Exhibit 4

Energy Answers International, Inc.

Arecibo Puerto Rico Renewable Energy Project

Prevention of Significant Deterioration (PSD) Air Permit Application

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3. Emissions Summary

This Section describes the methodology for estimating emissions from the proposed Facility. The detailed emission rate calculations are given in Appendix A. Emission calculations were developed for normal operating conditions, including 100 percent, 110 percent, and 80 percent boiler load scenarios. Emissions from fuel oil combustion during startup and shutdown transitional periods are also quantified using a conservative approach and published emission factors. Greenhouse gas (GHG) emissions from the facility are also quantified and contrasted against emission levels that would otherwise occur from landfilling the waste materials.

3.1 Normal Operations

Where appropriate, the emission calculations were based upon the proposed BACT performance levels described in Section 5. The BACT emission levels have been guaranteed by the manufacturers of the equipment and control devices, and, therefore, represent conservative estimates of expected actual emissions.

3.1.1 Processed Refuse Fuel (PRF) Boilers

The technical approach for calculating the maximum potential to emit from the two PRF-fired boilers was to use the proposed BACT emission limits (See Section 5) and control equipment vendor guaranteed outlet concentrations with the design outlet air flow specifications. Emissions representing a short-term maximum (110%) firing rate; a typical sustained (100%) firing rate; and a short-term minimum (80%) firing rate were calculated and are provided in Table 2 of Appendix A. Maximum hourly and annual and emission rates are given. For annual potential-to-emit (PTE) calculations, the two boilers were assumed to operate continuously for 8,760 hours per year at 100% design capacity. In reality, the Facility is expected to operate at 95 percent availability, or 8,322 hours per year.

3.1.2 Cooling Tower

The cooling tower is a potential source of particulate matter emissions. The maximum emission rates for PM, PM_{10}, and $PM_{2.5}$ were calculated based upon the equations and methods in AP-42 Chapter 13.4, design flow specifications, and actual water quality test data obtained for the potential cooling water supply source (Cano Triburones). These emission rates are further refined via a method developed by Reisman and Frisbie that is specific to cooling towers. The cooling towers are assumed to operate continuously for 8,760 hours per year at 100% design capacity

for PTE calculations. Table 3 in Appendix A provides the emission calculations for the cooling tower cells.

3.1.3 Lime and Ash Handling

Loading, unloading, and conveying activities associated with receiving, storing, and handling lime for the Turbosorp and ash from the boilers (both fly ash and bottom ash) can potentially result in emissions of particulate matter. Energy Answers proposes to control the potential emissions of particulate matter from its lime storage and ash handling operations by using fabric filters (baghouses). Emission rates of particulate matter are, therefore, developed based on the performance specifications given for the fabric filters and the maximum design exhaust air flow rates through the baghouses. Table 4 in Appendix A provides the calculations of particulate from the lime and ash handling activities.

3.1.4 Emergency Diesel Generator and Fire Water Pumps

The proposed emergency diesel generator will be approximately 670 horsepower. As discussed in Section 4, this unit will be new and, therefore, subject to the emission limits provided in NSPS Subpart IIII and NESHAP Subpart ZZZZ. These emission standards were conservatively used in conjunction with the emergency generator operating limit of 500 hours per year for emergency equipment to estimate the maximum potential to emit. Emissions of individual hazardous air pollutants are also estimated using conservative emission factors given in AP-42. Table 5 of Appendix A provides the emission rate calculations for the emergency generator.

3.1.5 Diesel Fire Water Pump Emission Calculations

Energy Answers proposes to install one diesel-fired fire water pump with an approximate rating of 335 horsepower. Similar to the emergency generator, this unit will be new and, therefore, subject to the emission limits provided in NSPS Subpart IIII and NESHAP Subpart ZZZZ. These emission standards were used in conjunction with the operating limit of 500 hours per year to estimate the maximum potential to emit since it will be manufactured to meet these limits. Additional emissions are estimated using conservative emission factors given in AP-42. Table 6 of Appendix A provides the emission rate calculations for the emergency generator.

3.2 Startup and Shutdown Emissions

Each boiler will be equipped with three auxiliary fuel oil burners rated at 167 MMBTU/hr each. Startup procedures will require No. 2 fuel oil to be burned for approximately 12 hours. Shutdown procedures will require approximately 4 hours during which No. 2 fuel oil will be used. Emission rates during this period are summarized in Table 7 of Appendix A. Emissions during startup and shutdown episodes will be vented through the control equipment which will minimize emissions.

3.3 GHG Emissions

Emissions of GHG are quantified for the proposed facility based on the approximate fossil carbon content of PRF and the assumption that 100 percent is oxidized to CO_2, plus emissions from combusting approximately 180,000 gallons per year of No. 2 fuel oil (startup, shutdown). Emissions of methane are quantified and included in the calculations so that the total GHG emissions are expressed as CO_2 equivalents (CO_2e). Emission calculations of GHG associated with transporting the waste materials to the AREP and a landfill are developed based on the Dynamic Itinerary for the area and Solid Waste Management Association (SWMA) publications. Vehicle emissions factors are taken from the MOBILE6.2 emissions model and the landfill GHG are quantified using the EPA's LandGen emissions model. The proposed facility is shown to result in a net reduction in GHG emissions from the area. Appendix A includes GHG emission calculations.

3.4 Facility Potential to Emit Summary

The following Table summarizes the potential annual emissions from the proposed facility as derived using the methods described above. Detailed calculations for each emission source are provided in Appendix A.

Table 3-1: Facility Potential Emissions Summary - TPY

Pollutant	Boiler 1	Boiler 2	Ash Handling	Silos	EDG	FWP	Cooling Tower	Total	PSD Sig TPY
PM	20.3	20.3	0.028	0.00084	0.055	0.0277	2.03	42.8	25
PM_{10}	20.3	20.3	0.028	0.00084	0.055	0.0277	1.07	41.9	15
$PM_{2.5}$	20.3	20.3	0.028	0.00084	0.055	0.0277	0.0044	40.8	10
NO_x	175	175	---	---	1.11	0.55	---	352	40
SO_2	130	130	---	---	0.0007	0.00037	---	260	40
CO	356	356	---	---	0.96	0.48	---	713	100
VOC	35.0	35.0	---	---	0.055	0.0277	---	70.2	40
HCl	77.3	77.3	---	---	---	---	---	155	---
Mercury	0.0346	0.0346	---	---	7.75E-09	---	---	0.0692	0.1
Nickel	0.0121	0.0121	---	---	4.65E-08	---	---	0.024	---
Arsenic	0.00099	0.00099	---	---	1.09E-08	---	---	0.0020	> 0
Cadmium	0.0203	0.0203	---	---	2.84E-08	---	---	0.041	---
Chromium	0.00782	0.00782	---	---	1.49E-07	---	---	0.016	---
Lead	0.153	0.153	---	---	2.30E-08	---	---	0.31	0.6
TCDD-2378	2.65E-05	2.65E-05	---	---	---	---	---	5.29E-05	3.50E-06
Beryllium	0.0016	0.0016	---	---	6.46E-09	---	---	0.0032	0.0004
Fluorides (as HF)	7.01	7.01	---	---	---	1.87E-06	---	14.0	3
Sulfuric Acid	30.7	30.7	---	---	---	---	---	61.3	7
Ammonia	28.8	28.8	---	---	---	---	---	57.6	---

5.2.9 BACT Determination for Cadmium Emissions

Table 5-10 summarized cadmium permit values listed in the USEPA's BACT/LAER Clearinghouse and in permits. Cadmium is present in refuse and is released as fumes and fine particulate matter during combustion. Available emission control techniques are the same as those previously discussed for particulate matter. Annual emissions test data (1994-1998) from Unit No. 3 at SEMASS indicates outlet cadmium concentrations which range from <0.110 to 4.0 µg/dscm (total mass basis), corrected to 7% O_2. Energy Answers proposes to use the Turbosorp® dry lime injection system with FF to achieve an emission limit of 10 µg/dscm, corrected to 7% O_2, measured using EPA Method 29, as the BACT level of control for cadmium emissions.

5.2.10 BACT Determination for Lead Emissions

Lead is present in refuse and is released as fumes and fine particulate matter during combustion. Available emission control techniques are the same as those previously discussed for particulate matter. Annual emissions test data (1994-1998) from Unit No.3 at SEMASS, which serves as the technological basis for the proposed facility, indicates outlet lead concentrations which range from 6.38 to <78.5 µg/dscm, corrected to 7% O_2. Table 5-11 summarizes permit values listed in the USEPA's RACT/BACT/LAER Clearinghouse. Energy Answers proposes to use a Turbosorp® Circulating Dry Fluid Bed Scrubber with FF to achieve an emission limit of 75 µg/dscm, corrected to 7% O_2, measured using EPA Method 29, as BACT for lead emissions.

5.2.11 BACT for MWC ORGANICS Emissions from Boilers

The term "MWC organics" is defined as organic compounds present in MWC flue gas emissions, measured as polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs). Other organic substances emitted from MWCs include volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). There are three potential sources of organic emissions from municipal waste combustors. The first potential source is the organic fuel material that may pass through the combustor undestroyed. The second is the combustion process itself, where organics can be produced by chemical reactions with precursor compounds in the combustor. The third source is from formation of organics from precursors during chemical reactions in low temperature regions (downstream of the combustion zone). This third source is believed to apply particularly to PCDD and PCDF formation.

APPENDIX A - TABLE 2
ENERGY ANSWERS INTERNATIONAL
BOILER POTENTIAL EMISSIONS AND STACK PARAMETERS
ARECIBO PUERTO RICO

Parameter	Units	MAX	TYPICAL	MIN
Fuel Firing Rate	TPD	1158	1053	842
Heat Input	MMBTU/hr	550	500	400
% Load Capacity	%	110	100	80

Estimated Flue Gas Conditions				
Stack Gas Temperature	F	323	314	305
Actual Flue Gas Density at Stack Inlet	lb/ft3	0.0495	0.0498	0.0518
Flue Gas Flow (wet)	lb/hr	724452	658685	525917
Moisture in Flue Gas	lb/hr	83325	74083	56456
Percent Moisture in Flue Gas	%vol	18.02	17.65	16.9
Percent Oxygen in Flue Gas	%vol	7.53	7.56	7.67
Flue Gas Flow (dry)	lb/hr	641127	584602	469461
Flue Gas Flow (wet)	acfm	243717	220380	169351
Flue Gas Flow (dry)	dscfm	136064	124037	99610
Flue Gas Flow (dry)	dscmm	3852	3512	2820
Stack Inner Diameter	ft	7	7	7
Velocity	fps	105.55	95.44	73.34

			MODEL EMISSION RATE						
Pollutant	BACT Limit / Emission Factor	Units	MAX g/s	AVG g/s	MIN g/s	MAX lb/hr	AVG lb/hr	MIN lb/hr	TPY (1)
PM	10	mg/DSCM @ 7% O2	0.642	0.585	0.470	5.10	4.65	3.73	20.3
PM10	10	mg/DSCM @ 7% O2	0.642	0.585	0.470	5.10	4.65	3.73	20.3
PM2.5	10	mg/DSCM @ 7% O2	0.642	0.585	0.470	5.10	4.65	3.73	20.3
NOx	45	ppmvd @ 7% O2	5.53	5.04	4.05	43.89	40.01	32.13	175.3
SO2	24	ppmvd @ 7% O2	4.11	3.74	3.01	32.59	29.71	23.86	130.1
CO	150	ppmvd @ 7% O2	11.22	10.23	8.22	89.06	81.19	65.20	355.6
VOC	0.016	lbs/MMBtu	1.11	1.01	0.806	8.80	8.00	6.40	35.0
HCl	25	ppmvd @ 7% O2	2.44	2.22	1.78	19.35	17.64	14.17	77.3
Mercury	17	ug/DSCM @ 7% O2	1.09E-03	9.95E-04	7.99E-04	0.0087	0.0079	0.0063	0.035
Nickel	0.000063	lbs/ton PRF	3.83E-04	3.48E-04	2.78E-04	0.0030	0.0028	0.0022	0.012
Arsenic	0.00000517	lbs/ton PRF	3.14E-05	2.86E-05	2.29E-05	0.00025	0.00023	0.00018	0.000994
Cadmium	10	ug/DSCM @ 7% O2	6.42E-04	5.85E-04	4.70E-04	0.0051	0.0046	0.0037	0.0203
Chromium	0.0000407	lbs/ton PRF	2.47E-04	2.25E-04	1.80E-04	0.0020	0.0018	0.0014	0.0078
Lead	75	ug/DSCM @ 7% O2	0.0048	0.0044	0.0035	0.038	0.035	0.028	0.153
TCDD-2378	13	ng/DSCM @ 7% O2	8.35E-07	7.61E-07	6.11E-07	6.62E-06	6.04E-06	4.85E-06	2.65E-05
Beryllium	0.00000073	lbs/MMBtu	0.000051	0.000046	0.000037	4.02E-04	3.65E-04	2.92E-04	0.00160
Fluorides (as HF)	0.0032	lbs/MMBtu	0.222	0.202	0.161	1.76	1.60	1.28	7.01
Sulfuric acid (as H2SO4)	0.014	lbs/MMBtu	0.970	0.882	0.706	7.70	7.00	5.60	30.7
Ammonia	20	ppmvd @ 7% O2	0.91	0.83	0.67	7.21	6.57	5.28	28.8

Example Calculations:

PM10 : 10 mg/DSCM x 3460 DSCMM x 1 g/1000 mg x 1 min / 60 sec = 0.577 g/s

SO2 : 24 ppmvd x 122196 ft / min x 1 ppm / 1,000,000 x 1 lb-mol / 385 ft3 x 64.04 lb SO2/lb-mol x 453.6 g/lb x 1 min / 60 sec = 3.69 g/s

Sulfuric acid : 0.014 lb/MMBtu x 500 MMBtu/hr x 453.6 g/lb x 1 hr / 3600 sec = 0.882 g/s

Nickel : 0.000063 lb/ton PRF x 1050 ton/day x 1 day/24 hr x 1 hr/3600 sec x 453.6 g/lb = 3.74 E-4 g/s

Notes:

(1) Annual Emissions are based on the average operating condition (100% load) occurring continously for 8,760 hours per year.