ST	10.09931	290379.19	4630621	94.93	94.93	87082304	CLF_87.SFC	1	5
320	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	1-HR	RIDGEWC	2ND	9.96377	290457.81	4630687	94.85	108	87082302	CLF_87.SFC	1	5
321	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	TURBINES	1ST	9.41964	290552.91	4630762	107	107	87080424	CLF_87.SFC	1	5
322	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	TURBINES	2ND	8.74082	290481.12	4630633.5	96.5	108	87081821	CLF_87.SFC	1	5
323	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	100PCT	1ST	9.41964	290552.91	4630762	107	107	87080424	CLF_87.SFC	1	5
324	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	100PCT	2ND	8.74082	290481.12	4630633.5	96.5	108	87081821	CLF_87.SFC	1	5
325	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	WCLOAD	1ST	9.41964	290552.91	4630762	107	107	87080424	CLF_87.SFC	1	5
326	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	WCLOAD	2ND	8.74082	290481.12	4630633.5	96.5	108	87081821	CLF_87.SFC	1	5
327	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	RIDGE100	1ST	9.41964	290552.91	4630762	107	107	87080424	CLF_87.SFC	1	5
328	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	RIDGE100	2ND	8.74082	290481.12	4630633.5	96.5	108	87081821	CLF_87.SFC	1	5
329	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	RIDGEWC	1ST	9.41964	290552.91	4630762	107	107	87080424	CLF_87.SFC	1	5
330	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	3-HR	RIDGEWC	2ND	8.74082	290481.12	4630633.5	96.5	108	87081821	CLF_87.SFC	1	5
331	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	TURBINES	1ST	7.65812	290522.75	4630649.5	100.46	108	87112208	CLF_87.SFC	1	5
332	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	TURBINES	2ND	7.56098	290501.12	4630662	99.12	108	87112208	CLF_87.SFC	1	5
333	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	100PCT	1ST	7.65812	290522.75	4630649.5	100.46	108	87112208	CLF_87.SFC	1	5
334	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	100PCT	2ND	7.56098	290501.12	4630662	99.12	108	87112208	CLF_87.SFC	1	5
335	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	WCLOAD	1ST	7.65812	290522.75	4630649.5	100.46	108	87112208	CLF_87.SFC	1	5
336	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	WCLOAD	2ND	7.56098	290501.12	4630662	99.12	108	87112208	CLF_87.SFC	1	5
337	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	RIDGE100	1ST	7.65812	290522.75	4630649.5	100.46	108	87112208	CLF_87.SFC	1	5
338	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	RIDGE100	2ND	7.56098	290501.12	4630662	99.12	108	87112208	CLF_87.SFC	1	5
339	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	RIDGEWC	1ST	7.65812	290522.75	4630649.5	100.46	108	87112208	CLF_87.SFC	1	5
340	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	8-HR	RIDGEWC	2ND	7.56098	290501.12	4630662	99.12	108	87112208	CLF_87.SFC	1	5
341	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	TURBINES	1ST	5.75485	290500.25	4630617.5	96.56	108	87112124	CLF_87.SFC	1	5
342	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	TURBINES	2ND	4.87096	290202.91	4630545.5	91.76	100	87050424	CLF_87.SFC	1	5
343	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	100PCT	1ST	5.75485	290500.25	4630617.5	96.56	108	87112124	CLF_87.SFC	1	5
344	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	100PCT	2ND	4.87096	290202.91	4630545.5	91.76	100	87050424	CLF_87.SFC	1	5
345	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	WCLOAD	1ST	5.75485	290500.25	4630617.5	96.56	108	87112124	CLF_87.SFC	1	5
346	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	WCLOAD	2ND	4.87096	290202.91	4630545.5	91.76	100	87050424	CLF_87.SFC	1	5
347	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	RIDGE100	1ST	5.75485	290500.25	4630617.5	96.56	108	87112124	CLF_87.SFC	1	5

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
348	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	RIDGE100	2ND	4.87096	290202.91	4630545.5	91.76	100	87050424	CLF_87.SFC	1	5
349	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	RIDGEWC	1ST	5.75485	290500.25	4630617.5	96.56	108	87112124	CLF_87.SFC	1	5
350	AERMOD	Ridgewood criteria_87_UNIT.USF	UNIT	24-HR	RIDGEWC	2ND	4.87096	290202.91	4630545.5	91.76	Hill	87050424	CLF_87.SFC	1	5
351	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	TURBINES	1ST	221.75664	290379.19	4630621	94.93	94.93	88072101	CLF_88.SFC	15	10
352	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	TURBINES	2ND	220.6483	290440.38	4630628	96.67	96.67	88081520	CLF_88.SFC	15	10
353	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	100PCT	1ST	631.38544	288983.19	4630578.5	133.17	149	88010817	CLF_88.SFC	15	10
354	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	100PCT	2ND	630.89423	288983.19	4630578.5	133.17	149	88012522	CLF_88.SFC	15	10
355	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	ULE100	1ST	22.87836	289090.41	4630596	131.7	138	88011408	CLF_88.SFC	15	10
356	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	ULE100	2ND	21.46032	289090.41	4630596	131.7	138	88031018	CLF_88.SFC	15	10
357	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	CAT	1ST	492.57596	289075	4630578.5	134.86	138	88122616	CLF_88.SFC	15	10
358	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	CAT	2ND	490.52762	289075	4630578.5	134.86	138	88122619	CLF_88.SFC	15	10
359	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	WCLOAD	1ST	549.39539	288954	4630574	136.28	149	88050719	CLF_88.SFC	15	10
360	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	WCLOAD	2ND	544.15106	288954	4630574	136.28	149	88041324	CLF_88.SFC	15	10
361	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	EXIST100	1ST	631.23553	288983.19	4630578.5	133.17	149	88010817	CLF_88.SFC	15	10
362	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	EXIST100	2ND	630.74469	288983.19	4630578.5	133.17	149	88012522	CLF_88.SFC	15	10
363	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	RIDGE100	1ST	627.59412	288963.69	4630575.5	135.17	149	88100717	CLF_88.SFC	15	10
364	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	RIDGE100	2ND	625.77655	288963.69	4630575.5	135.17	149	88021209	CLF_88.SFC	15	10
365	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	EXISTWC	1ST	547.4176	288954	4630574	136.28	149	88050719	CLF_88.SFC	15	10
366	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	EXISTWC	2ND	542.9715	288954	4630574	136.28	149	88040523	CLF_88.SFC	15	10
367	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	ULE50	1ST	17.18789	289080.59	4630594.5	133.21	138	88121118	CLF_88.SFC	15	10
368	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	ULE50	2ND	17.14094	289080.59	4630594.5	133.21	138	88121119	CLF_88.SFC	15	10
369	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	RIDGEWC	1ST	548.60162	288954	4630574	136.28	149	88050719	CLF_88.SFC	15	10
370	AERMOD	Ridgewood criteria_88_CO.USF	CO	1-HR	RIDGEWC	2ND	543.12158	288954	4630574	136.28	149	88041324	CLF_88.SFC	15	10
371	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	TURBINES	1ST	170.19548	290481.12	4630633.5	96.5	108	88032108	CLF_88.SFC	15	10
372	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	TURBINES	2ND	161.49675	290481.12	4630633.5	96.5	108	88032024	CLF_88.SFC	15	10
373	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	100PCT	1ST	547.35272	288973.5	4630577	134.23	149	88100424	CLF_88.SFC	15	10
374	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	100PCT	2ND	518.28552	288973.5	4630577	134.23	149	88100808	CLF_88.SFC	15	10
375	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	ULE100	1ST	10.74665	289061.19	4630591	130.82	138	88060608	CLF_88.SFC	15	10
376	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	ULE100	2ND	9.59345	289061.19	4630591	130.82	138	88041016	CLF_88.SFC	15	10
377	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	CAT	1ST	408.89023	289075	4630578.5	134.86	138	88011408	CLF_88.SFC	15	10
378	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	CAT	2ND	346.4361	289075.66	4630551.5	137.51	137.51	88010908	CLF_88.SFC	15	10
379	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	WCLOAD	1ST	453.5827	288963.69	4630575.5	135.17	149	88040608	CLF_88.SFC	15	10
380	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	WCLOAD	2ND	438.39185	288963.69	4630575.5	135.17	149	88100408	CLF_88.SFC	15	10
381	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	EXIST100	1ST	547.20062	288973.5	4630577	134.23	149	88100424	CLF_88.SFC	15	10
382	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	EXIST100	2ND	518.11499	288973.5	4630577	134.23	149	88100808	CLF_88.SFC	15	10
383	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	RIDGE100	1ST	541.27728	288973.5	4630577	134.23	149	88100424	CLF_88.SFC	15	10
384	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	RIDGE100	2ND	511.72925	288973.5	4630577	134.23	149	88100808	CLF_88.SFC	15	10
385	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	EXISTWC	1ST	452.57516	288963.69	4630575.5	135.17	149	88040608	CLF_88.SFC	15	10
386	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	EXISTWC	2ND	438.1322	288963.69	4630575.5	135.17	149	88100408	CLF_88.SFC	15	10
387	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	ULE50	1ST	11.99862	289070.91	4630592.5	132.2	138	88041008	CLF_88.SFC	15	10
388	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	ULE50	2ND	11.91705	289070.91	4630592.5	132.2	138	88121124	CLF_88.SFC	15	10
389	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	RIDGEWC	1ST	450.70969	288963.69	4630575.5	135.17	149	88040608	CLF_88.SFC	15	10
390	AERMOD	Ridgewood criteria_88_CO.USF	CO	8-HR	RIDGEWC	2ND	434.68222	288963.69	4630575.5	135.17	Hill	88100408	CLF_88.SFC	15	10
391	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	TURBINES	1ST	3.77981	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	15	10
392	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	100PCT	1ST	14.03306	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
393	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	ULE100	1ST	0.23107	289080.59	4630594.5	133.21	138	1 YRS	CLF_88.SFC	15	10
394	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	CAT	1ST	6.02776	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	15	10
395	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	WCLOAD	1ST	12.98505	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
396	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	EXIST100	1ST	13.89198	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
397	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	RIDGE100	1ST	13.53905	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
398	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	EXISTWC	1ST	12.84413	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
399	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	ULE50	1ST	0.28797	289080.59	4630594.5	133.21	138	1 YRS	CLF_88.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
400	AERMOD	Ridgewood criteria_88_NOX.USF	NOX	ANNUAL	RIDGEWC	1ST	12.45228	289075	4630578.5	134.86	Hill	1 YRS	CLF_88.SFC	15	10
401	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	TURBINES	1ST	2.9908	290254.03	4630775	94.35	101	1 YRS	CLF_88.SFC	17	10
402	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	100PCT	1ST	3.26032	290254.03	4630775	94.35	101	1 YRS	CLF_88.SFC	17	10
403	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	ULE100	1ST	0.46177	289080.59	4630594.5	133.21	138	1 YRS	CLF_88.SFC	17	10
404	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	CAT	1ST	0.60375	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	17	10
405	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	WCLOAD	1ST	3.25458	290254.03	4630775	94.35	101	1 YRS	CLF_88.SFC	17	10
406	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	EXIST100	1ST	2.34241	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	17	10
407	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	RIDGE100	1ST	3.04705	290254.03	4630775	94.35	101	1 YRS	CLF_88.SFC	17	10
408	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	EXISTWC	1ST	2.23806	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	17	10
409	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	ULE50	1ST	0.57595	289080.59	4630594.5	133.21	138	1 YRS	CLF_88.SFC	17	10
410	AERMOD	Ridgewood criteria_88_PM.USF	PM	ANNUAL	RIDGEWC	1ST	3.04121	290254.03	4630775	94.35	101	1 YRS	CLF_88.SFC	17	10
411	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	TURBINES	1ST	11.08778	290257.41	4630787.5	96.79	101	88051524	CLF_88.SFC	17	10
412	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	TURBINES	2ND	9.73223	290257.41	4630787.5	96.79	101	88061624	CLF_88.SFC	17	10
413	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	100PCT	1ST	19.2296	288973.5	4630577	134.23	149	88051924	CLF_88.SFC	17	10
414	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	100PCT	2ND	18.8388	288973.5	4630577	134.23	149	88040824	CLF_88.SFC	17	10
415	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	ULE100	1ST	6.95841	289058.69	4630573	133.97	138	88041024	CLF_88.SFC	17	10
416	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	ULE100	2ND	5.95314	289075	4630578.5	134.86	138	88121124	CLF_88.SFC	17	10
417	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	CAT	1ST	5.01047	289058.69	4630573	133.97	138	88041024	CLF_88.SFC	17	10
418	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	CAT	2ND	4.40154	289082.12	4630583.5	134.52	138	88032224	CLF_88.SFC	17	10
419	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	WCLOAD	1ST	17.70227	288973.5	4630577	134.23	149	88051924	CLF_88.SFC	17	10
420	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	WCLOAD	2ND	16.89011	288973.5	4630577	134.23	149	88040824	CLF_88.SFC	17	10
421	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	EXIST100	1ST	19.22288	288973.5	4630577	134.23	149	88051924	CLF_88.SFC	17	10
422	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	EXIST100	2ND	18.83191	288973.5	4630577	134.23	149	88040824	CLF_88.SFC	17	10
423	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	RIDGE100	1ST	15.30356	288963.69	4630575.5	135.17	149	88100424	CLF_88.SFC	17	10
424	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	RIDGE100	2ND	14.34995	288973.5	4630577	134.23	149	88051924	CLF_88.SFC	17	10
425	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	EXISTWC	1ST	17.69555	288973.5	4630577	134.23	149	88051924	CLF_88.SFC	17	10
426	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	EXISTWC	2ND	16.88322	288973.5	4630577	134.23	149	88040824	CLF_88.SFC	17	10
427	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	ULE50	1ST	8.15587	289051.41	4630589.5	129.32	149	88041024	CLF_88.SFC	17	10
428	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	ULE50	2ND	7.0783	289070.91	4630592.5	132.2	138	88041024	CLF_88.SFC	17	10
429	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	RIDGEWC	1ST	12.86345	288973.5	4630577	134.23	149	88100424	CLF_88.SFC	17	10
430	AERMOD	Ridgewood criteria_88_PM.USF	PM	24-HR	RIDGEWC	2ND	11.73121	288973.5	4630577	134.23	Hill	88051924	CLF_88.SFC	17	10
431	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	TURBINES	1ST	1.28257	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	15	10
432	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	100PCT	1ST	4.27342	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	15	10
433	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	ULE100	1ST	0.28365	289080.59	4630594.5	133.21	138	1 YRS	CLF_88.SFC	15	10
434	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	CAT	1ST	1.26106	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	15	10
435	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	WCLOAD	1ST	4.17642	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	15	10
436	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	EXIST100	1ST	4.2253	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	15	10
437	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	RIDGE100	1ST	2.32588	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
438	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	EXISTWC	1ST	4.12833	289082.12	4630583.5	134.52	138	1 YRS	CLF_88.SFC	15	10
439	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	ULE50	1ST	0.3535	289080.59	4630594.5	133.21	138	1 YRS	CLF_88.SFC	15	10
440	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	ANNUAL	RIDGEWC	1ST	2.16377	289075	4630578.5	134.86	138	1 YRS	CLF_88.SFC	15	10
441	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	TURBINES	1ST	16.54799	290515.84	4630830.5	104.65	104.65	88081006	CLF_88.SFC	15	10
442	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	TURBINES	2ND	15.88983	290515.84	4630830.5	104.65	104.65	88061521	CLF_88.SFC	15	10
443	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	100PCT	1ST	50.19215	289369.5	4632007.5	122.5	128	88022303	CLF_88.SFC	15	10
444	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	100PCT	2ND	47.68816	289304.09	4632012	121.2	128	88032603	CLF_88.SFC	15	10
445	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	ULE100	1ST	8.68567	289090.41	4630596	131.7	138	88011409	CLF_88.SFC	15	10
446	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	ULE100	2ND	8.28446	289080.59	4630594.5	133.21	138	88042218	CLF_88.SFC	15	10
447	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	CAT	1ST	17.79965	289075	4630578.5	134.86	138	88011409	CLF_88.SFC	15	10
448	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	CAT	2ND	16.36244	289082.12	4630583.5	134.52	138	88042003	CLF_88.SFC	15	10
449	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	WCLOAD	1ST	50.06466	289369.5	4632007.5	122.5	128	88022303	CLF_88.SFC	15	10
450	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	WCLOAD	2ND	47.42264	289304.09	4632012	121.2	128	88032603	CLF_88.SFC	15	10
451	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	EXIST100	1ST	50.18364	289369.5	4632007.5	122.5	128	88022303	CLF_88.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
452	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	EXIST100	2ND	47.67677	289304.09	4632012	121.2	128	88032603	CLF_88.SFC	15	10
453	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	RIDGE100	1ST	21.28371	288963.69	4630575.5	135.17	149	88051821	CLF_88.SFC	15	10
454	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	RIDGE100	2ND	21.00619	288963.69	4630575.5	135.17	149	88040524	CLF_88.SFC	15	10
455	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	EXISTWC	1ST	50.05615	289369.5	4632007.5	122.5	128	88022303	CLF_88.SFC	15	10
456	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	EXISTWC	2ND	47.41125	289304.09	4632012	121.2	128	88032603	CLF_88.SFC	15	10
457	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	ULE50	1ST	8.34774	289041.69	4630588	129.69	149	88010824	CLF_88.SFC	15	10
458	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	ULE50	2ND	7.16997	289080.59	4630594.5	133.21	138	88041924	CLF_88.SFC	15	10
459	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	RIDGEWC	1ST	18.51349	288963.69	4630575.5	135.17	149	88040524	CLF_88.SFC	15	10
460	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	3-HR	RIDGEWC	2ND	18.26725	288944.31	4630572.5	137.54	149	88020318	CLF_88.SFC	15	10
461	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	TURBINES	1ST	10.84988	290481.12	4630633.5	96.5	108	88032124	CLF_88.SFC	15	10
462	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	TURBINES	2ND	9.2024	290512.59	4630857	99.59	107	88081024	CLF_88.SFC	15	10
463	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	100PCT	1ST	21.72701	289506.91	4631974	121.75	121.75	88122824	CLF_88.SFC	15	10
464	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	100PCT	2ND	21.33337	289515.59	4631970.5	121.99	121.99	88080524	CLF_88.SFC	15	10
465	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	ULE100	1ST	4.27437	289058.69	4630573	133.97	138	88041024	CLF_88.SFC	15	10
466	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	ULE100	2ND	3.65686	289075	4630578.5	134.86	138	88121124	CLF_88.SFC	15	10
467	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	CAT	1ST	10.46542	289058.69	4630573	133.97	138	88041024	CLF_88.SFC	15	10
468	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	CAT	2ND	9.19354	289082.12	4630583.5	134.52	138	88032224	CLF_88.SFC	15	10
469	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	WCLOAD	1ST	21.71772	289506.91	4631974	121.75	121.75	88122824	CLF_88.SFC	15	10
470	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	WCLOAD	2ND	21.32231	289515.59	4631970.5	121.99	121.99	88080524	CLF_88.SFC	15	10
471	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	EXIST100	1ST	21.71765	289506.91	4631974	121.75	121.75	88122824	CLF_88.SFC	15	10
472	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	EXIST100	2ND	21.32137	289515.59	4631970.5	121.99	121.99	88080524	CLF_88.SFC	15	10
473	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	RIDGE100	1ST	15.01341	288973.5	4630577	134.23	149	88100424	CLF_88.SFC	15	10
474	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	RIDGE100	2ND	14.37277	288963.69	4630575.5	135.17	149	88040624	CLF_88.SFC	15	10
475	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	EXISTWC	1ST	21.70835	289506.91	4631974	121.75	121.75	88122824	CLF_88.SFC	15	10
476	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	EXISTWC	2ND	21.31031	289515.59	4631970.5	121.99	121.99	88080524	CLF_88.SFC	15	10
477	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	ULE50	1ST	5.00593	289051.41	4630589.5	129.32	149	88041024	CLF_88.SFC	15	10
478	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	ULE50	2ND	4.34454	289070.91	4630592.5	132.2	138	88041024	CLF_88.SFC	15	10
479	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	RIDGEWC	1ST	13.11471	288973.5	4630577	134.23	149	88100424	CLF_88.SFC	15	10
480	AERMOD	Ridgewood criteria_88_SO2.USF	SO2	24-HR	RIDGEWC	2ND	12.66542	288963.69	4630575.5	135.17	Hill	88040624	CLF_88.SFC	15	10
481	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	ANNUAL	TURBINES	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	1	5
482	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	ANNUAL	100PCT	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	1	5
483	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	ANNUAL	WCLOAD	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	1	5
484	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	ANNUAL	RIDGE100	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	1	5
485	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	ANNUAL	RIDGEWC	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	CLF_88.SFC	1	5
486	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	TURBINES	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	CLF_88.SFC	1	5
487	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	TURBINES	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	CLF_88.SFC	1	5
488	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	100PCT	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	CLF_88.SFC	1	5
489	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	100PCT	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	CLF_88.SFC	1	5
490	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	WCLOAD	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	CLF_88.SFC	1	5
491	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	WCLOAD	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	CLF_88.SFC	1	5
492	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	RIDGE100	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	CLF_88.SFC	1	5
493	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	RIDGE100	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	CLF_88.SFC	1	5
494	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	RIDGEWC	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	CLF_88.SFC	1	5
495	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	1-HR	RIDGEWC	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	CLF_88.SFC	1	5
496	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	TURBINES	1ST	9.73411	290515.84	4630830.5	104.65	104.65	88081006	CLF_88.SFC	1	5
497	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	TURBINES	2ND	9.34696	290515.84	4630830.5	104.65	104.65	88061521	CLF_88.SFC	1	5
498	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	100PCT	1ST	9.73411	290515.84	4630830.5	104.65	104.65	88081006	CLF_88.SFC	1	5
499	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	100PCT	2ND	9.34696	290515.84	4630830.5	104.65	104.65	88061521	CLF_88.SFC	1	5
500	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	WCLOAD	1ST	9.73411	290515.84	4630830.5	104.65	104.65	88081006	CLF_88.SFC	1	5
501	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	WCLOAD	2ND	9.34696	290515.84	4630830.5	104.65	104.65	88061521	CLF_88.SFC	1	5
502	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	RIDGE100	1ST	9.73411	290515.84	4630830.5	104.65	104.65	88081006	CLF_88.SFC	1	5
503	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	RIDGE100	2ND	9.34696	290515.84	4630830.5	104.65	104.65	88061521	CLF_88.SFC	1	5

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
504	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	RIDGEWC	1ST	9.73411	290515.84	4630830.5	104.65	104.65	88081006	CLF_88.SFC	1	5
505	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	3-HR	RIDGEWC	2ND	9.34696	290515.84	4630830.5	104.65	104.65	88061521	CLF_88.SFC	1	5
506	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	TURBINES	1ST	7.75025	290481.12	4630633.5	96.5	108	88032108	CLF_88.SFC	1	5
507	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	TURBINES	2ND	7.35413	290481.12	4630633.5	96.5	108	88032024	CLF_88.SFC	1	5
508	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	100PCT	1ST	7.75025	290481.12	4630633.5	96.5	108	88032108	CLF_88.SFC	1	5
509	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	100PCT	2ND	7.35413	290481.12	4630633.5	96.5	108	88032024	CLF_88.SFC	1	5
510	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	WCLOAD	1ST	7.75025	290481.12	4630633.5	96.5	108	88032108	CLF_88.SFC	1	5
511	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	WCLOAD	2ND	7.35413	290481.12	4630633.5	96.5	108	88032024	CLF_88.SFC	1	5
512	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	RIDGE100	1ST	7.75025	290481.12	4630633.5	96.5	108	88032108	CLF_88.SFC	1	5
513	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	RIDGE100	2ND	7.35413	290481.12	4630633.5	96.5	108	88032024	CLF_88.SFC	1	5
514	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	RIDGEWC	1ST	7.75025	290481.12	4630633.5	96.5	108	88032108	CLF_88.SFC	1	5
515	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	8-HR	RIDGEWC	2ND	7.35413	290481.12	4630633.5	96.5	108	88032024	CLF_88.SFC	1	5
516	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	TURBINES	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	CLF_88.SFC	1	5
517	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	TURBINES	2ND	5.41318	290512.59	4630857	99.59	107	88081024	CLF_88.SFC	1	5
518	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	100PCT	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	CLF_88.SFC	1	5
519	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	100PCT	2ND	5.41318	290512.59	4630857	99.59	107	88081024	CLF_88.SFC	1	5
520	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	WCLOAD	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	CLF_88.SFC	1	5
521	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	WCLOAD	2ND	5.41318	290512.59	4630857	99.59	107	88081024	CLF_88.SFC	1	5
522	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	RIDGE100	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	CLF_88.SFC	1	5
523	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	RIDGE100	2ND	5.41318	290512.59	4630857	99.59	107	88081024	CLF_88.SFC	1	5
524	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	RIDGEWC	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	CLF_88.SFC	1	5
525	AERMOD	Ridgewood criteria_88_UNIT.USF	UNIT	24-HR	RIDGEWC	2ND	5.41318	290512.59	4630857	99.59	Hill	88081024	CLF_88.SFC	1	5
526	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	TURBINES	1ST	222.97821	290415.41	4630610.5	95.38	95.38	89072823	CLF_89.SFC	15	10
527	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	TURBINES	2ND	222.06619	290415.41	4630610.5	95.38	95.38	89072822	CLF_89.SFC	15	10
528	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	100PCT	1ST	643.24103	288954	4630574	136.28	149	89020203	CLF_89.SFC	15	10
529	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	100PCT	2ND	632.32416	288954	4630574	136.28	149	89110823	CLF_89.SFC	15	10
530	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	ULE100	1ST	24.63934	289031.91	4630586.5	130.21	149	89010417	CLF_89.SFC	15	10
531	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	ULE100	2ND	21.48246	289100.09	4630597.5	130.24	138	89112117	CLF_89.SFC	15	10
532	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	CAT	1ST	477.64856	289075	4630578.5	134.86	138	89010420	CLF_89.SFC	15	10
533	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	CAT	2ND	477.51126	289075	4630578.5	134.86	138	89010422	CLF_89.SFC	15	10
534	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	WCLOAD	1ST	554.04346	288954	4630574	136.28	149	89020203	CLF_89.SFC	15	10
535	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	WCLOAD	2ND	550.35815	288954	4630574	136.28	149	89110823	CLF_89.SFC	15	10
536	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	EXIST100	1ST	642.76703	288954	4630574	136.28	149	89020203	CLF_89.SFC	15	10
537	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	EXIST100	2ND	631.57471	288954	4630574	136.28	149	89110823	CLF_89.SFC	15	10
538	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	RIDGE100	1ST	642.56171	288954	4630574	136.28	149	89020203	CLF_89.SFC	15	10
539	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	RIDGE100	2ND	631.52832	288954	4630574	136.28	149	89110823	CLF_89.SFC	15	10
540	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	EXISTWC	1ST	553.56946	288954	4630574	136.28	149	89020203	CLF_89.SFC	15	10
541	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	EXISTWC	2ND	549.6087	288954	4630574	136.28	149	89110823	CLF_89.SFC	15	10
542	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	ULE50	1ST	17.3769	289080.59	4630594.5	133.21	138	89120116	CLF_89.SFC	15	10
543	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	ULE50	2ND	16.61081	289070.91	4630592.5	132.2	138	89010409	CLF_89.SFC	15	10
544	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	RIDGEWC	1ST	552.93713	288954	4630574	136.28	149	89020203	CLF_89.SFC	15	10
545	AERMOD	Ridgewood criteria_89_CO.USF	CO	1-HR	RIDGEWC	2ND	549.14124	288954	4630574	136.28	149	89110823	CLF_89.SFC	15	10
546	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	TURBINES	1ST	177.24045	290522.31	4630859	99.6	109	89111408	CLF_89.SFC	15	10
547	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	TURBINES	2ND	172.21475	290512.59	4630857	99.59	107	89082108	CLF_89.SFC	15	10
548	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	100PCT	1ST	558.34583	288973.5	4630577	134.23	149	89022324	CLF_89.SFC	15	10
549	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	100PCT	2ND	533.52045	288973.5	4630577	134.23	149	89101924	CLF_89.SFC	15	10
550	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	ULE100	1ST	13.1473	289090.41	4630596	131.7	138	89012116	CLF_89.SFC	15	10
551	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	ULE100	2ND	12.56417	289080.59	4630594.5	133.21	138	89012116	CLF_89.SFC	15	10
552	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	CAT	1ST	357.94473	289050	4630547	136.43	136.43	89010408	CLF_89.SFC	15	10
553	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	CAT	2ND	352.64908	289036.97	4630548	135.7	135.7	89010408	CLF_89.SFC	15	10
554	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	WCLOAD	1ST	470.82712	288973.5	4630577	134.23	149	89022324	CLF_89.SFC	15	10
555	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	WCLOAD	2ND	470.09003	288973.5	4630577	134.23	149	89101924	CLF_89.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
556	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	EXIST100	1ST	558.10852	288973.5	4630577	134.23	149	89022324	CLF_89.SFC	15	10
557	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	EXIST100	2ND	532.87543	288973.5	4630577	134.23	149	89101924	CLF_89.SFC	15	10
558	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	RIDGE100	1ST	553.94244	288973.5	4630577	134.23	149	89022324	CLF_89.SFC	15	10
559	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	RIDGE100	2ND	531.14081	288973.5	4630577	134.23	149	89101924	CLF_89.SFC	15	10
560	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	EXISTWC	1ST	470.58984	288973.5	4630577	134.23	149	89022324	CLF_89.SFC	15	10
561	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	EXISTWC	2ND	469.44498	288973.5	4630577	134.23	149	89101924	CLF_89.SFC	15	10
562	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	ULE50	1ST	11.86712	289093.31	4630597	131.16	138	89012116	CLF_89.SFC	15	10
563	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	ULE50	2ND	10.99606	289031.91	4630586.5	130.21	149	89010408	CLF_89.SFC	15	10
564	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	RIDGEWC	1ST	469.64865	288954	4630574	136.28	149	89030408	CLF_89.SFC	15	10
565	AERMOD	Ridgewood criteria_89_CO.USF	CO	8-HR	RIDGEWC	2ND	464.16306	288973.5	4630577	134.23	Hill	89022324	CLF_89.SFC	15	10
566	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	TURBINES	1ST	3.60727	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	15	10
567	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	100PCT	1ST	12.52588	289075	4630578.5	134.86	138	1 YRS	CLF_89.SFC	15	10
568	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	ULE100	1ST	0.18705	289080.59	4630594.5	133.21	138	1 YRS	CLF_89.SFC	15	10
569	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	CAT	1ST	5.24548	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
570	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	WCLOAD	1ST	11.57001	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
571	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	EXIST100	1ST	12.32363	289075	4630578.5	134.86	138	1 YRS	CLF_89.SFC	15	10
572	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	RIDGE100	1ST	12.04403	289075	4630578.5	134.86	138	1 YRS	CLF_89.SFC	15	10
573	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	EXISTWC	1ST	11.36726	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
574	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	ULE50	1ST	0.23409	289080.59	4630594.5	133.21	138	1 YRS	CLF_89.SFC	15	10
575	AERMOD	Ridgewood criteria_89_NOX.USF	NOX	ANNUAL	RIDGEWC	1ST	11.04443	289082.12	4630583.5	134.52	Hill	1 YRS	CLF_89.SFC	15	10
576	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	TURBINES	1ST	2.73936	290254.03	4630775	94.35	101	1 YRS	CLF_89.SFC	17	10
577	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	100PCT	1ST	3.00874	290254.03	4630775	94.35	101	1 YRS	CLF_89.SFC	17	10
578	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	ULE100	1ST	0.37381	289080.59	4630594.5	133.21	138	1 YRS	CLF_89.SFC	17	10
579	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	CAT	1ST	0.52539	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	17	10
580	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	WCLOAD	1ST	3.00254	290254.03	4630775	94.35	101	1 YRS	CLF_89.SFC	17	10
581	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	EXIST100	1ST	2.08303	289075	4630578.5	134.86	138	1 YRS	CLF_89.SFC	17	10
582	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	RIDGE100	1ST	2.79218	290254.03	4630775	94.35	101	1 YRS	CLF_89.SFC	17	10
583	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	EXISTWC	1ST	2.05955	288983.19	4630578.5	133.17	149	1 YRS	CLF_89.SFC	17	10
584	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	ULE50	1ST	0.46817	289080.59	4630594.5	133.21	138	1 YRS	CLF_89.SFC	17	10
585	AERMOD	Ridgewood criteria_89_PM.USF	PM	ANNUAL	RIDGEWC	1ST	2.78697	290254.03	4630775	94.35	101	1 YRS	CLF_89.SFC	17	10
586	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	TURBINES	1ST	11.92884	290254.03	4630749	93.35	101	89101824	CLF_89.SFC	17	10
587	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	TURBINES	2ND	9.52567	290257.41	4630787.5	96.79	101	89080424	CLF_89.SFC	17	10
588	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	100PCT	1ST	20.27055	288983.19	4630578.5	133.17	149	89101824	CLF_89.SFC	17	10
589	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	100PCT	2ND	18.20899	288983.19	4630578.5	133.17	149	89022424	CLF_89.SFC	17	10
590	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	ULE100	1ST	6.68275	288954	4630574	136.28	149	89022424	CLF_89.SFC	17	10
591	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	ULE100	2ND	4.63977	289012.41	4630583.5	131.23	149	89112324	CLF_89.SFC	17	10
592	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	CAT	1ST	5.05488	289036.97	4630548	135.7	135.7	89101824	CLF_89.SFC	17	10
593	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	CAT	2ND	4.36646	289036.97	4630548	135.7	135.7	89030624	CLF_89.SFC	17	10
594	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	WCLOAD	1ST	18.79468	288983.19	4630578.5	133.17	149	89101824	CLF_89.SFC	17	10
595	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	WCLOAD	2ND	16.43674	288983.19	4630578.5	133.17	149	89030824	CLF_89.SFC	17	10
596	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	EXIST100	1ST	20.26312	288983.19	4630578.5	133.17	149	89101824	CLF_89.SFC	17	10
597	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	EXIST100	2ND	18.20281	288983.19	4630578.5	133.17	149	89022424	CLF_89.SFC	17	10
598	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	RIDGE100	1ST	15.92342	288983.19	4630578.5	133.17	149	89101824	CLF_89.SFC	17	10
599	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	RIDGE100	2ND	13.7911	288983.19	4630578.5	133.17	149	89030624	CLF_89.SFC	17	10
600	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	EXISTWC	1ST	18.78725	288983.19	4630578.5	133.17	149	89101824	CLF_89.SFC	17	10
601	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	EXISTWC	2ND	16.41964	288983.19	4630578.5	133.17	149	89030824	CLF_89.SFC	17	10
602	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	ULE50	1ST	7.17415	289012.41	4630583.5	131.23	149	89101824	CLF_89.SFC	17	10
603	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	ULE50	2ND	5.03128	289022.19	4630585	130.64	149	89112324	CLF_89.SFC	17	10
604	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	RIDGEWC	1ST	13.13213	288983.19	4630578.5	133.17	149	89101824	CLF_89.SFC	17	10
605	AERMOD	Ridgewood criteria_89_PM.USF	PM	24-HR	RIDGEWC	2ND	11.71843	288983.19	4630578.5	133.17	Hill	89030624	CLF_89.SFC	17	10
606	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	TURBINES	1ST	1.22403	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	15	10
607	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	100PCT	1ST	3.9648	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
608	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	ULE100	1ST	0.22962	289080.59	4630594.5	133.21	138	1 YRS	CLF_89.SFC	15	10
609	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	CAT	1ST	1.0974	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
610	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	WCLOAD	1ST	3.87169	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
611	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	EXIST100	1ST	3.89599	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
612	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	RIDGE100	1ST	2.08656	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
613	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	EXISTWC	1ST	3.80289	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
614	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	ULE50	1ST	0.28735	289080.59	4630594.5	133.21	138	1 YRS	CLF_89.SFC	15	10
615	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	ANNUAL	RIDGEWC	1ST	1.94986	289082.12	4630583.5	134.52	138	1 YRS	CLF_89.SFC	15	10
616	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	TURBINES	1ST	16.3797	290415.41	4630610.5	95.38	95.38	89072824	CLF_89.SFC	15	10
617	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	TURBINES	2ND	15.47621	290387.75	4630597.5	93.64	93.64	89072824	CLF_89.SFC	15	10
618	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	100PCT	1ST	48.23713	289322.81	4632011	122.86	128	89111606	CLF_89.SFC	15	10
619	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	100PCT	2ND	46.30841	289257.19	4632017	120.52	127	89092221	CLF_89.SFC	15	10
620	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	ULE100	1ST	8.45715	289041.69	4630588	129.69	149	89040806	CLF_89.SFC	15	10
621	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	ULE100	2ND	7.33886	289061.19	4630591	130.82	138	89040806	CLF_89.SFC	15	10
622	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	CAT	1ST	17.30457	289075	4630578.5	134.86	138	89010421	CLF_89.SFC	15	10
623	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	CAT	2ND	16.67593	289075	4630578.5	134.86	138	89072824	CLF_89.SFC	15	10
624	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	WCLOAD	1ST	47.96214	289322.81	4632011	122.86	128	89111606	CLF_89.SFC	15	10
625	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	WCLOAD	2ND	46.09119	289257.19	4632017	120.52	127	89092221	CLF_89.SFC	15	10
626	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	EXIST100	1ST	48.22965	289322.81	4632011	122.86	128	89111606	CLF_89.SFC	15	10
627	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	EXIST100	2ND	46.29079	289257.19	4632017	120.52	127	89092221	CLF_89.SFC	15	10
628	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	RIDGE100	1ST	21.34986	288963.69	4630575.5	135.17	149	89091821	CLF_89.SFC	15	10
629	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	RIDGE100	2ND	21.03775	288963.69	4630575.5	135.17	149	89060921	CLF_89.SFC	15	10
630	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	EXISTWC	1ST	47.95467	289322.81	4632011	122.86	128	89111606	CLF_89.SFC	15	10
631	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	EXISTWC	2ND	46.07356	289257.19	4632017	120.52	127	89092221	CLF_89.SFC	15	10
632	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	ULE50	1ST	7.53251	289070.91	4630592.5	132.2	138	89022509	CLF_89.SFC	15	10
633	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	ULE50	2ND	6.89553	289022.19	4630585	130.64	149	89112309	CLF_89.SFC	15	10
634	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	RIDGEWC	1ST	18.61133	288963.69	4630575.5	135.17	149	89060921	CLF_89.SFC	15	10
635	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	3-HR	RIDGEWC	2ND	18.09473	288954	4630574	136.28	149	89030406	CLF_89.SFC	15	10
636	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	TURBINES	1ST	9.3682	290515.84	4630830.5	104.65	104.65	89082124	CLF_89.SFC	15	10
637	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	TURBINES	2ND	8.19609	290479.44	4630674.5	97.26	108	89112124	CLF_89.SFC	15	10
638	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	100PCT	1ST	22.55853	289276.19	4632014	120.02	128	89111624	CLF_89.SFC	15	10
639	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	100PCT	2ND	21.38377	289266.81	4632015	120.28	128	89092224	CLF_89.SFC	15	10
640	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	ULE100	1ST	4.10504	288954	4630574	136.28	149	89022424	CLF_89.SFC	15	10
641	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	ULE100	2ND	2.85009	289012.41	4630583.5	131.23	149	89112324	CLF_89.SFC	15	10
642	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	CAT	1ST	10.55817	289036.97	4630548	135.7	135.7	89101824	CLF_89.SFC	15	10
643	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	CAT	2ND	9.12027	289036.97	4630548	135.7	135.7	89030624	CLF_89.SFC	15	10
644	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	WCLOAD	1ST	22.45897	289276.19	4632014	120.02	128	89111624	CLF_89.SFC	15	10
645	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	WCLOAD	2ND	21.29728	289266.81	4632015	120.28	128	89092224	CLF_89.SFC	15	10
646	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	EXIST100	1ST	22.5491	289276.19	4632014	120.02	128	89111624	CLF_89.SFC	15	10
647	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	EXIST100	2ND	21.37295	289266.81	4632015	120.28	128	89092224	CLF_89.SFC	15	10
648	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	RIDGE100	1ST	15.33406	288954	4630574	136.28	149	89020224	CLF_89.SFC	15	10
649	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	RIDGE100	2ND	13.86583	288954	4630574	136.28	149	89060924	CLF_89.SFC	15	10
650	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	EXISTWC	1ST	22.44954	289276.19	4632014	120.02	128	89111624	CLF_89.SFC	15	10
651	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	EXISTWC	2ND	21.28646	289266.81	4632015	120.28	128	89092224	CLF_89.SFC	15	10
652	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	ULE50	1ST	4.40336	289012.41	4630583.5	131.23	149	89101824	CLF_89.SFC	15	10
653	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	ULE50	2ND	3.08811	289022.19	4630585	130.64	149	89112324	CLF_89.SFC	15	10
654	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	RIDGEWC	1ST	13.71006	288954	4630574	136.28	149	89020224	CLF_89.SFC	15	10
655	AERMOD	Ridgewood criteria_89_SO2.USF	SO2	24-HR	RIDGEWC	2ND	12.71872	288954	4630574	136.28	Hill	89060924	CLF_89.SFC	15	10
656	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	ANNUAL	TURBINES	1ST	0.72002	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	1	5
657	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	ANNUAL	100PCT	1ST	0.72002	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	1	5
658	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	ANNUAL	WCLOAD	1ST	0.72002	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	1	5
659	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	ANNUAL	RIDGE100	1ST	0.72002	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	1	5

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
660	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	ANNUAL	RIDGEWC	1ST	0.72002	290544.41	4630637	104.42	104.42	1 YRS	CLF_89.SFC	1	5
661	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	TURBINES	1ST	10.15384	290415.41	4630610.5	95.38	95.38	89072823	CLF_89.SFC	1	5
662	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	TURBINES	2ND	10.1123	290415.41	4630610.5	95.38	95.38	89072822	CLF_89.SFC	1	5
663	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	100PCT	1ST	10.15384	290415.41	4630610.5	95.38	95.38	89072823	CLF_89.SFC	1	5
664	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	100PCT	2ND	10.1123	290415.41	4630610.5	95.38	95.38	89072822	CLF_89.SFC	1	5
665	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	WCLOAD	1ST	10.15384	290415.41	4630610.5	95.38	95.38	89072823	CLF_89.SFC	1	5
666	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	WCLOAD	2ND	10.1123	290415.41	4630610.5	95.38	95.38	89072822	CLF_89.SFC	1	5
667	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	RIDGE100	1ST	10.15384	290415.41	4630610.5	95.38	95.38	89072823	CLF_89.SFC	1	5
668	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	RIDGE100	2ND	10.1123	290415.41	4630610.5	95.38	95.38	89072822	CLF_89.SFC	1	5
669	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	RIDGEWC	1ST	10.15384	290415.41	4630610.5	95.38	95.38	89072823	CLF_89.SFC	1	5
670	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	1-HR	RIDGEWC	2ND	10.1123	290415.41	4630610.5	95.38	95.38	89072822	CLF_89.SFC	1	5
671	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	TURBINES	1ST	9.63512	290415.41	4630610.5	95.38	95.38	89072824	CLF_89.SFC	1	5
672	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	TURBINES	2ND	9.10365	290387.75	4630597.5	93.64	93.64	89072824	CLF_89.SFC	1	5
673	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	100PCT	1ST	9.63512	290415.41	4630610.5	95.38	95.38	89072824	CLF_89.SFC	1	5
674	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	100PCT	2ND	9.10365	290387.75	4630597.5	93.64	93.64	89072824	CLF_89.SFC	1	5
675	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	WCLOAD	1ST	9.63512	290415.41	4630610.5	95.38	95.38	89072824	CLF_89.SFC	1	5
676	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	WCLOAD	2ND	9.10365	290387.75	4630597.5	93.64	93.64	89072824	CLF_89.SFC	1	5
677	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	RIDGE100	1ST	9.63512	290415.41	4630610.5	95.38	95.38	89072824	CLF_89.SFC	1	5
678	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	RIDGE100	2ND	9.10365	290387.75	4630597.5	93.64	93.64	89072824	CLF_89.SFC	1	5
679	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	RIDGEWC	1ST	9.63512	290415.41	4630610.5	95.38	95.38	89072824	CLF_89.SFC	1	5
680	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	3-HR	RIDGEWC	2ND	9.10365	290387.75	4630597.5	93.64	93.64	89072824	CLF_89.SFC	1	5
681	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	TURBINES	1ST	8.07106	290522.31	4630859	99.6	109	89111408	CLF_89.SFC	1	5
682	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	TURBINES	2ND	7.8422	290512.59	4630857	99.59	107	89082108	CLF_89.SFC	1	5
683	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	100PCT	1ST	8.07106	290522.31	4630859	99.6	109	89111408	CLF_89.SFC	1	5
684	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	100PCT	2ND	7.8422	290512.59	4630857	99.59	107	89082108	CLF_89.SFC	1	5
685	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	WCLOAD	1ST	8.07106	290522.31	4630859	99.6	109	89111408	CLF_89.SFC	1	5
686	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	WCLOAD	2ND	7.8422	290512.59	4630857	99.59	107	89082108	CLF_89.SFC	1	5
687	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	RIDGE100	1ST	8.07106	290522.31	4630859	99.6	109	89111408	CLF_89.SFC	1	5
688	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	RIDGE100	2ND	7.8422	290512.59	4630857	99.59	107	89082108	CLF_89.SFC	1	5
689	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	RIDGEWC	1ST	8.07106	290522.31	4630859	99.6	109	89111408	CLF_89.SFC	1	5
690	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	8-HR	RIDGEWC	2ND	7.8422	290512.59	4630857	99.59	107	89082108	CLF_89.SFC	1	5
691	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	TURBINES	1ST	5.5107	290515.84	4630830.5	104.65	104.65	89082124	CLF_89.SFC	1	5
692	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	TURBINES	2ND	4.82123	290479.44	4630674.5	97.26	108	89112124	CLF_89.SFC	1	5
693	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	100PCT	1ST	5.5107	290515.84	4630830.5	104.65	104.65	89082124	CLF_89.SFC	1	5
694	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	100PCT	2ND	4.82123	290479.44	4630674.5	97.26	108	89112124	CLF_89.SFC	1	5
695	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	WCLOAD	1ST	5.5107	290515.84	4630830.5	104.65	104.65	89082124	CLF_89.SFC	1	5
696	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	WCLOAD	2ND	4.82123	290479.44	4630674.5	97.26	108	89112124	CLF_89.SFC	1	5
697	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	RIDGE100	1ST	5.5107	290515.84	4630830.5	104.65	104.65	89082124	CLF_89.SFC	1	5
698	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	RIDGE100	2ND	4.82123	290479.44	4630674.5	97.26	108	89112124	CLF_89.SFC	1	5
699	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	RIDGEWC	1ST	5.5107	290515.84	4630830.5	104.65	104.65	89082124	CLF_89.SFC	1	5
700	AERMOD	Ridgewood criteria_89_UNIT.USF	UNIT	24-HR	RIDGEWC	2ND	4.82123	290479.44	4630674.5	97.26	Hill	89112124	CLF_89.SFC	1	5
701	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	TURBINES	1ST	220.6683	290214.69	4630870.5	95.2	98	90061419	CLF_90.SFC	15	10
702	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	TURBINES	2ND	217.84076	290415.41	4630610.5	95.38	95.38	90060420	CLF_90.SFC	15	10
703	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	100PCT	1ST	630.96399	288963.69	4630575.5	135.17	149	90022508	CLF_90.SFC	15	10
704	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	100PCT	2ND	625.33948	288963.69	4630575.5	135.17	149	90102517	CLF_90.SFC	15	10
705	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	ULE100	1ST	25.08733	289080.59	4630594.5	133.21	138	90121020	CLF_90.SFC	15	10
706	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	ULE100	2ND	22.78281	289080.59	4630594.5	133.21	138	90111022	CLF_90.SFC	15	10
707	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	CAT	1ST	488.68665	289075	4630578.5	134.86	138	90022521	CLF_90.SFC	15	10
708	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	CAT	2ND	487.23544	289075	4630578.5	134.86	138	90022603	CLF_90.SFC	15	10
709	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	WCLOAD	1ST	548.18726	288963.69	4630575.5	135.17	149	90071219	CLF_90.SFC	15	10
710	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	WCLOAD	2ND	547.99353	288954	4630574	136.28	149	90090319	CLF_90.SFC	15	10
711	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	EXIST100	1ST	630.77368	288963.69	4630575.5	135.17	149	90022508	CLF_90.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
712	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	EXIST100	2ND	625.07422	288963.69	4630575.5	135.17	149	90102517	CLF_90.SFC	15	10
713	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	RIDGE100	1ST	627.46283	288963.69	4630575.5	135.17	149	90022508	CLF_90.SFC	15	10
714	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	RIDGE100	2ND	623.98535	288963.69	4630575.5	135.17	149	90043004	CLF_90.SFC	15	10
715	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	EXISTWC	1ST	547.47949	288963.69	4630575.5	135.17	149	90071219	CLF_90.SFC	15	10
716	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	EXISTWC	2ND	546.68884	288954	4630574	136.28	149	90031322	CLF_90.SFC	15	10
717	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	ULE50	1ST	16.79603	289070.91	4630592.5	132.2	138	90022524	CLF_90.SFC	15	10
718	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	ULE50	2ND	16.57029	289031.91	4630586.5	130.21	149	90020419	CLF_90.SFC	15	10
719	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	RIDGEWC	1ST	547.28894	288954	4630574	136.28	149	90031322	CLF_90.SFC	15	10
720	AERMOD	Ridgewood criteria_90_CO.USF	CO	1-HR	RIDGEWC	2ND	547.27478	288954	4630574	136.28	149	90090319	CLF_90.SFC	15	10
721	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	TURBINES	1ST	173.18988	290481.12	4630633.5	96.5	108	90032324	CLF_90.SFC	15	10
722	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	TURBINES	2ND	153.117	290500.25	4630617.5	96.56	108	90111324	CLF_90.SFC	15	10
723	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	100PCT	1ST	504.71823	288973.5	4630577	134.23	149	90082208	CLF_90.SFC	15	10
724	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	100PCT	2ND	494.50131	288973.5	4630577	134.23	149	90082124	CLF_90.SFC	15	10
725	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	ULE100	1ST	13.5125	289002.69	4630581.5	131.78	149	90111824	CLF_90.SFC	15	10
726	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	ULE100	2ND	11.79486	288993	4630580	132.22	149	90111816	CLF_90.SFC	15	10
727	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	CAT	1ST	353.52896	289075	4630578.5	134.86	138	90022524	CLF_90.SFC	15	10
728	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	CAT	2ND	346.67969	289075	4630578.5	134.86	138	90102924	CLF_90.SFC	15	10
729	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	WCLOAD	1ST	440.48178	288973.5	4630577	134.23	149	90040108	CLF_90.SFC	15	10
730	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	WCLOAD	2ND	437.32053	288973.5	4630577	134.23	149	90082208	CLF_90.SFC	15	10
731	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	EXIST100	1ST	504.36368	288973.5	4630577	134.23	149	90082208	CLF_90.SFC	15	10
732	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	EXIST100	2ND	494.02051	288973.5	4630577	134.23	149	90082124	CLF_90.SFC	15	10
733	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	RIDGE100	1ST	501.21429	288973.5	4630577	134.23	149	90082208	CLF_90.SFC	15	10
734	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	RIDGE100	2ND	491.50287	288973.5	4630577	134.23	149	90082124	CLF_90.SFC	15	10
735	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	EXISTWC	1ST	440.16098	288973.5	4630577	134.23	149	90040108	CLF_90.SFC	15	10
736	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	EXISTWC	2ND	436.96597	288973.5	4630577	134.23	149	90082208	CLF_90.SFC	15	10
737	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	ULE50	1ST	11.96614	289002.69	4630581.5	131.78	149	90111824	CLF_90.SFC	15	10
738	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	ULE50	2ND	11.69335	289012.41	4630583.5	131.23	149	90111808	CLF_90.SFC	15	10
739	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	RIDGEWC	1ST	436.87604	288973.5	4630577	134.23	149	90040108	CLF_90.SFC	15	10
740	AERMOD	Ridgewood criteria_90_CO.USF	CO	8-HR	RIDGEWC	2ND	432.72711	288973.5	4630577	134.23	Hill	90082208	CLF_90.SFC	15	10
741	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	TURBINES	1ST	3.22093	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	15	10
742	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	100PCT	1ST	12.22558	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
743	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	ULE100	1ST	0.19437	289080.59	4630594.5	133.21	138	1 YRS	CLF_90.SFC	15	10
744	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	CAT	1ST	5.25534	289082.12	4630583.5	134.52	138	1 YRS	CLF_90.SFC	15	10
745	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	WCLOAD	1ST	11.33017	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
746	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	EXIST100	1ST	12.00503	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
747	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	RIDGE100	1ST	11.75361	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
748	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	EXISTWC	1ST	11.10966	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
749	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	ULE50	1ST	0.24569	289080.59	4630594.5	133.21	138	1 YRS	CLF_90.SFC	15	10
750	AERMOD	Ridgewood criteria_90_NOX.USF	NOX	ANNUAL	RIDGEWC	1ST	10.82217	289075	4630578.5	134.86	Hill	1 YRS	CLF_90.SFC	15	10
751	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	TURBINES	1ST	3.00538	290254.03	4630775	94.35	101	1 YRS	CLF_90.SFC	17	10
752	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	100PCT	1ST	3.25855	290254.03	4630775	94.35	101	1 YRS	CLF_90.SFC	17	10
753	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	ULE100	1ST	0.38844	289080.59	4630594.5	133.21	138	1 YRS	CLF_90.SFC	17	10
754	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	CAT	1ST	0.52638	289082.12	4630583.5	134.52	138	1 YRS	CLF_90.SFC	17	10
755	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	WCLOAD	1ST	3.25373	290254.03	4630775	94.35	101	1 YRS	CLF_90.SFC	17	10
756	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	EXIST100	1ST	2.11802	290337	4631272.5	110.82	110.82	1 YRS	CLF_90.SFC	17	10
757	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	RIDGE100	1ST	3.05954	290254.03	4630775	94.35	101	1 YRS	CLF_90.SFC	17	10
758	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	EXISTWC	1ST	2.11005	290337	4631272.5	110.82	110.82	1 YRS	CLF_90.SFC	17	10
759	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	ULE50	1ST	0.49138	289080.59	4630594.5	133.21	138	1 YRS	CLF_90.SFC	17	10
760	AERMOD	Ridgewood criteria_90_PM.USF	PM	ANNUAL	RIDGEWC	1ST	3.05394	290254.03	4630775	94.35	101	1 YRS	CLF_90.SFC	17	10
761	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	TURBINES	1ST	12.25291	290257.41	4630787.5	96.79	101	90080624	CLF_90.SFC	17	10
762	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	TURBINES	2ND	11.77615	290257.41	4630787.5	96.79	101	90080724	CLF_90.SFC	17	10
763	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	100PCT	1ST	24.25978	288983.19	4630578.5	133.17	149	90111824	CLF_90.SFC	17	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
764	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	100PCT	2ND	18.41477	288983.19	4630578.5	133.17	149	90102624	CLF_90.SFC	17	10
765	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	ULE100	1ST	9.08953	289002.69	4630581.5	131.78	149	90111824	CLF_90.SFC	17	10
766	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	ULE100	2ND	5.11691	288983.19	4630578.5	133.17	149	90102624	CLF_90.SFC	17	10
767	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	CAT	1ST	4.79354	289036.97	4630548	135.7	135.7	90111824	CLF_90.SFC	17	10
768	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	CAT	2ND	3.89529	289082.12	4630583.5	134.52	138	90112924	CLF_90.SFC	17	10
769	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	WCLOAD	1ST	20.13934	288983.19	4630578.5	133.17	149	90111824	CLF_90.SFC	17	10
770	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	WCLOAD	2ND	15.76083	288983.19	4630578.5	133.17	149	90102624	CLF_90.SFC	17	10
771	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	EXIST100	1ST	24.25399	288983.19	4630578.5	133.17	149	90111824	CLF_90.SFC	17	10
772	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	EXIST100	2ND	18.4082	288983.19	4630578.5	133.17	149	90102624	CLF_90.SFC	17	10
773	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	RIDGE100	1ST	16.03401	288983.19	4630578.5	133.17	149	90111824	CLF_90.SFC	17	10
774	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	RIDGE100	2ND	13.43592	288963.69	4630575.5	135.17	149	90042924	CLF_90.SFC	17	10
775	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	EXISTWC	1ST	20.13355	288983.19	4630578.5	133.17	149	90111824	CLF_90.SFC	17	10
776	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	EXISTWC	2ND	15.75425	288983.19	4630578.5	133.17	149	90102624	CLF_90.SFC	17	10
777	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	ULE50	1ST	8.97139	289002.69	4630581.5	131.78	149	90111824	CLF_90.SFC	17	10
778	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	ULE50	2ND	5.15103	289002.69	4630581.5	131.78	149	90102624	CLF_90.SFC	17	10
779	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	RIDGEWC	1ST	12.71652	288983.19	4630578.5	133.17	149	90111824	CLF_90.SFC	17	10
780	AERMOD	Ridgewood criteria_90_PM.USF	PM	24-HR	RIDGEWC	2ND	11.78417	290257.41	4630787.5	96.79	Hill	90080724	CLF_90.SFC	17	10
781	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	TURBINES	1ST	1.09293	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	15	10
782	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	100PCT	1ST	3.77673	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
783	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	ULE100	1ST	0.23861	289080.59	4630594.5	133.21	138	1 YRS	CLF_90.SFC	15	10
784	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	CAT	1ST	1.09946	289082.12	4630583.5	134.52	138	1 YRS	CLF_90.SFC	15	10
785	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	WCLOAD	1ST	3.7408	289434.69	4631996.5	120.56	128	1 YRS	CLF_90.SFC	15	10
786	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	EXIST100	1ST	3.70188	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
787	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	RIDGE100	1ST	2.04287	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
788	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	EXISTWC	1ST	3.65721	289434.69	4631996.5	120.56	128	1 YRS	CLF_90.SFC	15	10
789	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	ULE50	1ST	0.3016	289080.59	4630594.5	133.21	138	1 YRS	CLF_90.SFC	15	10
790	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	ANNUAL	RIDGEWC	1ST	1.90403	289075	4630578.5	134.86	138	1 YRS	CLF_90.SFC	15	10
791	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	TURBINES	1ST	15.93086	290549.47	4630723	105.76	105.76	90060721	CLF_90.SFC	15	10
792	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	TURBINES	2ND	14.76535	290522.31	4630859	99.6	109	90071921	CLF_90.SFC	15	10
793	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	100PCT	1ST	49.48998	289350.81	4632009	122.42	128	90040421	CLF_90.SFC	15	10
794	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	100PCT	2ND	48.20531	289332.09	4632010	122.71	128	90042021	CLF_90.SFC	15	10
795	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	ULE100	1ST	9.47004	288993	4630580	132.22	149	90111818	CLF_90.SFC	15	10
796	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	ULE100	2ND	7.62368	289031.91	4630586.5	130.21	149	90111903	CLF_90.SFC	15	10
797	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	CAT	1ST	17.60095	289075	4630578.5	134.86	138	90022521	CLF_90.SFC	15	10
798	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	CAT	2ND	16.94769	289075	4630578.5	134.86	138	90022603	CLF_90.SFC	15	10
799	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	WCLOAD	1ST	49.27936	289350.81	4632009	122.42	128	90040421	CLF_90.SFC	15	10
800	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	WCLOAD	2ND	48.0001	289332.09	4632010	122.71	128	90042021	CLF_90.SFC	15	10
801	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	EXIST100	1ST	49.47916	289350.81	4632009	122.42	128	90040421	CLF_90.SFC	15	10
802	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	EXIST100	2ND	48.19293	289332.09	4632010	122.71	128	90042021	CLF_90.SFC	15	10
803	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	RIDGE100	1ST	21.25253	288954	4630574	136.28	149	90052103	CLF_90.SFC	15	10
804	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	RIDGE100	2ND	20.79063	288963.69	4630575.5	135.17	149	90021424	CLF_90.SFC	15	10
805	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	EXISTWC	1ST	49.26854	289350.81	4632009	122.42	128	90040421	CLF_90.SFC	15	10
806	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	EXISTWC	2ND	47.98772	289332.09	4632010	122.71	128	90042021	CLF_90.SFC	15	10
807	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	ULE50	1ST	7.72471	289022.19	4630585	130.64	149	90090803	CLF_90.SFC	15	10
808	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	ULE50	2ND	7.19985	289012.41	4630583.5	131.23	149	90090803	CLF_90.SFC	15	10
809	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	RIDGEWC	1ST	19.05304	288954	4630574	136.28	149	90052103	CLF_90.SFC	15	10
810	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	3-HR	RIDGEWC	2ND	18.13856	288954	4630574	136.28	149	90052024	CLF_90.SFC	15	10
811	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	TURBINES	1ST	10.99211	290492.34	4630702	96.68	108	90111224	CLF_90.SFC	15	10
812	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	TURBINES	2ND	9.48799	290501.12	4630662	99.12	108	90111224	CLF_90.SFC	15	10
813	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	100PCT	1ST	28.30418	289416	4632000	121.6	128	90031724	CLF_90.SFC	15	10
814	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	100PCT	2ND	26.0113	289453.31	4631993	120.45	120.45	90041024	CLF_90.SFC	15	10
815	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	ULE100	1ST	5.58347	289002.69	4630581.5	131.78	149	90111824	CLF_90.SFC	15	10

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
816	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	ULE100	2ND	3.14318	288983.19	4630578.5	133.17	149	90102624	CLF_90.SFC	15	10
817	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	CAT	1ST	10.01231	289036.97	4630548	135.7	135.7	90111824	CLF_90.SFC	15	10
818	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	CAT	2ND	8.13613	289082.12	4630583.5	134.52	138	90112924	CLF_90.SFC	15	10
819	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	WCLOAD	1ST	28.26071	289416	4632000	121.6	128	90031724	CLF_90.SFC	15	10
820	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	WCLOAD	2ND	25.97001	289453.31	4631993	120.45	120.45	90041024	CLF_90.SFC	15	10
821	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	EXIST100	1ST	28.29579	289416	4632000	121.6	128	90031724	CLF_90.SFC	15	10
822	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	EXIST100	2ND	26.00412	289453.31	4631993	120.45	120.45	90041024	CLF_90.SFC	15	10
823	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	RIDGE100	1ST	14.64666	288973.5	4630577	134.23	149	90082124	CLF_90.SFC	15	10
824	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	RIDGE100	2ND	14.30306	288973.5	4630577	134.23	149	90042924	CLF_90.SFC	15	10
825	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	EXISTWC	1ST	28.25233	289416	4632000	121.6	128	90031724	CLF_90.SFC	15	10
826	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	EXISTWC	2ND	25.96282	289453.31	4631993	120.45	120.45	90041024	CLF_90.SFC	15	10
827	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	ULE50	1ST	5.50648	289002.69	4630581.5	131.78	149	90111824	CLF_90.SFC	15	10
828	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	ULE50	2ND	3.16161	289002.69	4630581.5	131.78	149	90102624	CLF_90.SFC	15	10
829	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	RIDGEWC	1ST	12.97419	288973.5	4630577	134.23	149	90082124	CLF_90.SFC	15	10
830	AERMOD	Ridgewood criteria_90_SO2.USF	SO2	24-HR	RIDGEWC	2ND	12.59971	288973.5	4630577	134.23	Hill	90042924	CLF_90.SFC	15	10
831	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	ANNUAL	TURBINES	1ST	0.6429	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	1	5
832	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	ANNUAL	100PCT	1ST	0.6429	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	1	5
833	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	ANNUAL	WCLOAD	1ST	0.6429	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	1	5
834	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	ANNUAL	RIDGE100	1ST	0.6429	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	1	5
835	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	ANNUAL	RIDGEWC	1ST	0.6429	290519.41	4630601.5	98.06	108	1 YRS	CLF_90.SFC	1	5
836	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	TURBINES	1ST	10.04865	290214.69	4630870.5	95.2	98	90061419	CLF_90.SFC	1	5
837	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	TURBINES	2ND	9.91989	290415.41	4630610.5	95.38	95.38	90060420	CLF_90.SFC	1	5
838	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	100PCT	1ST	10.04865	290214.69	4630870.5	95.2	98	90061419	CLF_90.SFC	1	5
839	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	100PCT	2ND	9.91989	290415.41	4630610.5	95.38	95.38	90060420	CLF_90.SFC	1	5
840	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	WCLOAD	1ST	10.04865	290214.69	4630870.5	95.2	98	90061419	CLF_90.SFC	1	5
841	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	WCLOAD	2ND	9.91989	290415.41	4630610.5	95.38	95.38	90060420	CLF_90.SFC	1	5
842	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	RIDGE100	1ST	10.04865	290214.69	4630870.5	95.2	98	90061419	CLF_90.SFC	1	5
843	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	RIDGE100	2ND	9.91989	290415.41	4630610.5	95.38	95.38	90060420	CLF_90.SFC	1	5
844	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	RIDGEWC	1ST	10.04865	290214.69	4630870.5	95.2	98	90061419	CLF_90.SFC	1	5
845	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	1-HR	RIDGEWC	2ND	9.91989	290415.41	4630610.5	95.38	95.38	90060420	CLF_90.SFC	1	5
846	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	TURBINES	1ST	9.37109	290549.47	4630723	105.76	105.76	90060721	CLF_90.SFC	1	5
847	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	TURBINES	2ND	8.6855	290522.31	4630859	99.6	109	90071921	CLF_90.SFC	1	5
848	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	100PCT	1ST	9.37109	290549.47	4630723	105.76	105.76	90060721	CLF_90.SFC	1	5
849	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	100PCT	2ND	8.6855	290522.31	4630859	99.6	109	90071921	CLF_90.SFC	1	5
850	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	WCLOAD	1ST	9.37109	290549.47	4630723	105.76	105.76	90060721	CLF_90.SFC	1	5
851	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	WCLOAD	2ND	8.6855	290522.31	4630859	99.6	109	90071921	CLF_90.SFC	1	5
852	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	RIDGE100	1ST	9.37109	290549.47	4630723	105.76	105.76	90060721	CLF_90.SFC	1	5
853	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	RIDGE100	2ND	8.6855	290522.31	4630859	99.6	109	90071921	CLF_90.SFC	1	5
854	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	RIDGEWC	1ST	9.37109	290549.47	4630723	105.76	105.76	90060721	CLF_90.SFC	1	5
855	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	3-HR	RIDGEWC	2ND	8.6855	290522.31	4630859	99.6	109	90071921	CLF_90.SFC	1	5
856	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	TURBINES	1ST	7.88661	290481.12	4630633.5	96.5	108	90032324	CLF_90.SFC	1	5
857	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	TURBINES	2ND	6.97254	290500.25	4630617.5	96.56	108	90111324	CLF_90.SFC	1	5
858	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	100PCT	1ST	7.88661	290481.12	4630633.5	96.5	108	90032324	CLF_90.SFC	1	5
859	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	100PCT	2ND	6.97254	290500.25	4630617.5	96.56	108	90111324	CLF_90.SFC	1	5
860	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	WCLOAD	1ST	7.88661	290481.12	4630633.5	96.5	108	90032324	CLF_90.SFC	1	5
861	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	WCLOAD	2ND	6.97254	290500.25	4630617.5	96.56	108	90111324	CLF_90.SFC	1	5
862	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	RIDGE100	1ST	7.88661	290481.12	4630633.5	96.5	108	90032324	CLF_90.SFC	1	5
863	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	RIDGE100	2ND	6.97254	290500.25	4630617.5	96.56	108	90111324	CLF_90.SFC	1	5
864	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	RIDGEWC	1ST	7.88661	290481.12	4630633.5	96.5	108	90032324	CLF_90.SFC	1	5
865	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	8-HR	RIDGEWC	2ND	6.97254	290500.25	4630617.5	96.56	108	90111324	CLF_90.SFC	1	5
866	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	TURBINES	1ST	6.46594	290492.34	4630702	96.68	108	90111224	CLF_90.SFC	1	5
867	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	TURBINES	2ND	5.58117	290501.12	4630662	99.12	108	90111224	CLF_90.SFC	1	5

TABLE G-3
CRITERIA POLLUTANT MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
868	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	100PCT	1ST	6.46594	290492.34	4630702	96.68	108	90111224	CLF_90.SFC	1	5
869	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	100PCT	2ND	5.58117	290501.12	4630662	99.12	108	90111224	CLF_90.SFC	1	5
870	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	WCLOAD	1ST	6.46594	290492.34	4630702	96.68	108	90111224	CLF_90.SFC	1	5
871	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	WCLOAD	2ND	5.58117	290501.12	4630662	99.12	108	90111224	CLF_90.SFC	1	5
872	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	RIDGE100	1ST	6.46594	290492.34	4630702	96.68	108	90111224	CLF_90.SFC	1	5
873	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	RIDGE100	2ND	5.58117	290501.12	4630662	99.12	108	90111224	CLF_90.SFC	1	5
874	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	RIDGEWC	1ST	6.46594	290492.34	4630702	96.68	108	90111224	CLF_90.SFC	1	5
875	AERMOD	Ridgewood criteria_90_UNIT.USF	UNIT	24-HR	RIDGEWC	2ND	5.58117	290501.12	4630662	99.12	108	90111224	CLF_90.SFC	1	5

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
1	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	ANNUAL	RIDGE100	1ST	0.02319	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
2	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	ANNUAL	TURBINES	1ST	0.01114	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	4	3
3	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	ANNUAL	RIDGEWOR	1ST	0.02171	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
4	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	1-HR	RIDGE100	1ST	0.23752	288954	4630574	136.28	149	72090220	DEM_CLF_72.SFC	4	3
5	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	1-HR	RIDGE100	2ND	0.23746	288954	4630574	136.28	149	72121602	DEM_CLF_72.SFC	4	3
6	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	1-HR	TURBINES	1ST	0.18696	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	4	3
7	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	1-HR	TURBINES	2ND	0.1849	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	4	3
8	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	1-HR	RIDGEWOR	1ST	0.20609	288963.69	4630575.5	135.17	149	72060519	DEM_CLF_72.SFC	4	3
9	AERMOD	Ridgewood Air Toxics DEM_72_H2S.USF	H2S	1-HR	RIDGEWOR	2ND	0.20515	288954	4630574	136.28	Hill	72042005	DEM_CLF_72.SFC	4	3
10	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	ANNUAL	RIDGE100	1ST	0.1165	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
11	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	ANNUAL	TURBINES	1ST	0.07624	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	4	3
12	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	ANNUAL	RIDGEWOR	1ST	0.10925	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
13	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	1-HR	RIDGE100	1ST	1.51662	288983.19	4630578.5	133.17	149	72122207	DEM_CLF_72.SFC	4	3
14	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	1-HR	RIDGE100	2ND	1.5121	288983.19	4630578.5	133.17	149	72122402	DEM_CLF_72.SFC	4	3
15	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	1-HR	TURBINES	1ST	1.2798	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	4	3
16	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	1-HR	TURBINES	2ND	1.26572	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	4	3
17	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	1-HR	RIDGEWOR	1ST	1.28011	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	4	3
18	AERMOD	Ridgewood Air Toxics DEM_72_HCL.USF	HCL	1-HR	RIDGEWOR	2ND	1.26603	290205.59	4630873.5	95.16	Hill	72062305	DEM_CLF_72.SFC	4	3
19	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	ANNUAL	RIDGE100	1ST	0.00002	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
20	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	ANNUAL	TURBINES	1ST	0.00001	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	4	3
21	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	ANNUAL	RIDGEWOR	1ST	0.00002	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
22	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	1-HR	RIDGE100	1ST	0.0002	288954	4630574	136.28	149	72090220	DEM_CLF_72.SFC	4	3
23	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	1-HR	RIDGE100	2ND	0.0002	288954	4630574	136.28	149	72121602	DEM_CLF_72.SFC	4	3
24	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	1-HR	TURBINES	1ST	0.00016	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	4	3
25	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	1-HR	TURBINES	2ND	0.00016	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	4	3
26	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	1-HR	RIDGEWOR	1ST	0.00018	288963.69	4630575.5	135.17	149	72060519	DEM_CLF_72.SFC	4	3
27	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	1-HR	RIDGEWOR	2ND	0.00018	288954	4630574	136.28	149	72121602	DEM_CLF_72.SFC	4	3
28	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	24-HR	RIDGE100	1ST	0.00013	288963.69	4630575.5	135.17	149	72050924	DEM_CLF_72.SFC	4	3
29	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	24-HR	RIDGE100	2ND	0.00012	288963.69	4630575.5	135.17	149	72092024	DEM_CLF_72.SFC	4	3
30	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	24-HR	TURBINES	1ST	0.00009	290500.25	4630617.5	96.56	108	72121724	DEM_CLF_72.SFC	4	3
31	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	24-HR	TURBINES	2ND	0.00009	290500.25	4630617.5	96.56	108	72032624	DEM_CLF_72.SFC	4	3
32	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	24-HR	RIDGEWOR	1ST	0.00012	289075.66	4630551.5	137.51	137.51	72011624	DEM_CLF_72.SFC	4	3
33	AERMOD	Ridgewood Air Toxics DEM_72_HG.USF	HG	24-HR	RIDGEWOR	2ND	0.00011	288944.31	4630572.5	137.54	Hill	72050824	DEM_CLF_72.SFC	4	3
34	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	ANNUAL	RIDGE100	1ST	54.75667	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
35	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	ANNUAL	TURBINES	1ST	26.21284	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	4	3
36	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	ANNUAL	RIDGEWOR	1ST	52.17182	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_72.SFC	4	3
37	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	1-HR	RIDGE100	1ST	559.84064	288954	4630574	136.28	149	72090220	DEM_CLF_72.SFC	4	3
38	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	1-HR	RIDGE100	2ND	559.26276	288954	4630574	136.28	149	72121602	DEM_CLF_72.SFC	4	3
39	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	1-HR	TURBINES	1ST	440.02826	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	4	3
40	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	1-HR	TURBINES	2ND	435.18643	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	4	3
41	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	1-HR	RIDGEWOR	1ST	490.13312	288963.69	4630575.5	135.17	149	72060519	DEM_CLF_72.SFC	4	3
42	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	1-HR	RIDGEWOR	2ND	488.88229	288954	4630574	136.28	149	72121602	DEM_CLF_72.SFC	4	3
43	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	24-HR	RIDGE100	1ST	345.36758	288963.69	4630575.5	135.17	149	72050924	DEM_CLF_72.SFC	4	3
44	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	24-HR	RIDGE100	2ND	338.89249	288963.69	4630575.5	135.17	149	72092024	DEM_CLF_72.SFC	4	3
45	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	24-HR	TURBINES	1ST	249.61035	290500.25	4630617.5	96.56	108	72121724	DEM_CLF_72.SFC	4	3
46	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	24-HR	TURBINES	2ND	235.01776	290500.25	4630617.5	96.56	108	72032624	DEM_CLF_72.SFC	4	3
47	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	24-HR	RIDGEWOR	1ST	319.95651	289075.66	4630551.5	137.51	137.51	72011624	DEM_CLF_72.SFC	4	3
48	AERMOD	Ridgewood Air Toxics DEM_72_METHAN	METHANE	24-HR	RIDGEWOR	2ND	299.04828	288944.31	4630572.5	137.54	Hill	72050824	DEM_CLF_72.SFC	4	3
49	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	ANNUAL	RIDGE100	1ST	0.61533	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	1	3
50	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	ANNUAL	TURBINES	1ST	0.61533	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	1	3
51	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	ANNUAL	RIDGEWOR	1ST	0.61533	290488.59	4630570.5	93.89	113	1 YRS	DEM_CLF_72.SFC	1	3
52	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	1-HR	RIDGE100	1ST	10.3293	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	1	3

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
53	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	1-HR	RIDGE100	2ND	10.21564	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	1	3
54	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	1-HR	TURBINES	1ST	10.3293	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	1	3
55	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	1-HR	TURBINES	2ND	10.21564	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	1	3
56	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	1-HR	RIDGEWOR	1ST	10.3293	290205.59	4630873.5	95.16	98	72062119	DEM_CLF_72.SFC	1	3
57	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	1-HR	RIDGEWOR	2ND	10.21564	290205.59	4630873.5	95.16	98	72062305	DEM_CLF_72.SFC	1	3
58	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	24-HR	RIDGE100	1ST	5.8594	290500.25	4630617.5	96.56	108	72121724	DEM_CLF_72.SFC	1	3
59	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	24-HR	RIDGE100	2ND	5.51685	290500.25	4630617.5	96.56	108	72032624	DEM_CLF_72.SFC	1	3
60	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	24-HR	TURBINES	1ST	5.8594	290500.25	4630617.5	96.56	108	72121724	DEM_CLF_72.SFC	1	3
61	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	24-HR	TURBINES	2ND	5.51685	290500.25	4630617.5	96.56	108	72032624	DEM_CLF_72.SFC	1	3
62	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	24-HR	RIDGEWOR	1ST	5.8594	290500.25	4630617.5	96.56	108	72121724	DEM_CLF_72.SFC	1	3
63	AERMOD	Ridgewood Air Toxics DEM_72_UNIT.USI	UNIT	24-HR	RIDGEWOR	2ND	5.51685	290500.25	4630617.5	96.56	Hill	72032624	DEM_CLF_72.SFC	1	3
64	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	ANNUAL	RIDGE100	1ST	0.02449	289082.12	4630583.5	134.52	138	1 YRS	DEM_CLF_76.SFC	4	3
65	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	ANNUAL	TURBINES	1ST	0.01528	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	4	3
66	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	ANNUAL	RIDGEWOR	1ST	0.02267	289082.12	4630583.5	134.52	138	1 YRS	DEM_CLF_76.SFC	4	3
67	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	1-HR	RIDGE100	1ST	0.23764	288954	4630574	136.28	149	76100119	DEM_CLF_76.SFC	4	3
68	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	1-HR	RIDGE100	2ND	0.23087	288963.69	4630575.5	135.17	149	76122816	DEM_CLF_76.SFC	4	3
69	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	1-HR	TURBINES	1ST	0.1783	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	4	3
70	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	1-HR	TURBINES	2ND	0.17318	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	4	3
71	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	1-HR	RIDGEWOR	1ST	0.207	288954	4630574	136.28	149	76100119	DEM_CLF_76.SFC	4	3
72	AERMOD	Ridgewood Air Toxics DEM_76_H2S.USF	H2S	1-HR	RIDGEWOR	2ND	0.20273	288954	4630574	136.28	Hill	76030919	DEM_CLF_76.SFC	4	3
73	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	ANNUAL	RIDGE100	1ST	0.10659	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	4	3
74	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	ANNUAL	TURBINES	1ST	0.10461	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	4	3
75	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	ANNUAL	RIDGEWOR	1ST	0.10627	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	4	3
76	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	1-HR	RIDGE100	1ST	1.47413	288983.19	4630578.5	133.17	149	76021404	DEM_CLF_76.SFC	4	3
77	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	1-HR	RIDGE100	2ND	1.46723	288983.19	4630578.5	133.17	149	76120807	DEM_CLF_76.SFC	4	3
78	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	1-HR	TURBINES	1ST	1.2205	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	4	3
79	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	1-HR	TURBINES	2ND	1.1855	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	4	3
80	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	1-HR	RIDGEWOR	1ST	1.23005	288983.19	4630578.5	133.17	149	76021404	DEM_CLF_76.SFC	4	3
81	AERMOD	Ridgewood Air Toxics DEM_76_HCL.USF	HCL	1-HR	RIDGEWOR	2ND	1.22572	288983.19	4630578.5	133.17	Hill	76120807	DEM_CLF_76.SFC	4	3
82	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	ANNUAL	RIDGE100	1ST	0.00002	289082.12	4630583.5	134.52	138	1 YRS	DEM_CLF_76.SFC	4	3
83	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	ANNUAL	TURBINES	1ST	0.00001	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	4	3
84	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	ANNUAL	RIDGEWOR	1ST	0.00002	289082.12	4630583.5	134.52	138	1 YRS	DEM_CLF_76.SFC	4	3
85	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	1-HR	RIDGE100	1ST	0.0002	288954	4630574	136.28	149	76100119	DEM_CLF_76.SFC	4	3
86	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	1-HR	RIDGE100	2ND	0.0002	288963.69	4630575.5	135.17	149	76122816	DEM_CLF_76.SFC	4	3
87	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	1-HR	TURBINES	1ST	0.00015	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	4	3
88	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	1-HR	TURBINES	2ND	0.00015	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	4	3
89	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	1-HR	RIDGEWOR	1ST	0.00018	288954	4630574	136.28	149	76100119	DEM_CLF_76.SFC	4	3
90	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	1-HR	RIDGEWOR	2ND	0.00018	288954	4630574	136.28	149	76030919	DEM_CLF_76.SFC	4	3
91	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	24-HR	RIDGE100	1ST	0.00006	288963.69	4630575.5	135.17	149	76030224	DEM_CLF_76.SFC	4	3
92	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	24-HR	RIDGE100	2ND	0.00005	288973.5	4630577	134.23	149	76100224	DEM_CLF_76.SFC	4	3
93	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	24-HR	TURBINES	1ST	0.00004	290479.44	4630674.5	97.26	108	76031724	DEM_CLF_76.SFC	4	3
94	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	24-HR	TURBINES	2ND	0.00003	290500.25	4630617.5	96.56	108	76110124	DEM_CLF_76.SFC	4	3
95	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	24-HR	RIDGEWOR	1ST	0.00006	288963.69	4630575.5	135.17	149	76030224	DEM_CLF_76.SFC	4	3
96	AERMOD	Ridgewood Air Toxics DEM_76_HG.USF	HG	24-HR	RIDGEWOR	2ND	0.00005	288963.69	4630575.5	135.17	Hill	76052524	DEM_CLF_76.SFC	4	3
97	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	ANNUAL	RIDGE100	1ST	57.52469	289082.12	4630583.5	134.52	138	1 YRS	DEM_CLF_76.SFC	4	3
98	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	ANNUAL	TURBINES	1ST	35.9677	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	4	3
99	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	ANNUAL	RIDGEWOR	1ST	53.84131	289082.12	4630583.5	134.52	138	1 YRS	DEM_CLF_76.SFC	4	3
100	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	1-HR	RIDGE100	1ST	559.29291	288954	4630574	136.28	149	76100119	DEM_CLF_76.SFC	4	3
101	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	1-HR	RIDGE100	2ND	546.01685	288963.69	4630575.5	135.17	149	76122816	DEM_CLF_76.SFC	4	3
102	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	1-HR	TURBINES	1ST	419.63846	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	4	3
103	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	1-HR	TURBINES	2ND	407.60428	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	4	3
104	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	1-HR	RIDGEWOR	1ST	493.23514	288954	4630574	136.28	149	76100119	DEM_CLF_76.SFC	4	3

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
105	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	1-HR	RIDGEWOR	2ND	482.63837	288954	4630574	136.28	149	76030919	DEM_CLF_76.SFC	4	3
106	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	24-HR	RIDGE100	1ST	173.08626	288963.69	4630575.5	135.17	149	76030224	DEM_CLF_76.SFC	4	3
107	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	24-HR	RIDGE100	2ND	137.26616	288973.5	4630577	134.23	149	76100224	DEM_CLF_76.SFC	4	3
108	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	24-HR	TURBINES	1ST	114.01537	290479.44	4630674.5	97.26	108	76031724	DEM_CLF_76.SFC	4	3
109	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	24-HR	TURBINES	2ND	93.10196	290500.25	4630617.5	96.56	108	76110124	DEM_CLF_76.SFC	4	3
110	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	24-HR	RIDGEWOR	1ST	155.59296	288963.69	4630575.5	135.17	149	76030224	DEM_CLF_76.SFC	4	3
111	AERMOD	Ridgewood Air Toxics DEM_76_METHAN	METHANE	24-HR	RIDGEWOR	2ND	126.1467	288963.69	4630575.5	135.17	Hill	76052524	DEM_CLF_76.SFC	4	3
112	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	ANNUAL	RIDGE100	1ST	0.84431	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	1	3
113	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	ANNUAL	TURBINES	1ST	0.84431	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	1	3
114	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	ANNUAL	RIDGEWOR	1ST	0.84431	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_76.SFC	1	3
115	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	1-HR	RIDGE100	1ST	9.85067	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	1	3
116	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	1-HR	RIDGE100	2ND	9.56818	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	1	3
117	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	1-HR	TURBINES	1ST	9.85067	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	1	3
118	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	1-HR	TURBINES	2ND	9.56818	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	1	3
119	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	1-HR	RIDGEWOR	1ST	9.85067	290415.41	4630610.5	95.38	95.38	76072122	DEM_CLF_76.SFC	1	3
120	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	1-HR	RIDGEWOR	2ND	9.56818	290415.41	4630610.5	95.38	95.38	76042319	DEM_CLF_76.SFC	1	3
121	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	24-HR	RIDGE100	1ST	2.67642	290479.44	4630674.5	97.26	108	76031724	DEM_CLF_76.SFC	1	3
122	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	24-HR	RIDGE100	2ND	2.18549	290500.25	4630617.5	96.56	108	76110124	DEM_CLF_76.SFC	1	3
123	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	24-HR	TURBINES	1ST	2.67642	290479.44	4630674.5	97.26	108	76031724	DEM_CLF_76.SFC	1	3
124	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	24-HR	TURBINES	2ND	2.18549	290500.25	4630617.5	96.56	108	76110124	DEM_CLF_76.SFC	1	3
125	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	24-HR	RIDGEWOR	1ST	2.67642	290479.44	4630674.5	97.26	108	76031724	DEM_CLF_76.SFC	1	3
126	AERMOD	Ridgewood Air Toxics DEM_76_UNIT.USI	UNIT	24-HR	RIDGEWOR	2ND	2.18549	290500.25	4630617.5	96.56	Hill	76110124	DEM_CLF_76.SFC	1	3
127	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	ANNUAL	RIDGE100	1ST	0.02573	289075.66	4630551.5	137.51	137.51	1 YRS	DEM_CLF_80.SFC	4	3
128	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	ANNUAL	TURBINES	1ST	0.01451	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	4	3
129	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	ANNUAL	RIDGEWOR	1ST	0.02384	289075.66	4630551.5	137.51	137.51	1 YRS	DEM_CLF_80.SFC	4	3
130	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	1-HR	RIDGE100	1ST	0.23489	288954	4630574	136.28	149	80111804	DEM_CLF_80.SFC	4	3
131	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	1-HR	RIDGE100	2ND	0.2348	288954	4630574	136.28	149	80050623	DEM_CLF_80.SFC	4	3
132	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	1-HR	TURBINES	1ST	0.18221	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	4	3
133	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	1-HR	TURBINES	2ND	0.17742	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	4	3
134	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	1-HR	RIDGEWOR	1ST	0.20607	288954	4630574	136.28	149	80060219	DEM_CLF_80.SFC	4	3
135	AERMOD	Ridgewood Air Toxics DEM_80_H2S.USF	H2S	1-HR	RIDGEWOR	2ND	0.20588	288954	4630574	136.28	Hill	80050623	DEM_CLF_80.SFC	4	3
136	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	ANNUAL	RIDGE100	1ST	0.10597	289041.31	4630573	132.81	138	1 YRS	DEM_CLF_80.SFC	4	3
137	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	ANNUAL	TURBINES	1ST	0.0993	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	4	3
138	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	ANNUAL	RIDGEWOR	1ST	0.10087	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	4	3
139	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	1-HR	RIDGE100	1ST	1.52273	288983.19	4630578.5	133.17	149	80123005	DEM_CLF_80.SFC	4	3
140	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	1-HR	RIDGE100	2ND	1.51321	288983.19	4630578.5	133.17	149	80020701	DEM_CLF_80.SFC	4	3
141	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	1-HR	TURBINES	1ST	1.24727	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	4	3
142	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	1-HR	TURBINES	2ND	1.21452	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	4	3
143	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	1-HR	RIDGEWOR	1ST	1.24753	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	4	3
144	AERMOD	Ridgewood Air Toxics DEM_80_HCL.USF	HCL	1-HR	RIDGEWOR	2ND	1.23225	288983.19	4630578.5	133.17	Hill	80020701	DEM_CLF_80.SFC	4	3
145	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	ANNUAL	RIDGE100	1ST	0.00002	289075.66	4630551.5	137.51	137.51	1 YRS	DEM_CLF_80.SFC	4	3
146	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	ANNUAL	TURBINES	1ST	0.00001	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	4	3
147	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	ANNUAL	RIDGEWOR	1ST	0.00002	289075.66	4630551.5	137.51	137.51	1 YRS	DEM_CLF_80.SFC	4	3
148	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	1-HR	RIDGE100	1ST	0.0002	288954	4630574	136.28	149	80111804	DEM_CLF_80.SFC	4	3
149	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	1-HR	RIDGE100	2ND	0.0002	288954	4630574	136.28	149	80050623	DEM_CLF_80.SFC	4	3
150	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	1-HR	TURBINES	1ST	0.00016	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	4	3
151	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	1-HR	TURBINES	2ND	0.00015	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	4	3
152	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	1-HR	RIDGEWOR	1ST	0.00018	288954	4630574	136.28	149	80050623	DEM_CLF_80.SFC	4	3
153	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	1-HR	RIDGEWOR	2ND	0.00018	288954	4630574	136.28	149	80060219	DEM_CLF_80.SFC	4	3
154	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	24-HR	RIDGE100	1ST	0.00014	288983.19	4630578.5	133.17	149	80011524	DEM_CLF_80.SFC	4	3
155	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	24-HR	RIDGE100	2ND	0.00013	288963.69	4630575.5	135.17	149	80033124	DEM_CLF_80.SFC	4	3
156	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	24-HR	TURBINES	1ST	0.0001	290479.44	4630674.5	97.26	108	80031524	DEM_CLF_80.SFC	4	3

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
157	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	24-HR	TURBINES	2ND	0.00008	290427.91	4630589	93.8	97	80111124	DEM_CLF_80.SFC	4	3
158	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	24-HR	RIDGEWOR	1ST	0.00012	288963.69	4630575.5	135.17	149	80042824	DEM_CLF_80.SFC	4	3
159	AERMOD	Ridgewood Air Toxics DEM_80_HG.USF	HG	24-HR	RIDGEWOR	2ND	0.00012	288973.5	4630577	134.23	Hill	80033124	DEM_CLF_80.SFC	4	3
160	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	ANNUAL	RIDGE100	1ST	60.33212	289075.66	4630551.5	137.51	137.51	1 YRS	DEM_CLF_80.SFC	4	3
161	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	ANNUAL	TURBINES	1ST	34.14338	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	4	3
162	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	ANNUAL	RIDGEWOR	1ST	56.42555	289075.66	4630551.5	137.51	137.51	1 YRS	DEM_CLF_80.SFC	4	3
163	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	1-HR	RIDGE100	1ST	552.86115	288954	4630574	136.28	149	80111804	DEM_CLF_80.SFC	4	3
164	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	1-HR	RIDGE100	2ND	552.08508	288954	4630574	136.28	149	80050623	DEM_CLF_80.SFC	4	3
165	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	1-HR	TURBINES	1ST	428.84409	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	4	3
166	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	1-HR	TURBINES	2ND	417.58432	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	4	3
167	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	1-HR	RIDGEWOR	1ST	489.55682	288954	4630574	136.28	149	80050623	DEM_CLF_80.SFC	4	3
168	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	1-HR	RIDGEWOR	2ND	489.51398	288954	4630574	136.28	149	80060219	DEM_CLF_80.SFC	4	3
169	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	24-HR	RIDGE100	1ST	383.8956	288983.19	4630578.5	133.17	149	80011524	DEM_CLF_80.SFC	4	3
170	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	24-HR	RIDGE100	2ND	354.99854	288963.69	4630575.5	135.17	149	80033124	DEM_CLF_80.SFC	4	3
171	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	24-HR	TURBINES	1ST	266.04791	290479.44	4630674.5	97.26	108	80031524	DEM_CLF_80.SFC	4	3
172	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	24-HR	TURBINES	2ND	225.84459	290427.91	4630589	93.8	97	80111124	DEM_CLF_80.SFC	4	3
173	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	24-HR	RIDGEWOR	1ST	339.67447	288963.69	4630575.5	135.17	149	80042824	DEM_CLF_80.SFC	4	3
174	AERMOD	Ridgewood Air Toxics DEM_80_METHAN	METHANE	24-HR	RIDGEWOR	2ND	316.61087	288973.5	4630577	134.23	Hill	80033124	DEM_CLF_80.SFC	4	3
175	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	ANNUAL	RIDGE100	1ST	0.80149	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	1	3
176	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	ANNUAL	TURBINES	1ST	0.80149	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	1	3
177	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	ANNUAL	RIDGEWOR	1ST	0.80149	290519.41	4630601.5	98.06	108	1 YRS	DEM_CLF_80.SFC	1	3
178	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	1-HR	RIDGE100	1ST	10.06676	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	1	3
179	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	1-HR	RIDGE100	2ND	9.80245	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	1	3
180	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	1-HR	TURBINES	1ST	10.06676	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	1	3
181	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	1-HR	TURBINES	2ND	9.80245	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	1	3
182	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	1-HR	RIDGEWOR	1ST	10.06676	290379.19	4630621	94.93	94.93	80061602	DEM_CLF_80.SFC	1	3
183	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	1-HR	RIDGEWOR	2ND	9.80245	290379.19	4630621	94.93	94.93	80081620	DEM_CLF_80.SFC	1	3
184	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	24-HR	RIDGE100	1ST	6.24526	290479.44	4630674.5	97.26	108	80031524	DEM_CLF_80.SFC	1	3
185	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	24-HR	RIDGE100	2ND	5.30152	290427.91	4630589	93.8	97	80111124	DEM_CLF_80.SFC	1	3
186	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	24-HR	TURBINES	1ST	6.24526	290479.44	4630674.5	97.26	108	80031524	DEM_CLF_80.SFC	1	3
187	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	24-HR	TURBINES	2ND	5.30152	290427.91	4630589	93.8	97	80111124	DEM_CLF_80.SFC	1	3
188	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	24-HR	RIDGEWOR	1ST	6.24526	290479.44	4630674.5	97.26	108	80031524	DEM_CLF_80.SFC	1	3
189	AERMOD	Ridgewood Air Toxics DEM_80_UNIT.USI	UNIT	24-HR	RIDGEWOR	2ND	5.30152	290427.91	4630589	93.8	Hill	80111124	DEM_CLF_80.SFC	1	3
190	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	ANNUAL	RIDGE100	1ST	0.02772	289050	4630547	136.43	136.43	1 YRS	DEM_CLF_84.SFC	4	3
191	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	ANNUAL	TURBINES	1ST	0.01312	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	4	3
192	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	ANNUAL	RIDGEWOR	1ST	0.02606	289050	4630547	136.43	136.43	1 YRS	DEM_CLF_84.SFC	4	3
193	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	1-HR	RIDGE100	1ST	0.23774	288954	4630574	136.28	149	84093018	DEM_CLF_84.SFC	4	3
194	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	1-HR	RIDGE100	2ND	0.23743	288954	4630574	136.28	149	84101324	DEM_CLF_84.SFC	4	3
195	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	1-HR	TURBINES	1ST	0.18502	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	4	3
196	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	1-HR	TURBINES	2ND	0.1774	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	4	3
197	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	1-HR	RIDGEWOR	1ST	0.20703	288954	4630574	136.28	149	84093018	DEM_CLF_84.SFC	4	3
198	AERMOD	Ridgewood Air Toxics DEM_84_H2S.USF	H2S	1-HR	RIDGEWOR	2ND	0.20574	288954	4630574	136.28	Hill	84101324	DEM_CLF_84.SFC	4	3
199	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	ANNUAL	RIDGE100	1ST	0.13459	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_84.SFC	4	3
200	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	ANNUAL	TURBINES	1ST	0.08978	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	4	3
201	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	ANNUAL	RIDGEWOR	1ST	0.12443	288983.19	4630578.5	133.17	149	1 YRS	DEM_CLF_84.SFC	4	3
202	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	1-HR	RIDGE100	1ST	1.51015	288983.19	4630578.5	133.17	149	84022407	DEM_CLF_84.SFC	4	3
203	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	1-HR	RIDGE100	2ND	1.50735	288983.19	4630578.5	133.17	149	84011216	DEM_CLF_84.SFC	4	3
204	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	1-HR	TURBINES	1ST	1.2665	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	4	3
205	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	1-HR	TURBINES	2ND	1.21438	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	4	3
206	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	1-HR	RIDGEWOR	1ST	1.26678	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	4	3
207	AERMOD	Ridgewood Air Toxics DEM_84_HCL.USF	HCL	1-HR	RIDGEWOR	2ND	1.23927	288983.19	4630578.5	133.17	Hill	84011018	DEM_CLF_84.SFC	4	3
208	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	ANNUAL	RIDGE100	1ST	0.00002	289050	4630547	136.43	136.43	1 YRS	DEM_CLF_84.SFC	4	3

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
209	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	ANNUAL	TURBINES	1ST	0.00001	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	4	3
210	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	ANNUAL	RIDGEWOR	1ST	0.00002	289050	4630547	136.43	136.43	1 YRS	DEM_CLF_84.SFC	4	3
211	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	1-HR	RIDGE100	1ST	0.0002	288954	4630574	136.28	149	84093018	DEM_CLF_84.SFC	4	3
212	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	1-HR	RIDGE100	2ND	0.0002	288954	4630574	136.28	149	84101324	DEM_CLF_84.SFC	4	3
213	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	1-HR	TURBINES	1ST	0.00016	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	4	3
214	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	1-HR	TURBINES	2ND	0.00015	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	4	3
215	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	1-HR	RIDGEWOR	1ST	0.00018	288954	4630574	136.28	149	84093018	DEM_CLF_84.SFC	4	3
216	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	1-HR	RIDGEWOR	2ND	0.00018	288954	4630574	136.28	149	84101324	DEM_CLF_84.SFC	4	3
217	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	24-HR	RIDGE100	1ST	0.00014	288983.19	4630578.5	133.17	149	84011324	DEM_CLF_84.SFC	4	3
218	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	24-HR	RIDGE100	2ND	0.00013	288983.19	4630578.5	133.17	149	84021624	DEM_CLF_84.SFC	4	3
219	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	24-HR	TURBINES	1ST	0.0001	290293.16	4630565	89.22	89.22	84060124	DEM_CLF_84.SFC	4	3
220	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	24-HR	TURBINES	2ND	0.00009	290288.84	4630540.5	89	99	84031924	DEM_CLF_84.SFC	4	3
221	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	24-HR	RIDGEWOR	1ST	0.00012	289075.66	4630551.5	137.51	137.51	84020724	DEM_CLF_84.SFC	4	3
222	AERMOD	Ridgewood Air Toxics DEM_84_HG.USF	HG	24-HR	RIDGEWOR	2ND	0.00012	288973.5	4630577	134.23	Hill	84101324	DEM_CLF_84.SFC	4	3
223	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	ANNUAL	RIDGE100	1ST	64.90993	289050	4630547	136.43	136.43	1 YRS	DEM_CLF_84.SFC	4	3
224	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	ANNUAL	TURBINES	1ST	30.86901	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	4	3
225	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	ANNUAL	RIDGEWOR	1ST	61.54078	289050	4630547	136.43	136.43	1 YRS	DEM_CLF_84.SFC	4	3
226	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	1-HR	RIDGE100	1ST	559.54761	288954	4630574	136.28	149	84093018	DEM_CLF_84.SFC	4	3
227	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	1-HR	RIDGE100	2ND	559.09137	288954	4630574	136.28	149	84101324	DEM_CLF_84.SFC	4	3
228	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	1-HR	TURBINES	1ST	435.45593	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	4	3
229	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	1-HR	TURBINES	2ND	417.53543	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	4	3
230	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	1-HR	RIDGEWOR	1ST	493.33997	288954	4630574	136.28	149	84093018	DEM_CLF_84.SFC	4	3
231	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	1-HR	RIDGEWOR	2ND	490.74298	288954	4630574	136.28	149	84101324	DEM_CLF_84.SFC	4	3
232	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	24-HR	RIDGE100	1ST	371.38699	288983.19	4630578.5	133.17	149	84011324	DEM_CLF_84.SFC	4	3
233	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	24-HR	RIDGE100	2ND	359.49515	288983.19	4630578.5	133.17	149	84021624	DEM_CLF_84.SFC	4	3
234	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	24-HR	TURBINES	1ST	259.74124	290293.16	4630565	89.22	89.22	84060124	DEM_CLF_84.SFC	4	3
235	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	24-HR	TURBINES	2ND	232.26959	290288.84	4630540.5	89	99	84031924	DEM_CLF_84.SFC	4	3
236	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	24-HR	RIDGEWOR	1ST	332.026	289075.66	4630551.5	137.51	137.51	84020724	DEM_CLF_84.SFC	4	3
237	AERMOD	Ridgewood Air Toxics DEM_84_METHAN	METHANE	24-HR	RIDGEWOR	2ND	317.57071	288973.5	4630577	134.23	Hill	84101324	DEM_CLF_84.SFC	4	3
238	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	ANNUAL	RIDGE100	1ST	0.72462	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	1	3
239	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	ANNUAL	TURBINES	1ST	0.72462	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	1	3
240	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	ANNUAL	RIDGEWOR	1ST	0.72462	290327.91	4630487	89	89	1 YRS	DEM_CLF_84.SFC	1	3
241	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	1-HR	RIDGE100	1ST	10.22197	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	1	3
242	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	1-HR	RIDGE100	2ND	9.8013	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	1	3
243	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	1-HR	TURBINES	1ST	10.22197	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	1	3
244	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	1-HR	TURBINES	2ND	9.8013	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	1	3
245	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	1-HR	RIDGEWOR	1ST	10.22197	290387.75	4630597.5	93.64	93.64	84061120	DEM_CLF_84.SFC	1	3
246	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	1-HR	RIDGEWOR	2ND	9.8013	290524.88	4630796.5	104.81	104.81	84072402	DEM_CLF_84.SFC	1	3
247	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	24-HR	RIDGE100	1ST	6.09721	290293.16	4630565	89.22	89.22	84060124	DEM_CLF_84.SFC	1	3
248	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	24-HR	RIDGE100	2ND	5.45234	290288.84	4630540.5	89	99	84031924	DEM_CLF_84.SFC	1	3
249	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	24-HR	TURBINES	1ST	6.09721	290293.16	4630565	89.22	89.22	84060124	DEM_CLF_84.SFC	1	3
250	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	24-HR	TURBINES	2ND	5.45234	290288.84	4630540.5	89	99	84031924	DEM_CLF_84.SFC	1	3
251	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	24-HR	RIDGEWOR	1ST	6.09721	290293.16	4630565	89.22	89.22	84060124	DEM_CLF_84.SFC	1	3
252	AERMOD	Ridgewood Air Toxics DEM_84_UNIT.USI	UNIT	24-HR	RIDGEWOR	2ND	5.45234	290288.84	4630540.5	89	Hill	84031924	DEM_CLF_84.SFC	1	3
253	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	ANNUAL	RIDGE100	1ST	0.02389	289075	4630578.5	134.86	138	1 YRS	DEM_CLF_88.SFC	4	3
254	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	ANNUAL	TURBINES	1ST	0.01366	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	4	3
255	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	ANNUAL	RIDGEWOR	1ST	0.02199	289075	4630578.5	134.86	138	1 YRS	DEM_CLF_88.SFC	4	3
256	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	1-HR	RIDGE100	1ST	0.23419	288954	4630574	136.28	149	88050719	DEM_CLF_88.SFC	4	3
257	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	1-HR	RIDGE100	2ND	0.23382	288954	4630574	136.28	149	88072103	DEM_CLF_88.SFC	4	3
258	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	1-HR	TURBINES	1ST	0.18278	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	4	3
259	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	1-HR	TURBINES	2ND	0.18186	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	4	3
260	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	1-HR	RIDGEWOR	1ST	0.20612	288954	4630574	136.28	149	88050719	DEM_CLF_88.SFC	4	3

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
261	AERMOD	Ridgewood Air Toxics DEM_88_H2S.USF	H2S	1-HR	RIDGEWOR	2ND	0.2058	288954	4630574	136.28	Hill	88072104	DEM_CLF_88.SFC	4	3
262	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	ANNUAL	RIDGE100	1ST	0.10026	289041.31	4630573	132.81	138	1 YRS	DEM_CLF_88.SFC	4	3
263	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	ANNUAL	TURBINES	1ST	0.09348	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	4	3
264	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	ANNUAL	RIDGEWOR	1ST	0.0949	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	4	3
265	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	1-HR	RIDGE100	1ST	1.51378	288983.19	4630578.5	133.17	149	88010817	DEM_CLF_88.SFC	4	3
266	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	1-HR	RIDGE100	2ND	1.51125	288983.19	4630578.5	133.17	149	88012524	DEM_CLF_88.SFC	4	3
267	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	1-HR	TURBINES	1ST	1.25117	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	4	3
268	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	1-HR	TURBINES	2ND	1.24491	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	4	3
269	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	1-HR	RIDGEWOR	1ST	1.2514	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	4	3
270	AERMOD	Ridgewood Air Toxics DEM_88_HCL.USF	HCL	1-HR	RIDGEWOR	2ND	1.24524	290440.38	4630628	96.67	Hill	88081520	DEM_CLF_88.SFC	4	3
271	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	ANNUAL	RIDGE100	1ST	0.00002	289075	4630578.5	134.86	138	1 YRS	DEM_CLF_88.SFC	4	3
272	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	ANNUAL	TURBINES	1ST	0.00001	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	4	3
273	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	ANNUAL	RIDGEWOR	1ST	0.00002	289075	4630578.5	134.86	138	1 YRS	DEM_CLF_88.SFC	4	3
274	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	1-HR	RIDGE100	1ST	0.0002	288963.69	4630575.5	135.17	149	88100717	DEM_CLF_88.SFC	4	3
275	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	1-HR	RIDGE100	2ND	0.0002	288963.69	4630575.5	135.17	149	88051820	DEM_CLF_88.SFC	4	3
276	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	1-HR	TURBINES	1ST	0.00016	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	4	3
277	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	1-HR	TURBINES	2ND	0.00016	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	4	3
278	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	1-HR	RIDGEWOR	1ST	0.00018	288954	4630574	136.28	149	88050719	DEM_CLF_88.SFC	4	3
279	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	1-HR	RIDGEWOR	2ND	0.00018	288954	4630574	136.28	149	88072104	DEM_CLF_88.SFC	4	3
280	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	24-HR	RIDGE100	1ST	0.00014	288973.5	4630577	134.23	149	88100424	DEM_CLF_88.SFC	4	3
281	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	24-HR	RIDGE100	2ND	0.00013	288963.69	4630575.5	135.17	149	88040624	DEM_CLF_88.SFC	4	3
282	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	24-HR	TURBINES	1ST	0.0001	290481.12	4630633.5	96.5	108	88032124	DEM_CLF_88.SFC	4	3
283	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	24-HR	TURBINES	2ND	0.00008	290512.59	4630857	99.59	107	88081024	DEM_CLF_88.SFC	4	3
284	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	24-HR	RIDGEWOR	1ST	0.00012	288973.5	4630577	134.23	149	88100424	DEM_CLF_88.SFC	4	3
285	AERMOD	Ridgewood Air Toxics DEM_88_HG.USF	HG	24-HR	RIDGEWOR	2ND	0.00012	288963.69	4630575.5	135.17	Hill	88040624	DEM_CLF_88.SFC	4	3
286	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	ANNUAL	RIDGE100	1ST	56.1259	289075	4630578.5	134.86	138	1 YRS	DEM_CLF_88.SFC	4	3
287	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	ANNUAL	TURBINES	1ST	32.13965	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	4	3
288	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	ANNUAL	RIDGEWOR	1ST	52.24458	289075	4630578.5	134.86	138	1 YRS	DEM_CLF_88.SFC	4	3
289	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	1-HR	RIDGE100	1ST	550.94818	288963.69	4630575.5	135.17	149	88100717	DEM_CLF_88.SFC	4	3
290	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	1-HR	RIDGE100	2ND	550.59509	288963.69	4630575.5	135.17	149	88051820	DEM_CLF_88.SFC	4	3
291	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	1-HR	TURBINES	1ST	430.18359	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	4	3
292	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	1-HR	TURBINES	2ND	428.0336	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	4	3
293	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	1-HR	RIDGEWOR	1ST	490.66196	288954	4630574	136.28	149	88050719	DEM_CLF_88.SFC	4	3
294	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	1-HR	RIDGEWOR	2ND	488.84567	288954	4630574	136.28	149	88072104	DEM_CLF_88.SFC	4	3
295	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	24-HR	RIDGE100	1ST	373.39124	288973.5	4630577	134.23	149	88100424	DEM_CLF_88.SFC	4	3
296	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	24-HR	RIDGE100	2ND	358.38724	288963.69	4630575.5	135.17	149	88040624	DEM_CLF_88.SFC	4	3
297	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	24-HR	TURBINES	1ST	271.88522	290481.12	4630633.5	96.5	108	88032124	DEM_CLF_88.SFC	4	3
298	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	24-HR	TURBINES	2ND	230.60124	290512.59	4630857	99.59	107	88081024	DEM_CLF_88.SFC	4	3
299	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	24-HR	RIDGEWOR	1ST	327.6358	288973.5	4630577	134.23	149	88100424	DEM_CLF_88.SFC	4	3
300	AERMOD	Ridgewood Air Toxics DEM_88_METHAN	METHANE	24-HR	RIDGEWOR	2ND	317.00296	288963.69	4630575.5	135.17	Hill	88040624	DEM_CLF_88.SFC	4	3
301	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	ANNUAL	RIDGE100	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	1	3
302	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	ANNUAL	TURBINES	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	1	3
303	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	ANNUAL	RIDGEWOR	1ST	0.75445	290544.41	4630637	104.42	104.42	1 YRS	DEM_CLF_88.SFC	1	3
304	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	1-HR	RIDGE100	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	1	3
305	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	1-HR	RIDGE100	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	1	3
306	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	1-HR	TURBINES	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	1	3
307	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	1-HR	TURBINES	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	1	3
308	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	1-HR	RIDGEWOR	1ST	10.09821	290379.19	4630621	94.93	94.93	88072101	DEM_CLF_88.SFC	1	3
309	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	1-HR	RIDGEWOR	2ND	10.04774	290440.38	4630628	96.67	96.67	88081520	DEM_CLF_88.SFC	1	3
310	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	24-HR	RIDGE100	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	DEM_CLF_88.SFC	1	3
311	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	24-HR	RIDGE100	2ND	5.41318	290512.59	4630857	99.59	107	88081024	DEM_CLF_88.SFC	1	3
312	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	24-HR	TURBINES	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	DEM_CLF_88.SFC	1	3

TABLE G-4
AIR TOXICS MODELING RESULTS

	Model	File	Pol	Average	Group	Rank	Conc.	East(X)	North(Y)	Elev	Hill	Time	Met File	Sources	Groups
313	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	24-HR	TURBINES	2ND	5.41318	290512.59	4630857	99.59	107	88081024	DEM_CLF_88.SFC	1	3
314	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	24-HR	RIDGEWOR	1ST	6.38228	290481.12	4630633.5	96.5	108	88032124	DEM_CLF_88.SFC	1	3
315	AERMOD	Ridgewood Air Toxics DEM_88_UNIT.USI	UNIT	24-HR	RIDGEWOR	2ND	5.41318	290512.59	4630857	99.59	107	88081024	DEM_CLF_88.SFC	1	3

APPENDIX H

VISCREEN MODEL OUTPUT

Visual Effects Screening Analysis for
Source: RI Central Genco
Class I Area: Lye Brook

*** Level-1 Screening ***

Input Emissions for

Particulates	40.50	TON/YR
NOx (as NO2)	159.10	TON/YR
Primary NO2	.00	TON/YR
Soot	.00	TON/YR
Primary SO4	4.50	TON/YR

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	.04 ppm
Background Visual Range:	40.00 km
Source-Observer Distance:	190.00 km
Min. Source-Class I Distance:	185.00 km
Max. Source-Class I Distance:	195.00 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	77.	185.0	92.	2.00	.003	.05	.000
SKY	140.	77.	185.0	92.	2.00	.001	.05	.000
TERRAIN	10.	77.	185.0	92.	2.00	.000	.05	.000
TERRAIN	140.	77.	185.0	92.	2.00	.000	.05	.000

Maximum Visual Impacts OUTSIDE Class I Area
Screening Criteria ARE NOT Exceeded

					Delta E		Contrast	
Backgrnd	Theta	Azi	Distance	Alpha	Crit	Plume	Crit	Plume
SKY	10.	75.	183.9	94.	2.00	.003	.05	.000
SKY	140.	75.	183.9	94.	2.00	.001	.05	.000
TERRAIN	10.	60.	173.8	109.	2.00	.000	.05	.000
TERRAIN	140.	60.	173.8	109.	2.00	.000	.05	.000

APPENDIX I

TURBINE DATA

Solar Turbines
A Caterpillar Company

PREDICTED ENGINE PERFORMANCE

Customer: Providence	Model: TAURUS 60-7901
	Package Type: GSC
Job ID:	Match: STANDARD
Run By: Kristel Gonsette — Date Run: 5-Sep-2007	Fuel System: GAS
Engine Performance Code: REV 3.40 — Engine Performance Data: REV 1.4	Fuel Type: CHOICE NATURAL GAS

DATA FOR NOMINAL PERFORMANCE

Elevation	feet	312
Inlet Loss	in H20	4.0
Exhaust Loss	in H20	10.0

		1	2	3	4	5	6
Engine Inlet Temperature	deg F	0.0	10.0	20.0	30.0	40.0	50.0
Relative Humidity	%	60.0	60.0	60.0	60.0	60.0	60.0
Specified Load*	kW	FULL	FULL	FULL	FULL	FULL	FULL
Net Output Power*	kW	6925	6741	6560	6371	6181	5998
Fuel Flow	mmBtu/hr	72.37	70.78	69.23	67.67	66.11	64.58
Heat Rate*	Btu/kW-hr	10450	10501	10554	10621	10696	10768
Therm Eff*	%	32.653	32.494	32.330	32.126	31.902	31.688
Inlet Air Flow	lbm/hr	181754	179513	177102	174628	172087	169260
Engine Exhaust Flow	lbm/hr	192594	190112	187465	184752	181974	178916
PCD	psiG	182.8	180.3	177.6	174.9	172.1	169.0
Compensated PTIT	deg F	1258	1257	1257	1257	1258	1258
Exhaust Temperature	deg F	934	938	942	946	951	957

Fuel Gas Composition (Volume Percent)

Methane (CH4)	52.63
Carbon Dioxide (CO2)	42.02
Hydrogen Sulfide (H2S)	0.18
Nitrogen (N2)	5.05
Oxygen (O2)	0.12

Fuel Gas Properties

LHV (Btu/Scf)	479.6	Specific Gravity	0.9823	Wobbe Index at 60F	483.9

**Electric power measured at the generator terminals.*

This performance was calculated with a basic inlet and exhaust system. Special equipment such as low noise silencers, special filters, heat recovery systems or cooling devices will affect engine performance. Performance shown is "Expected" performance at the pressure drops stated, not guaranteed.

Solar® Turbines
A Caterpillar Company

PREDICTED ENGINE PERFORMANCE

Customer: Providence	Model: TAURUS 60-7901
	Package Type: GSC
Job ID:	Match: STANDARD
Run By: Kristel Gonsette — Date Run: 5-Sep-2007	Fuel System: GAS
Engine Performance Code: REV 3.40 — Engine Performance Data: REV 1.4	Fuel Type: CHOICE NATURAL GAS

DATA FOR NOMINAL PERFORMANCE

Elevation	feet	312
Inlet Loss	in H20	4.0
Exhaust Loss	in H20	10.0

		1	2	3	4	5
Engine Inlet Temperature	deg F	60.0	70.0	80.0	90.0	100.0
Relative Humidity	%	60.0	60.0	60.0	60.0	60.0
Specified Load*	kW	FULL	FULL	FULL	FULL	FULL
Net Output Power*	kW	5813	5590	5344	5114	4875
Fuel Flow	mmBtu/hr	63.07	61.33	59.56	57.99	56.39
Heat Rate*	Btu/kW-hr	10850	10970	11144	11340	11568
Therm Eff*	%	31.448	31.104	30.620	30.090	29.497
Inlet Air Flow	lbm/hr	166176	162252	158104	154497	150438
Engine Exhaust Flow	lbm/hr	175603	171417	167003	163162	158862
PCD	psiG	165.7	161.6	157.1	153.2	148.8
Compensated PTIT	deg F	1258	1257	1258	1258	1257
Exhaust Temperature	deg F	963	970	980	989	999

Fuel Gas Composition (Volume Percent)

Methane (CH_4)	52.63
Carbon Dioxide (CO_2)	42.02
Hydrogen Sulfide (H_2S)	0.18
Nitrogen (N_2)	5.05
Oxygen (O_2)	0.12

Fuel Gas Properties

LHV (Btu/Scf)	479.6	Specific Gravity	0.9823	Wobbe Index at 60F	483.9

**Electric power measured at the generator terminals.*

This performance was calculated with a basic inlet and exhaust system. Special equipment such as low noise silencers, special filters, heat recovery systems or cooling devices will affect engine performance. Performance shown is "Expected" performance at the pressure drops stated, not guaranteed.