FACILITY PERMIT TO OPERATE

NM MILLIKEN GENCO, LLC
2050 S MILLIKEN AVE
ONTARIO, CA 91761

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By
for Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

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FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR:	NM MILLIKEN GENCO, LLC
LEGAL OPERATOR (if different than owner):	
EQUIPMENT LOCATION:	2050 S MILLIKEN AVE ONTARIO, CA 91761
MAILING ADDRESS:	5087 JUNCTION RD LOCKPORT, NY 14094
RESPONSIBLE OFFICIAL:	ANTHONY FALBO
TITLE:	SENIOR VICE PRESIDENT - OPERATIONS
TELEPHONE NUMBER:	(716) 439-1004
CONTACT PERSON:	SUPARNA CHAKLADAR
TITLE:	VICE PRESIDENT
TELEPHONE NUMBER:	(951) 833-4153
TITLE V PERMIT ISSUED:	December 21, 2007
TITLE V PERMIT EXPIRATION DATE:	December 20, 2012

TITLE V	RECLAIM	
YES	NOx:	NO
	SOx:	NO
	CYCLE:	0
	ZONE:	INLAND

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

Facility Equipment and Requirements
(Section D)

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, all individual Permits to Construct and Permits to Operate issued to various equipment at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions including periodic monitoring requirements, and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND PERMITS TO OPERATE AT THIS FACILITY:

Application number	Permit to Operate number	Equipment description	Page
515470	G17021	ICE (>500HP) LANDFILL GAS	4
515471	G17023	ICE (>500HP) LANDFILL GAS	8

NOTE: EQUIPMENT LISTED ABOVE THAT HAVE NO CORRESPONDING PERMITS TO OPERATE NUMBER ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

FACILITY WIDE CONDITION(S)

Condition(s):

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:

   A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGELMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
   B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION. [RULE 401]

2. THE OPERATOR SHALL NOT USE LANDFILL GAS CONTAINING SULFUR COMPOUNDS IN EXCESS OF 150 PPMV CALCULATED AS HYDROGEN SULFIDE AVERAGED DAILY. [RULE 431.1]

3. THIS FACILITY IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

   GASEOUS EMISSIONS: 1150.1
   GASEOUS EMISSIONS: 40CFR63 SUBPART AAAA
   GASEOUS EMISSIONS: 40CFR60 SUBPART WWW

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

PERMIT TO OPERATE

Permit No. G17021
A/N 515470

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 1 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE NO. 1, DEUTZ, MODEL TBG620V16K, SIXTEEN CYLINDER, 1850 BHP, LEAN BURN, LANDFILL GAS FIRED, TURBOCHARGED AND INTERCOOLED DRIVING AN ELECTRICAL GENERATOR.

2. RADIATOR WITH FANS.

3. ANCILLARY SKID WITH MUFFLER, HEAT EXCHANGER, FILTER, INTERCOOLER AND EXHAUST STACK.

Conditions:

1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]

2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3) OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE EMISSION OF RAW LANDFILL GAS TO THE ATMOSPHERE.
[RULE 1150.1]

4) A SAMPLING PORT SHALL BE INSTALLED IN THE LANDFILL GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A GAS SAMPLE.
[RULE 431.1]

5) A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE LANDFILL GAS SUPPLY LINE TO THE ENGINE.
[RULE 1303(b)(2)-OFFSETS]

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

6) THE HEATING VALUE OF LANDFILL GAS BURNED IN THIS ENGINE SHALL NOT EXCEED 17.6 MMBTU/HR, BASED ON A 1-HOUR AVERAGE. THE LANDFILL GAS FLOW RATE TO THE ENGINE, THE METHANE CONTENT OF THE LANDFILL GAS AND THE GROSS ELECTRICAL OUTPUT (KW) SHALL BE MEASURED EVERY 15-MINUTES. THE HEATING VALUE OF THE LANDFILL GAS SHALL BE CALCULATED BY TWO METHODS:

METHOD 1:
(MEASURED METHANE VOLUME FRACTION) X (MEASURED FLOW RATE) X (1,010 BTU/SCF)

METHOD 2:
(MEASURED GROSS KW OUTPUT) X (13,925 BTU/KW-HR)

THE OPERATOR SHALL KEEP A LOG OF THE AVERAGE HOURLY HEATING VALUE OF THE LANDFILL GAS BURNED, CALCULATED BY BOTH METHODS. THE OPERATOR SHALL INDICATE IN THE LOG THE METHOD USED TO DETERMINE COMPLIANCE.
[RULE 1303 (b)(2)-OFFSETS]

7) THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1110.2]

8) THE ENGINE SHALL ONLY USE LANDFILL GAS AS A FUEL.
[RULE 204]

9) THE OPERATOR SHALL KEEP A MONTHLY OPERATING LOG THAT INCLUDES:
A. TOTAL HOURS OF OPERATION.
B. TOTAL CUBIC FEET OF LANDFILL GAS CONSUMED.
C. CUMULATIVE HOURS OF OPERATION SINCE THE LAST SOURCE TEST.
[RULE 1110.2]

10) THE OPERATOR SHALL REPORT ANY BREAKDOWN RESULTING IN EMISSIONS IN EXCESS OF RULE OR PERMIT LIMITS PER THE REQUIREMENTS OF SCAQMD RULE 1110.2.
[RULE 1110.2]

11) TWO SAMPLING PORTS MUST BE PROVIDED IN THE ENGINE EXHAUST DUCT, 8-10 DUCT DIAMETERS DOWNSTREAM AND TWO DUCT DIAMETERS UPSTREAM OF ANY FLOW DISTURBANCE, AND SHALL CONSIST OF TWO 4 INCH WELD NIPPLES WITH PLUGS, 90 DEGREES APART. AN EQUIVALENT METHOD FOR EMISSION SAMPLING MAY BE USED UPON APPROVAL OF THE AQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS MUST BE SUPPLIED BY THE APPLICANT.
[RULE 217]

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

12) APPLICANT SHALL CONDUCT AN ANNUAL PERFORMANCE TEST OF THE ENGINE IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TEST. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD 10 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A TEST PROTOCOL SHALL BE SUBMITTED FOR APPROVAL AT LEAST 60 DAYS PRIOR TO TESTING.

THE PERFORMANCE TEST SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO A TEST OF THE INLET AND EXHAUST GASES, FOR THE FOLLOWING:

A. METHANE
B. TOTAL NON-METHANE HYDROCARBONS
C. OXIDES OF NITROGEN (EXHAUST ONLY)
D. CARBON MONOXIDE (EXHAUST ONLY)
E. PARTICULATES (EXHAUST ONLY)
F. TOTAL SULFUR COMPOUNDS AS H2S (INLET ONLY)
G. FLOW RATE
H. OXYGEN
I. NITROGEN
J. CARBON DIOXIDE
K. MOISTURE
L. TEMPERATURE
M. TOXIC AIR CONTAMINANTS INCLUDING BENZENE, CHLOROBENZENE, 1,2-DICHLORORETHANE, 1,1-DICHLOROETHANE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE AND XYLENES (EXHAUST ONLY).
N. GROSS ELECTRICAL POWER OUTPUT
O. ENGINE HOUR-METER READING

[RULE 1110.2, 1150.1, 218, 1303(a)(1)-BACT, 1303(b)(2)-OFFSETS, 1401]

13) THE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/HR
REACTIVE HYDROCARBONS	3.27
NITROGEN OXIDE	2.44
SULFUR DIOXIDE	0.31
CARBON MONOXIDE	10.2
PARTICULATES	0.32

[RULE 1303(b)(2)-OFFSETS]

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14) REACTIVE HYDROCARBON EMISSIONS FROM THE ENGINE SHALL NOT EXCEED 391 PPMV AS METHANE, WITH NO OXYGEN CORRECTION.
[RULE 1303(a)(1)-BACT]

15) OXIDES OF NITROGEN EMISSIONS FROM THE ENGINE SHALL NOT EXCEED 102 PPMV, WITH NO OXYGEN CORRECTION.
[RULE 1303(a)(1)-BACT]

16) CARBON MONOXIDE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED 697 PPMV, WITH NO OXYGEN CORRECTION.
[RULE 1303(a)(1)-BACT]

17) A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) SHALL BE INSTALLED AND OPERATED TO MEASURE THE ENGINE EXHAUST CONCENTRATION FOR NOX AND O2 ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 15% O2. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF AQMD RULE 218. PRIOR TO INSTALLATION, THIS MONITORING SYSTEM SHALL BE APPROVED IN WRITING BY THE AQMD.
[RULE 218, 1110.2]

18) ALL RECORDS, SUCH AS MONTHLY OPERATING LOG, GROSS ELECTRICAL POWER OUTPUT, MAINTENANCE RECORDS AND PERFORMANCE TEST RESULTS, SHALL BE MAINTAINED FOR FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303(b)(2)-OFFSETS]

19) THIS ENGINE SHALL NOT BE OPERATED IN SUCH A MANNER AS TO UNREASONABLY INTERFERE WITH THE OWNER'S/OPERATOR'S ABILITY TO COMPLY WITH AQMD RULE 1150.1 OR ANY OTHER AQMD RULE LIMITING LANDFILL GAS MIGRATION OR SURFACE EMISSIONS.
[RULE 1150.1]

Emissions and Requirements:

20) THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV AS HEXANE @ 3% O2 OR 98% WEIGHT REDUCTION, RULE 1150.1, 1303(a)(1)-BACT, 40CFR60 SUBPART WWW, 40CFR63 SUBPART AAAA
VOC: 40 PPMV AS CARBON @ 15% O2, RULE 1110.2
METHANE: 3000 PPMV @ 15% O2, RULE 1150.1
NOx: 36 PPMV @ 15% O2, RULE 1110.2
CO: 2000 PPMV @ 15% O2, RULE 1110.2
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

PERMIT TO OPERATE

Permit No. G17023
A/N 515471

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE NO. 2, DEUTZ, MODEL TBG620V16K, SIXTEEN CYLINDER, 1850 BHP, LEAN BURN, LANDFILL GAS FIRED, TURBOCHARGED AND INTERCOOLED DRIVING AN ELECTRICAL GENERATOR.

2. RADIATOR WITH FANS.

3. ANCILLARY SKID WITH MUFFLER, HEAT EXCHANGER, FILTER, INTERCOOLER AND EXHAUST STACK.

Conditions:

1) OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]

2) THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3) OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE EMISSION OF RAW LANDFILL GAS TO THE ATMOSPHERE.
[RULE 1150.1]

4) A SAMPLING PORT SHALL BE INSTALLED IN THE LANDFILL GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A GAS SAMPLE.
[RULE 431.1]

5) A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE LANDFILL GAS SUPPLY LINE TO THE ENGINE.
[RULE 1303(b)(2)-OFFSETS]

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

6) THE HEATING VALUE OF LANDFILL GAS BURNED IN THIS ENGINE SHALL NOT EXCEED 18.3 MMBTU/HR, BASED ON A 1-HOUR AVERAGE. THE LANDFILL GAS FLOW RATE TO THE ENGINE, THE METHANE CONTENT OF THE LANDFILL GAS AND THE GROSS ELECTRICAL OUTPUT (KW) SHALL BE MEASURED EVERY 15-MINUTES. THE HEATING VALUE OF THE LANDFILL GAS SHALL BE CALCULATED BY TWO METHODS:

METHOD 1:
(MEASURED METHANE VOLUME FRACTION) X (MEASURED FLOW RATE) X (1,010 BTU/SCF)

METHOD 2:
(MEASURED GROSS KW OUTPUT) X (14,476 BTU/KW-HR)

THE OPERATOR SHALL KEEP A LOG OF THE AVERAGE HOURLY HEATING VALUE OF THE LANDFILL GAS BURNED, CALCULATED BY BOTH METHODS. THE OPERATOR SHALL INDICATE IN THE LOG THE METHOD USED TO DETERMINE COMPLIANCE.
[RULE 1303 (b)(2)-OFFSETS]

7) THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE ENGINE.
[RULE 1110.2]

8) THE ENGINE SHALL ONLY USE LANDFILL GAS AS A FUEL.
[RULE 204]

9) THE OPERATOR SHALL KEEP A MONTHLY OPERATING LOG THAT INCLUDES:
D. TOTAL HOURS OF OPERATION.
E. TOTAL CUBIC FEET OF LANDFILL GAS CONSUMED.
F. CUMULATIVE HOURS OF OPERATION SINCE THE LAST SOURCE TEST.
[RULE 1110.2]

10) THE OPERATOR SHALL REPORT ANY BREAKDOWN RESULTING IN EMISSIONS IN EXCESS OF RULE OR PERMIT LIMITS PER THE REQUIREMENTS OF SCAQMD RULE 1110.2.
[RULE 1110.2]

11) TWO SAMPLING PORTS MUST BE PROVIDED IN THE ENGINE EXHAUST DUCT, 8-10 DUCT DIAMETERS DOWNSTREAM AND TWO DUCT DIAMETERS UPSTREAM OF ANY FLOW DISTURBANCE, AND SHALL CONSIST OF TWO 4 INCH WELD NIPPLES WITH PLUGS, 90 DEGREES APART. AN EQUIVALENT METHOD FOR EMISSION SAMPLING MAY BE USED UPON APPROVAL OF THE AQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS MUST BE SUPPLIED BY THE APPLICANT.
[RULE 217]

FACILITY PERMIT TO OPERATE
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12) APPLICANT SHALL CONDUCT AN ANNUAL PERFORMANCE TEST OF THE ENGINE IN ACCORDANCE WITH AQMD TEST PROCEDURES AND FURNISH THE AQMD A WRITTEN RESULT OF SUCH PERFORMANCE TEST. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD 10 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A TEST PROTOCOL SHALL BE SUBMITTED FOR APPROVAL AT LEAST 60 DAYS PRIOR TO TESTING.

THE PERFORMANCE TEST SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO A TEST OF THE INLET AND EXHAUST GASES, FOR THE FOLLOWING:

A. METHANE
B. TOTAL NON-METHANE HYDROCARBONS
C. OXIDES OF NITROGEN (EXHAUST ONLY)
D. CARBON MONOXIDE (EXHAUST ONLY)
E. PARTICULATES (EXHAUST ONLY)
F. TOTAL SULFUR COMPOUNDS AS H2S (INLET ONLY)
G. FLOW RATE
H. OXYGEN
I. NITROGEN
J. CARBON DIOXIDE
K. MOISTURE
L. TEMPERATURE
M. TOXIC AIR CONTAMINANTS INCLUDING BENZENE, CHLOROBENZENE, 1,2-DICHLORORETHANE, 1,1-DICHLOROETHANE, DICHLOROMETHANE, TETRACHLOROETHYLENE, TETRACHLOROMETHANE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, TRICHLOROMETHANE, VINYL CHLORIDE AND XYLENES (EXHAUST ONLY).
N. GROSS ELECTRICAL POWER OUTPUT
O. ENGINE HOUR-METER READING

[RULE 1110.2, 1150.1, 218, 1303(a)(1)-BACT, 1303(b)(2)-OFFSETS, 1401]

13) THE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/HR
REACTIVE HYDROCARBONS	3.27
NITROGEN OXIDE	2.44
SULFUR DIOXIDE	0.31
CARBON MONOXIDE	10.2
PARTICULATES	0.32

[RULE 1303(b)(2)-OFFSETS]

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

14) REACTIVE HYDROCARBON EMISSIONS FROM THE ENGINE SHALL NOT EXCEED 391 PPMV AS METHANE, WITH NO OXYGEN CORRECTION.
[RULE 1303(a)(1)-BACT]

15) OXIDES OF NITROGEN EMISSIONS FROM THE ENGINE SHALL NOT EXCEED 102 PPMV, WITH NO OXYGEN CORRECTION.
[RULE 1303(a)(1)-BACT]

16) CARBON MONOXIDE EMISSIONS FROM THE ENGINE SHALL NOT EXCEED 697 PPMV, WITH NO OXYGEN CORRECTION.
[RULE 1303(a)(1)-BACT]

17) A CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) SHALL BE INSTALLED AND OPERATED TO MEASURE THE ENGINE EXHAUST CONCENTRATION FOR NOX AND O2 ON A DRY BASIS. IN ADDITION, THE SYSTEM SHALL CONVERT THE ACTUAL NOX CONCENTRATION TO A CORRECTED NOX CONCENTRATION AT 15% O2. THIS MONITORING SYSTEM SHALL COMPLY WITH THE REQUIREMENTS OF AQMD RULE 218. PRIOR TO INSTALLATION, THIS MONITORING SYSTEM SHALL BE APPROVED IN WRITING BY THE AQMD.
[RULE 218, 1110.2]

18) ALL RECORDS, SUCH AS MONTHLY OPERATING LOG, GROSS ELECTRICAL POWER OUTPUT, MAINTENANCE RECORDS AND PERFORMANCE TEST RESULTS, SHALL BE MAINTAINED FOR FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1150.1, 1303(b)(2)-OFFSETS]

19) THIS ENGINE SHALL NOT BE OPERATED IN SUCH A MANNER AS TO UNREASONABLY INTERFERE WITH THE OWNER'S/OPERATOR'S ABILITY TO COMPLY WITH AQMD RULE 1150.1 OR ANY OTHER AQMD RULE LIMITING LANDFILL GAS MIGRATION OR SURFACE EMISSIONS.
[RULE 1150.1]

Emissions and Requirements:

20) THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

NMOC: 20 PPMV AS HEXANE @ 3% O2 OR 98% WEIGHT REDUCTION, RULE 1150.1, 1303(a)(1)-BACT, 40CFR60 SUBPART WWW, 40CFR63 SUBPART AAAA
VOC: 40 PPMV AS CARBON @ 15% O2, RULE 1110.2
METHANE: 3000 PPMV @ 15% O2, RULE 1150.1
NOx: 36 PPMV @ 15% O2, RULE 1110.2
CO: 2000 PPMV @ 15% O2, RULE 1110.2
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

Periodic Monitoring:

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

   FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

   FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

   [RULE 3004 (a) (4)]

Emissions And Requirements:

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

   VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS
   VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

   VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765

FACILITY PERMIT TO OPERATE
NM MILLIKEN GENCO, LLC

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
486800	1110.2

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 · www.aqmd.gov

Facility ID: 129661
Date: March 6, 2012

COMPANY NAME: NM MILLIKEN GENCO LLC
MAILING ADDRESS: 3005 DOUGLAS BLVD., STE. 105
ROSEVILLE, CA 95661

ATTENTION: MR. ANTHONY J. FALBO, VP & GENERAL MANAGER

APPLICATION NUMBER: **486800**

RULE 1110.2 (f) (1) (D) INSPECTION AND MONITORING (I & M) PLAN FOR THE FACILITY LOCATED AT 2050 S. MILLIKEN AVENUE, ONTARIO, CA 91761.

Please refer to the application you submitted for the evaluation of your Inspection and Monitoring (I & M) plan under District Rule 1110.2 (f) (1) (D), for the facility described above.

The Rule 1110.2 Inspection & Monitoring plan you submitted has been APPROVED.

A copy of your approved plan, together with any addendum, statements or declarations you provided during the evaluation of your plan, is attached. In accordance with Rule 1110.2 (f)(1)(D)(ix), any change in equipment, control equipment, operating conditions or emission limits will require that you submit an application to the District for the revision of your I & M plan.

If you have any questions about this approval, please call Mr. Ray Ronquillo at (909) 396-3049.

Very truly yours,

Charles Tupac, P.E.
Air Quality and Compliance Supervisor
Refinery and Waste Management Unit

Enclosure(s)

FORTISTAR Methane Group
NM Milliken Genco Energy LLC.

Rule 1110.2 Inspection and Monitoring Plan

1.0 Introduction:

The South Coast Air Quality Management District (SCAQMD) modified Rule 1110.2 in February 2008. This rule applies to Internal Combustion Engines (ICEs) that are rated higher than 50 HP. The modified version of this rule included several new requirements including the requirement for an Inspection and Monitoring (I&M) Plan for ICEs that met certain criteria. ICEs that do not have a continuous emission monitoring system (CEMS) for NOx and CO are required to implement a SCAQMD approved I&M Plan to assure continued compliance of the engines between the required annual source tests.

The ICEs at NM Milliken Genco Energy LLC. are equipped with a NOx CEMS but do not have CEMS for CO. Therefore, an I&M Plan focused on CO monitoring is required for the site.

Rule 1110.2 states that an I&M Plan, if required, be submitted to the SCAQMD by August 1, 2008. The approved plan will be effective December 1, 2008. As required by the Rule, NM Milliken Genco Energy LLC. is submitting a completed form 400-A, a compliance plan for CO emissions and a check in the amount of $505.35 towards filing and review fees as required by Rule 306.

2.0 Facility Description:

NM Milliken Genco Energy LLC. is located at 2050 S. Milliken Avenue, Ontario, California and is identified by the SCAQMD with Facility ID 129661. Two landfill gas fired ICEs are being operated at this facility. A Title V permit was issued by the SCAQMD for this facility on December 21, 2007. The facility is current with its reporting as required by the Title V permit.

3.0 Inspection and Monitoring Plan:

3.1 Engine Parameters affecting CO emissions:

Rule 1110.2 requires identification of engine operating parameters necessary to keep pollutant concentrations within rule limits. CO emissions from ICEs at NM Milliken Genco LLC. can be gauged by reviewing the exhaust temperature and the percent oxygen data. Both these parameters are/will be recorded continuously for the engines using a SCADA system.

An operating range will be established based on exhaust stack temperature and oxygen data recorded during the most recent compliant annual source test. This range will be set at + or – 15% of the average concentrations measured during the source test. Parameters outside the operating range will be considered to potentially cause an exceedence of CO emissions at the engines.

3.2 Quarterly Emission Checks:

The Rule requires all lean burn engines equipped with a NOx CEMS subject to a CO limit more stringent than 2000 ppmvd to perform quarterly or every 2000 hour CO emissions checks. The operator can chose the limit that results in the later date for testing. The portable analyzer used for this testing shall be calibrated, maintained and operated in accordance with manufacturer's specifications and recommendations. The SCAQMD is in the process of preparing a Protocol for Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from the Stationary Engines for ICEs subject to Rule 1110.2. This Protocol, when available and finalized, shall be followed for quarterly CO emission checks.

NM Milliken Genco Energy LLC. plans to utilize a portable emission analyzer (such as a COSA Model 704 or an ECOM) for quarterly CO emission monitoring. The specification for this analyzer will be maintained as Attachment A to this I&M Plan (as a placeholder, an ECOM information sheet is provided). Further, an experienced, SCAQMD trained operator will perform the emission check each quarter. SCAQMD is in the process of developing a training program for operators for this purpose. Once available, operators responsible for quarterly testing will ensure they get certified by SCAQMD as required.

3.3 Daily Monitoring

Using the existing proprietary SCADA system at the facility, operators will record the following parameters on a daily basis:

1. Engine load
2. Fuel flowrate
3. Engine elapsed time meter operating hours
4. Set points (Maximum and Minimum) and acceptable range of percent Oxygen
5. Set points (Maximum and Minimum) and acceptable range of exhaust temperature and
6. Operating hours since last CO emission check

3.4 Procedures for Breakdown/Malfunction Events:

The procedures mentioned in Rule 1110.2 and clarified in the compliance guide will be followed during breakdown and malfunctions. Specifically;

1. For breakdowns resulting in rule violations or exceedence of permitted CO emission limits, a notification will be made to AQMD as required by the R1110.2 Periodic Monitoring Protocol. For excess CO emissions recorded during routine quarterly emission checks, the operator will immediately retest the engine with the portable analyzer to confirm the first reading obtained. If the reading is confirmed to be a violation, an attempt will be made to expeditiously resolve the problem within 24 hours of detection and conduct an emissions check to confirm compliance. If trouble shooting is not successful, the ICE will be shutdown awaiting diagnostics and repair.

2. For malfunctions that do not result in excess CO emissions, the operator will attempt to correct the problem and conduct an emissions check within 48 hours of initial knowledge of the problem using the calibrated portable analyzer mentioned in 3.2 above.

Operators will follow manufacture recommended procedures, detailed in the Operation and Maintenance (O&M) Manual, during trouble shooting and maintenance of the ICEs.

3.5 Preventative Maintenance

Operators at NM Milliken Genco Energy LLC. conduct routine maintenance of the ICEs according to manufacturer's recommendations. In addition to the annual major maintenance of the ICEs, daily, weekly and quarterly maintenance is conducted. The ICEs are maintained constantly to ensure that they function as designed and in compliance with the emission limits dictated by SCAQMD rules and permit limits.

3.6 Reporting Requirements

Oxygen and exhaust temperature are being used as a surrogate for CO emission monitoring. If these parameters exceed the operating range identified in 3.1 above (+ or – 15% of that recorded during the most recent compliant source test) or CO emission checks have indicated exceedences, the operator shall comply with the following requirements:

a. For excess emissions caused by a breakdown, we will notify AQMD at 1-800-CUT-SMOG within one hour of learning of the breakdown in the same manner required by paragraph (b)(1) of Rule 430. This report is not required if there is no breakdown.

b. Within 24 hours or the end of an operating cycle, whichever is sooner; we will correct the problem and demonstrate compliance with another emission check or shut down the engine for diagnostics and repair.

c. Comply with all other requirements of Rule 1110.2 (f)(1)(H) if there was a breakdown.

d. Since NM Milliken is a Title V facility, we will also notify AQMD at 1-800-CUT-SMOG within 72 hours of learning of learning of any emission exceedance and submit a written report with 14 days using Form 500-N Deviations, Emergencies & Breakdowns.

This rule also requires the submittal of Quarterly Compliance Reports in a format approved by SCAQMD. Such reports are required to be submitted within 15 days of the end of the calendar quarter. Attachment C presents the form developed by SCAQMD for Quarterly Reporting – Rule 1110.2 – Quarterly Report for Stationary Engines. NM Milliken Genco Energy LLC. is in compliance with this reporting requirement and such quarterly reporting will continue.

ATTACHMENT A

PORTABLE EMISSIONS ANALYZER BROCHURE

ECOM A-PLUS

Portable Emission Analyzer

- Measures O_2, CO, NO_X, "Low NO_X", SO_2, & Combustibles
- CO_2, Efficiency & Excess Air Calculations
- Stack Temperature and Draft Measurement
- Large backlit LCD display
- On - board impact printer
- Thermoelectric Gas cooler & automatic moisture drain
- In-line flowmeter with 2.5+ lpm pump
- Automatic purge / Sensor overrange protection
- Advanced DAS 2.0 software compatible

Both the EPA / ETV (Environmental Technology Verification) program and the South Coast Air Quality Management District, (SCAQMD) have documented the exceptional performance of the A-PLUS. The unit also meets the criteria of the EPA CTM protocols for portable EC based analyzers and EPA's 40CFR Part 60 Update of Continuous Instrumental Test Methods, Final Rule.

The ECOM A-PLUS portable emission analyzer offers affordable "compliance level" performance in a rugged, easy to use package. The A-PLUS features an advanced Sample Conditioning system, incorporating an optional heated sample line, thermoelectric Peltier Gas Cooler, and peristaltic pump for continuous moisture removal.

The A-PLUS can be fitted with sensors to measure O_2, CO, NO, NO_2, SO_2, and Combustibles, along with gas and ambient temperatures, stack draft & pressure, plus calculations of CO_2, efficiency, dew point and excess air. A special Low NOx version of the A-PLUS is designed for single digit NO_X measurements with resolution to 0.1 PPM! In addition, the A-PLUS can be fitted with USB for use with ECOM's Advanced DAS Compliance Testing Software for complete emissions analysis.

Housed in a high quality, aluminum reinforced case, the A-PLUS comes complete with a standard sample line and probe, internal battery, AC power cord, thermocouple, spare filters, extra printer paper, quick reference User Card, and Operation Manual.

ETV

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Technical Specifications

ECOM A-PLUS

MEASUREMENT (KEY)	RANGE	ACCURACY	RESOLUTION	SENSOR LIFE	SENSOR TYPE
Oxygen (O)	0-21% vol.	± 2% Measured	0.1% vol.	2 Years	Electrochemical
Carbon Monoxide (C)	0-4,000 ppm	± 2% Measured	1 ppm	3 Years	Electrochemical
Carbon Monoxide (V)	0-40,000 ppm	± 2% Measured	1 ppm	3 Years	Electrochemical
Nitric Oxide (N)	0-4,000 ppm	± 2% Measured	1 ppm	3 Years	Electrochemical
Nitric Oxide (.N)	0-400 ppm	± 2% Measured	0.1 ppm	3 Years	Electrochemical
Nitrogen Dioxide (X)	0-500 ppm	± 2% Measured	1 ppm	3 Years	Electrochemical
Nitrogen Dioxide (.X)	0-50 ppm	± 2% Measured	0.1 ppm	3 Years	Electrochemical
Sulfur Dioxide (S)	0-5,000 ppm	± 2% Measured	1 ppm	3 Years	Electrochemical
Combustibles (H)	0-6.00 % vol.	± 2% Measured	0.01% vol	5 Years	Pellister
Gas Temperature	32-1800 F	± 2% Measured	1 deg F	10 Years	NiCrNi
Ambient Temperature	0-250 F	± 2% Measured	1 deg F	10 Years	Semi-conductor
Draft / Pressure	± 40" H_2O	± 2% Measured	0.1% H_2O	10 Years	DMS
O_2 Correction	0-20% Oxygen				
Smoke Scale	0-9				
Carbon Dioxide CO_2	0-CO_2 max of fuel	Calculated			
Efficiency	0-99.9%	Calculated			
Excess Air (Lambda)	1-infinity	Calculated			

*ACCURACY: When calibrated prior to use per ECOM America, Ltd. specifications.

Physical

Instrument: 16" x 10" x 12" Aluminum Carry Case
Probe: 13" Length x 3/8" OD Inconel w/ Pistol Grip Handle*
Sample Line: 15' high-temp flex hose w/thermocouple wire*
Weight: 28 lbs.

Electrical

AC: 110/220V 50/60Hz (User selectable)
Batteries: 12V lead-acid, 2-3 hour life
Pump: Flow rate of 2.5 lpm
Display: Backlit, adjustable contrast & zoom, displays all parameters simultaneously.

Operating Temperature

Core temperature of the instrument is monitored continuously. Internal Temperature Compensation software assures accurate sensor response over the range of 20°F to 104°F.

*Optional probe & sample line lengths are available.

ECOM America Ltd. has built an outstanding reputation in the industries we serve by providing a high quality product and responsive technical support to our customers. We maintain a large inventory of analyzers and parts to assure fast delivery of new items and quick turnaround on service. Always Expect Responsive Customer Support & Service from ECOM!

Order Information

ECOM A-PLUS

A-PLUS is available with 2-5 sensors. Common configurations include:

2-3 Gas	4 Gas	5 Gas
OC	OCNX	OCVNX
OCN	OC.N.X	OCV.N.X
		OC.N.XH
		OC.N.XS
		OCNXS
		OCNXH

Consumables:
Water Trap / Particulate Filters, NO_x / SO_2 Filter Media, Printer Paper / Printer Ribbon

Parts & Accessories:
Transport / Shipping Cases, Refillable Calibration Gas Bottles, Heated Sample Line, Data Acquisition Software

ECOM America, Ltd.
1628 Oakbrook Drive
Gainesville, GA 30507
Toll Free: **877.326.6411**
Tel: 770.532.3280
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ATTACHMENT B

Rule 1110.2 –Quarterly Report for Stationary Engines

South Coast Air Quality Management District

Rule 1110.2 - Quarterly Report for Stationary Engines

Due 15 days after the end of each calendar quarter (January 15, April 15, July 15, October 15)

***Fax** to 909-396-3343, or **Mail** to SCAQMD, Attention: Enforcement, P.O. Box 4941, Diamond Bar, CA 91765-0941*

Quarter Ended (mm/dd/yyyy) _____ Report Date _____ Page Number ___ of ___

If there were no reportable incidents, enter "None" in box to right, complete Sections I and IV and submit form. ☐

Section I - Facility Information

Permit Issued to (business name of operator that appears on permit): _____ Valid AQMD Facility ID (available on permit or invoice issued by AQMD): _____

Facility Address: _____

City: _____ State: CA Zip Code: _____

Mailing Address (if different): _____

City: _____ State: _____ Zip Code: _____

Name, title and phone number of the person to contact for further information:

Name _____ Title _____ Phone _____

Section II - Previously Reported Engine Breakdowns and Title V Deviations During the Quarter (Attach additional pages if needed.)

Engine Application No.	Type of Incident*	Date of Incident	Date of Written Report

*Enter one of the following: "Breakdown", "Title V Deviation", or "Title V Emergency".

Section III - Other Reportable Incidents During the Quarter (Summarize here, attach additional pages if needed, and complete Section V.)

Engine Application No.	Type of Incident**	Date Operator Learned of Incident

**Enter one of the following: "Air-to-Fuel Ratio Controller Fault or Alarm", "Parameter Out of Range", "Excess Emission Check" or "Other".

Section IV - Certification Statement

I certify under penalty of law that based on information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments and other materials are true, accurate and complete.

For Title V Facilities Only: ☐ I also certify under penalty of law that I am the responsible official for this facility as defined in AQMD Regulation XXX.

Signature _____ Title _____ Date _____

Type or Print Name _____ Phone _____ Fax _____

Address _____ City _____ State _____ Zip Code _____

Rule 1110.2 Quarterly Report for Stationary Engines

Facility ID: _____ Quarter Ended (mm/dd/yyyy): _____ Page Number ___ of ___

Section V - Information Regarding Incidents Reported in Section III:

Engine Application No. _____ Engine Description _____

Type of Incident* _____

Incident Description _____

Cause (to extent known) _____

Corrective Action Taken _____

Dates and Times of Events

Incident Began (to extent known) _____ Operator Discovered _____

Corrective Action Started _____ Compliance Achieved _____

Engine Shutdown _____ Engine Restarted _____

	O2, % (dry)	NOx, ppmvd @ 15% O2	CO, ppmvd @ 15% O2
Portable Analyzer Data before Corrective Action (if any)			
Portable Analyzer Data after Corrective Action			

Engine Application No. _____ Engine Description _____

Type of Incident* _____

Incident Description _____

Cause (to extent known) _____

Corrective Action Taken _____

Dates and Times of Events

Incident Began (to extent known) _____ Operator Discovered _____

Corrective Action Started _____ Compliance Achieved _____

Engine Shutdown _____ Engine Restarted _____

	O2, % (dry)	NOx, ppmvd @ 15% O2	CO, ppmvd @ 15% O2
Portable Analyzer Data before Corrective Action (if any)			
Portable Analyzer Data after Corrective Action			

**Enter one of the following: "Air-to-Fuel Ratio Controller Fault or Alarm", "Parameter Out of Range", "Excess Emission Check" or "Other".

(Attach additional pages if needed.)