

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY
AIR QUALITY DIVISION**

April 26, 2022

**PERMIT TO INSTALL
64-10G**

ISSUED TO
LG Energy Solution Michigan, Inc.

LOCATED AT
875 East 48th Street
Holland, Michigan 49423

IN THE COUNTY OF
Holland

STATE REGISTRATION NUMBER
P0087

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environment, Great Lakes, and Energy. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: April 7, 2022	
DATE PERMIT TO INSTALL APPROVED: April 26, 2022	SIGNATURE:
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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COMMON ACRONYMS

AQD	Air Quality Division
BACT	Best Available Control Technology
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
COMS	Continuous Opacity Monitoring System
Department/department/EGLE	Michigan Department of Environment, Great Lakes, and Energy
EU	Emission Unit
FG	Flexible Group
GACS	Gallons of Applied Coating Solids
GC	General Condition
GHGs	Greenhouse Gases
HVLP	High Volume Low Pressure*
ID	Identification
IRSL	Initial Risk Screening Level
ITSL	Initial Threshold Screening Level
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MAERS	Michigan Air Emissions Reporting System
MAP	Malfunction Abatement Plan
MSDS	Material Safety Data Sheet
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standard for Hazardous Air Pollutants
NSPS	New Source Performance Standards
NSR	New Source Review
PS	Performance Specification
PSD	Prevention of Significant Deterioration
PTE	Permanent Total Enclosure
PTI	Permit to Install
RACT	Reasonable Available Control Technology
ROP	Renewable Operating Permit
SC	Special Condition
SCR	Selective Catalytic Reduction
SNCR	Selective Non-Catalytic Reduction
SRN	State Registration Number
TBD	To Be Determined
TEQ	Toxicity Equivalence Quotient
USEPA/EPA	United States Environmental Protection Agency
VE	Visible Emissions

*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

POLLUTANT / MEASUREMENT ABBREVIATIONS

acfm	Actual cubic feet per minute
BTU	British Thermal Unit
°C	Degrees Celsius
CO	Carbon Monoxide
CO ₂ e	Carbon Dioxide Equivalent
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
°F	Degrees Fahrenheit
gr	Grains
HAP	Hazardous Air Pollutant
Hg	Mercury
hr	Hour
HP	Horsepower
H ₂ S	Hydrogen Sulfide
kW	Kilowatt
lb	Pound
m	Meter
mg	Milligram
mm	Millimeter
MM	Million
MW	Megawatts
NMOC	Non-Methane Organic Compounds
NO _x	Oxides of Nitrogen
ng	Nanogram
PM	Particulate Matter
PM10	Particulate Matter equal to or less than 10 microns in diameter
PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
pph	Pounds per hour
ppm	Parts per million
ppmv	Parts per million by volume
ppmw	Parts per million by weight
psia	Pounds per square inch absolute
psig	Pounds per square inch gauge
scf	Standard cubic feet
sec	Seconds
SO ₂	Sulfur Dioxide
TAC	Toxic Air Contaminant
Temp	Temperature
THC	Total Hydrocarbons
tpy	Tons per year
µg	Microgram
µm	Micrometer or Micron
VOC	Volatile Organic Compounds
yr	Year

GENERAL CONDITIONS

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. **(R 336.1201(1))**
2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **(R 336.1201(4))**
3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to Rule 210 (R 336.1210), operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. **(R 336.1201(6)(b))**
4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. **(R 336.1201(8), Section 5510 of Act 451, PA 1994)**
5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to Rule 219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of Rule 219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environment, Great Lakes, and Energy. **(R 336.1219)**
6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. **(R 336.1901)**
7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal condition or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). **(R 336.1912)**
8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of Rule 301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with Rule 303 (R 336.1303). **(R 336.1301)**
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). **(R 336.1370)**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001. **(R 336.2001)**

EMISSION UNIT SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCATMIX1	Cathode material metering and mixing line consisting of product collectors, weigh and check scales, and a mixing tank to produce a cathode slurry. Particulate emissions are controlled by a common dust collector.	03/2012	FGELECTRODEMIX, FGTACS
EUANOMIX1	Anode material metering and mixing line consisting of product collectors, weigh and check scales, and a mixing tank to produce an anode slurry. Particulate emissions are controlled by a dust common collector.	03/2012	FGELECTRODEMIX, FGTACS
EUCATMIX2	Cathode material metering and mixing line consisting of product collectors, weigh and check scales, and a mixing tank to produce a cathode slurry. Particulate emissions are controlled by a common dust collector.	03/2012	FGELECTRODEMIX, FGTACS
EUANOMIX2	Anode material metering and mixing line consisting of product collectors, weigh and check scales, and a mixing tank to produce an anode slurry. Particulate emissions are controlled by a common dust collector.	03/2012	FGELECTRODEMIX, FGTACS
EUCATSLRYAPP1	Cathode slurry coating line. Emissions are controlled by an absorption column.	03/2012	FGSLRYAPP
EUANOSLRYAPP1	Anode slurry coating line.	03/2012	FGSLRYAPP
EUCATSLRYAPP2	Cathode slurry coating line. Emissions are controlled by an absorption column.	07/2019	FGSLRYAPP
EUANOSLRYAPP2	Anode slurry coating line.	07/2019	FGSLRYAPP
EUSVNTRCVY	N-methyl-2-pyrrolidone (NMP) recovery system utilizing a distillation column to recover NMP lost from the slurry application lines for re-use in the material metering and mixing lines.	06/2012	FGSLRYAPP
EUCATHSLIT1	Cathode slitting line. Particulate emissions are controlled by a dust collector.	11/2011	FGSLITTING, FGTACS
EUANOHSLIT1	Anode slitting line. Particulate emissions are controlled by a dust collector.	11/2011	FGSLITTING, FGTACS
EUCATHSLIT2	Cathode slitting line. Particulate emissions are controlled by a dust collector.	11/2011	FGSLITTING, FGTACS
EUANOHSLIT2	Anode slitting line. Particulate emissions are controlled by a dust collector.	11/2011	FGSLITTING, FGTACS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCATHSLIT3	Cathode slitting line. Particulate emissions are controlled by a dust collector.	11/2011	FGSLITTING, FGTACS
EUANOHSLIT3	Anode slitting line. Particulate emissions are controlled by a dust collector.	11/2011	FGSLITTING, FGTACS
EUCATNOTCH1	Cathode notching line (ID # 1-1 Cat). Particulate emissions are controlled by a dust collector.	08/2011	FGNOTCHING, FGTACS
EUANONOTCH1	Anode notching line (ID # 1-1 Ano). Particulate emissions are controlled by a dust collector.	08/2011	FGNOTCHING, FGTACS
EUCATNOTCH2	Cathode notching line (ID # 1-2 Cat). Particulate emissions are controlled by a dust collector.	08/2011	FGNOTCHING, FGTACS
EUANONOTCH2	Anode notching line (ID # 1-2 Ano). Particulate emissions are controlled by a dust collector.	08/2011	FGNOTCHING, FGTACS
EUCATNOTCH7	Cathode notching line (ID # 4-1 Cat). Particulate emissions are controlled by a dust collector.	05/2018	FGNOTCHING, FGTACS
EUANONOTCH7	Anode notching line (ID # 4-1 Ano). Particulate emissions are controlled by a dust collector.	05/2018	FGNOTCHING, FGTACS
EUCATNOTCH8	Cathode notching line (ID # 4-2 Cat). Particulate emissions are controlled by a dust collector.	05/2018	FGNOTCHING, FGTACS
EUANONOTCH8	Anode notching line (ID # 4-2 Ano). Particulate emissions are controlled by a dust collector.	05/2018	FGNOTCHING, FGTACS
EUCATNOTCH9	Cathode notching line (ID # 5-1 Cat). Particulate emissions are controlled by a dust collector.	2019	FGNOTCHING, FGTACS
EUANONOTCH9	Anode notching line (ID # 5-1 Ano). Particulate emissions are controlled by a dust collector.	2019	FGNOTCHING, FGTACS
EUCATNOTCH10	Cathode notching line (ID # 5-2 Cat). Particulate emissions are controlled by a dust collector.	2019	FGNOTCHING, FGTACS
EUANONOTCH10	Anode notching line (ID # 5-2 Ano). Particulate emissions are controlled by a dust collector.	2019	FGNOTCHING, FGTACS
EUCATNOTCH101	Cathode notching line (ID # 5-3 Cat). Particulate emissions are controlled by a dust collector.	2019	FGNOTCHING, FGTACS
EUANONOTCH101	Anode notching line (ID # 5-3 Ano). Particulate emissions are controlled by a dust collector.	2019	FGNOTCHING, FGTACS
EUCATNOTCH201	Cathode notching line (ID # 2 Cat). Particulate emissions are controlled by a dust collector.	02/2020	FGNOTCHING, FGTACS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUANONOTCH201	Anode notching line (ID # 2 Ano). Particulate emissions are controlled by a dust collector.	02/2020	FGNOTCHING, FGTACS
EUCATNOTCH301	Cathode notching line (ID # 3 Cat). Particulate emissions are controlled by a dust collector.	02/2020	FGNOTCHING, FGTACS
EUANONOTCH301	Anode notching line (ID # 3 Ano). Particulate emissions are controlled by a dust collector.	02/2020	FGNOTCHING, FGTACS
EUCATNOTCHSHRED	Notching line shredder for recovery of foil material from cathode notching. Particulate emissions are controlled by a dust collector.	TBD	FGNOTCHING, FGTACS
EUANONOTCHSHRED	Notching line shredder for recovery of foil material from anode notching. Particulate emissions are controlled by a dust collector.	TBD	FGNOTCHING, FGTACS
EUELECTROLYTE1	Cell assembly operations including addition of electrolyte material to pouches and sealing of pouches.	07/2011	FGELECTROLYTE
EUELECTROLYTE2	Cell assembly operations including addition of electrolyte material to pouches and sealing of pouches.	07/2011	FGELECTROLYTE
EUELECTROLYTE3	Cell assembly operations including addition of electrolyte material to pouches and sealing of pouches.	07/2011	FGELECTROLYTE
EUELECTROLYTE4	Cell assembly operations including addition of electrolyte material to pouches and sealing of pouches.	07/2011	FGELECTROLYTE
EUELECTROLYTE5	Cell assembly operations including addition of electrolyte material to pouches and sealing of pouches.	07/2011	FGELECTROLYTE
EUHWBOIL2	Maximum 12.6 MMBtu/hr natural gas-fired boiler.	05/2011	FGDCBOILERS
EUHWBOIL3	Maximum 12.6 MMBtu/hr natural gas-fired boiler.	05/2011	FGDCBOILERS
EUHWBOIL4	Maximum 12.6 MMBtu/hr natural gas-fired boiler.	05/2011	FGDCBOILERS
EUHOBOIL1	Maximum 16.75 MMBtu/hr natural gas-fired boiler.	07/2011	FGDCBOILERS
EUHOBOIL2	Maximum 16.75 MMBtu/hr natural gas-fired boiler.	07/2011	FGDCBOILERS
EUEMERGGEN1	Maximum 15 MMBtu/hr diesel-fired emergency generator.	05/2011	FGEMERGENCYGEN S
EUEMERGGEN2	Maximum 15 MMBtu/hr diesel-fired emergency generator.	05/2011	FGEMERGENCYGEN S
EUDEGAS	Degassing process utilizing vacuum pumps to degas cells after the charging and aging process. Emissions are vented to the in-plant environment.	06/2011	NA
EUSOLVENT	Facility-wide usage of cleaning solvents and the operation of 42 inkjet printers.	06/2011/ TBD	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUHHWBBOILER1	Maximum 2.5 MMBtu/hr natural gas-fired boiler	05/2011	NA
EUSRSBOILER1	Maximum 3.5 MMBtu/hr natural gas-fired boiler	05/2011	NA
EUSRSBOILER2	Maximum 3.5 MMBtu/hr natural gas-fired boiler	05/2011	NA
EUANOMIXII1	Phase II #1 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII2	Phase II #2 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII3	Phase II #3 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII4	Phase II #4 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII5	Phase II #5 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII6	Phase II #6 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII7	Phase II #7 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII8	Phase II #8 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII9	Phase II #9 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII10	Phase II #10 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOMIXII11	Phase II #11 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUANOMIXII12	Phase II #12 anode material metering and mixing line to produce an anode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII1	Phase II #1 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII2	Phase II #2 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII3	Phase II #3 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII4	Phase II #4 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII5	Phase II #5 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII6	Phase II #6 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII7	Phase II #7 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII8	Phase II #8 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUCATMIXII9	Phase II #9 cathode material metering and mixing line to produce a cathode slurry. Particulate emissions are controlled by dust collectors.	TBD	FGELECTRODEMIXII
EUANOCOATERII1	Phase II #1 anode slurry coating line.	TBD	FGSLRYAPP II
EUANOCOATERII2	Phase II #2 anode slurry coating line.	TBD	FGSLRYAPP II
EUANOCOATERII3	Phase II #3 anode slurry coating line.	TBD	FGSLRYAPP II
EUCATCOATERII1	Phase II #1 cathode slurry coating line. VOC emissions are controlled by N-methyl-2-pyrrolidone (NMP) Recovery System.	TBD	FGSLRYAPP II

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUCATCOATERII2	Phase II #2 cathode slurry coating line. VOC emissions are controlled by N-methyl-2-pyrrolidone (NMP) Recovery System.	TBD	FGSLRYAPPII
EUCATCOATERII3	Phase II #3 cathode slurry coating line. VOC emissions are controlled by N-methyl-2-pyrrolidone (NMP) Recovery System.	TBD	FGSLRYAPPII
EUANOHSPLITII1	Phase II #1 anode material half-slitter. Particulate emissions are controlled by a dust collector. Dust collectors do not vent to ambient air.	TBD	FGSLITTINGII
EUANOHSPLITII2	Phase II #2 anode material half-slitter. Particulate emissions are controlled by a dust collector. Dust collectors do not vent to ambient air.	TBD	FGSLITTINGII
EUANOHSPLITII3	Phase II #3 anode material half-slitter. Particulate emissions are controlled by a dust collector. Dust collectors do not vent to ambient air.	TBD	FGSLITTINGII
EUCATHSLITII1	Phase II #1 cathode material slitting process. Particulate emissions are controlled by a dust collector. Dust collectors do not vent to ambient air.	TBD	FGSLITTINGII
EUCATHSLITII2	Phase II #2 cathode material slitting process. Particulate emissions are controlled by a dust collector. Dust collectors do not vent to ambient air.	TBD	FGSLITTINGII
EUCATHSLITII3	Phase II #3 cathode material slitting process. Particulate emissions are controlled by a dust collector. Dust collectors do not vent to ambient air.	TBD	FGSLITTINGII
EUANONOTCHII1	Phase II #1 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII2	Phase II #12 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII3	Phase II #3 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII4	Phase II #4 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII5	Phase II #5 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII6	Phase II #6 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII7	Phase II #7 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUANONOTCHII8	Phase II #8 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII9	Phase II #9 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUANONOTCHII10	Phase II #10 anode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII1	Phase II #1 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII2	Phase II #2 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII3	Phase II #3 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII4	Phase II #4 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII5	Phase II #5 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII6	Phase II #6 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII7	Phase II #7 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII8	Phase II #8 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII9	Phase II #9 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUCATNOTCHII10	Phase II #10 cathode notching line. Particulate emissions controlled by a scrap collector and cyclone.	TBD	FGNOTCHINGII
EUELECTROLYTEII 1	Phase II #1 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns.	TBD	FGELECTROLYTEII
EUELECTROLYTEII 2	Phase II #2 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns.	TBD	FGELECTROLYTEII

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUELECTROLYTEII 3	Phase II #3 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns.	TBD	FGELECTROLYTEII
EUELECTROLYTEII 4	Phase II #4 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns,	TBD	FGELECTROLYTEII
EUELECTROLYTEII 5	Phase II #5 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns,	TBD	FGELECTROLYTEII
EUELECTROLYTEII 6	Phase II #6 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns,	TBD	FGELECTROLYTEII
EUELECTROLYTEII 7	Phase II #7 cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions controlled by absorption columns,	TBD	FGELECTROLYTEII
EUCESSII	Phase II Electrolyte supply tank. VOC emissions controlled by absorption column.	TBD	FGELECTROLYTEII
EUBOILHOI1	Phase II 25.1 MMBtu/hr hot oil boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHOI2	Phase II 25.1 MMBtu/hr hot oil boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHOI3	Phase II 25.1 MMBtu/hr hot oil boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHOI4	Phase II 25.1 MMBtu/hr hot oil boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHOI5	Phase II 25.1 MMBtu/hr hot oil boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHOI6	Phase II 25.1 MMBtu/hr hot oil boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILSTEAMII1	Phase II 10.5 MMBtu/hr steam boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILSTEAMII2	Phase II 10.5 MMBtu/hr steam boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHWII1	Phase II 12 MMBtu/hr hot water boiler with low NO _x burner.	TBD	FGBOILERSII

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date / Modification Date	Flexible Group ID
EUBOILHWII2	Phase II 12 MMBtu/hr hot water boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHWII3	Phase II 12 MMBtu/hr hot water boiler with low NO _x burner.	TBD	FGBOILERSII
EUBOILHWII4	Phase II 12 MMBtu/hr hot water boiler with low NO _x burner.	TBD	FGBOILERSII
EUEMGENII1	Phase II 800 kW diesel emergency generator.	TBD	FGEMERGGENSII
EUEMGENII2	Phase II 800 kW diesel emergency generator.	TBD	FGEMERGGENSII
EUDEGASII	Phase II vacuum pump to degas cells after charging and aging process. Emissions controlled by absorption columns.	TBD	NA
EUSOLVENTII	Phase II usage of cleaning solvents and the operation of 54 inkjet printers.	TBD	NA

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1291.

**EUSOLVENT
EMISSION UNIT CONDITIONS**

DESCRIPTION

Facility-wide usage of cleaning solvents and the operation of 42 inkjet printers.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	12.45 tpy	12-month rolling time period as determined at the end of each calendar month	EUSOLVENT	SC VI.2	R 336.1225, R 336.1702(a)
2. Acetone (CAS No. 67-64-1)	12.37 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EUSOLVENT	SC VI.2	R 336.1224

II. MATERIAL LIMIT(S)

1. The permittee shall not use more than 2,000 gallons of IPA solution in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
2. The permittee shall not use more than 1,200 gallons of Domino Make Up solution in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
3. The permittee shall not use more than 200 gallons of Domino Wash solution in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
4. The permittee shall not use more than 200 gallons of Domino Ink solution in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
5. The permittee shall not use more than 3,750 gallons of acetone (CAS No. 67-64-1) in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month.¹ **(R 336.1224)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1224, R 336.1225, R 336.1702(a))**
2. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents, and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1224, R 336.1225, R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702)**
2. The permittee shall keep the following information on a monthly basis for EUSOLVENT:
 - a) The amount, in gallons, of IPA solution used and reclaimed per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - b) The amount, in gallons, of Domino Make Up solution used and reclaimed per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - c) The amount, in gallons, of Domino Wash solution used and reclaimed per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - d) The amount, in gallons, of Domino Ink solution used and reclaimed per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - e) The amount, in gallons, of acetone used and reclaimed per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - f) The VOC content, in wt%, of each solvent used.
 - g) VOC mass emission calculations determining the monthly emission rate in pounds per calendar month and in tons per calendar month.
 - h) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - i) Acetone (CAS No. 67-64-1) mass emission calculations determining the monthly emission rate in pounds per calendar month and in tons per calendar month.
 - j) Acetone (CAS No. 67-64-1) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**EUDEGAS
EMISSION UNIT CONDITIONS**

DESCRIPTION

Degassing process utilizing vacuum pumps to degas cells after the charging and aging process. Emissions are vented to the in-plant environment.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	5.67 tpy	12-month rolling time period as determined at the end of each calendar	EUDEGAS	SC VI.2	R 336.1225, R 336.1702 (a)

II. MATERIAL LIMIT(S)

1. The permittee shall not produce more than 28,000,000 cells in EUDEGAS per 12-month rolling time period, as determined at the end of each calendar month. (R 336.1205(3), R 336.1225, R 336.1702(a))

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1225, R 336.1702(a), R 336.1910)

2. The permittee shall keep the following information on a monthly basis for EUDEGAS:
- a) The number of cells produced.
 - b) The number of cells produced per 12-month rolling time period, as determined at the end of each calendar month.
 - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDEGAS	3	23	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

**EUSOLVENTII
EMISSION UNIT CONDITIONS**

DESCRIPTION

Phase II usage of cleaning solvents and the operation of 54 inkjet printers.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Single absorption column used to control five (5) acetone sinks.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	8.0 tpy	12-month rolling time period as determined at the end of each calendar month	EUSOLVENTII	SC VI.2	R 336.1225, R 336.1702(a)
2. Acetone (CAS No. 67-64-1)	15.0 tpy ¹	12-month rolling time period as determined at the end of each calendar month	EUSOLVENTII	SC VI.2	R 336.1224

II. MATERIAL LIMIT(S)

1. The permittee shall not use more than 713 gallons of IPA solution in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
2. The permittee shall not use more than 1,200 gallons of Domino Make Up solution in EUSOLVENTII per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
3. The permittee shall not use more than 200 gallons of Domino Wash solution in EUSOLVENTII per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
4. The permittee shall not use more than 200 gallons of Domino Ink solution in EUSOLVENTII per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
5. The permittee shall not use more than 11,900 gallons of acetone (CAS No. 67-64-1) in EUSOLVENT per 12-month rolling time period, as determined at the end of each calendar month.¹ **(R 336.1224)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall capture all waste materials and shall store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. **(R 336.1224, R 336.1225, R 336.1702(a))**
2. The permittee shall handle all VOC and/or HAP containing materials, including coatings, reducers, solvents, and thinners, in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. **(R 336.1224, R 336.1225, R 336.1702(a))**

3. The permittee shall recover and reclaim, recycle, or dispose of, in accordance with all applicable regulations, a minimum of 25 percent by weight of all acetone used for EUSOLVENTII. **(R 336.1224, R 336.1225)**
4. The permittee shall not operate EUSOLVENTII unless the absorption column is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each absorption column includes a minimum control efficiency of 98 percent (by weight). **(R 336.1224, R 336.1225, R 336.1910)**
5. The permittee shall not operate the acetone sinks in EUSOLVENTII unless the pressure drop across the absorption column is seven (7) inches of water or more but not more than (11) inches of water. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
6. The permittee shall not operate EUSOLVENTII unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the absorption columns is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the EUSOLVENTII absorption column on a continuous basis. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

1. Upon request of the AQD District Supervisor, the permittee shall verify the control efficiency across each absorption column by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702)**
2. The permittee shall record the pressure drop for the absorption column for the acetone sinks in EUSOLVENTII once per calendar day, while operating. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
3. The permittee shall monitor and record the pressure drop across the absorption column at least once on each calendar day EUSOLVENTII is operated, during operation, with instrumentation acceptable to the AQD District Supervisor. The permittee shall keep these records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1910)**
4. The permittee shall keep, in a satisfactory manner, all records of the carbon replacement for the absorption column on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
5. The permittee shall keep the following information on a monthly basis for EUSOLVENTII:
 - a) The amount, in gallons, of IPA solution used per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - b) The amount, in gallons, of Domino Make Up solution used per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - c) The amount, in gallons, of Domino Wash solution used per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - d) The amount, in gallons, of Domino Ink solution used per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - e) The amount, in gallons, of acetone used and reclaimed per calendar month and per 12-month rolling time period as determined at the end of each calendar month.
 - f) The VOC content, in wt%, of each solvent used.
 - g) VOC mass emission calculations determining the monthly emission rate in pounds per calendar month and in tons per calendar month.
 - h) VOC mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - i) Acetone (CAS No. 67-64-1) mass emission calculations determining the monthly emission rate in pounds per calendar month and in tons per calendar month.
 - j) Acetone (CAS No. 67-64-1) mass emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.
 - k) Calculation of the percentage of acetone recovered, reclaimed, recycled, or disposed of.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUSOLVENTII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVSOLVENTII	20	14.5	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**EUDEGASII
EMISSION UNIT CONDITIONS**

DESCRIPTION

Phase II vacuum pump to degas cells after charging and aging process. Emissions controlled by absorption columns.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Two (2) absorption columns.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	0.22 tpy	12-month rolling time period as determined at the end of each calendar month	EUDEGASII	SC VI.2	R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

1. The permittee shall not produce more than 55,188,000 cells in EUDEGAS per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUDEGASII unless the associated absorption columns are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each absorption columns includes a minimum control efficiency of 98 percent (by weight). **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate EUDEGASII unless the pressure drop across each absorption column is seven (7) inches of water or more but not nor more than (11) inches of water. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall not operate EUDEGASII unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the absorption columns is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District

Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the EUDEGASII absorption columns on a continuous basis. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

1. Upon request of the AQD District Supervisor, the permittee shall verify the control efficiency across each absorption column by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall monitor and record the pressure drop across each absorption column at least once on each calendar day EUDEGASII is operated, during operation, with instrumentation acceptable to the AQD District Supervisor. The permittee shall keep these records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall keep, in a satisfactory manner, all records of the carbon replacement for the absorption columns on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall keep the following information on a monthly basis for EUDEGASII:
 - a) The number of cells produced.
 - b) The number of cells produced per 12-month rolling time period, as determined at the end of each calendar month.
 - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUDEGASII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDEGASII	26	10	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

FLEXIBLE GROUP SPECIAL CONDITIONS

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGELECTRODEMIX	Anode and cathode material metering and mixing process. Particulate emissions from all emission units are controlled by a dust collector.	EUCATMIX1, EUANOMIX1, EUCATMIX2, EUANOMIX2
FGSLRYAPP	Anode and cathode slurry application process. Emissions from the cathode portion of the slurry application process are controlled by two (2) absorption columns.	EUCATSLRYAPP1, EUANOSLRYAPP1, EUCATSLRYAPP2, EUANOSLRYAPP2, EUSVNCVY
FGSLITTING	Anode and cathode material slitting process. Particulate emissions from all emission units are controlled by six (6) dust collectors.	EUCATHSLIT1, EUANOHSLIT1, EUCATHSLIT2, EUANOHSLIT2, EUCATHSLIT3, EUANOHSLIT3
FGNOTCHING	Anode and cathode material notching process. Particulate emissions from all emission units are controlled by twelve (12) dust collectors.	EUCATNOTCH1, EUANONOTCH1, EUCATNOTCH2, EUANONOTCH2, EUCATNOTCH7, EUANONOTCH7, EUCATNOTCH8, EUANONOTCH8, EUCATNOTCH9, EUANONOTCH9, EUCATNOTCH10, EUANONOTCH10, EUCATNOTCH101, EUANONOTCH101, EUCATNOTCH201, EUANONOTCH201, EUCATNOTCH301, EUANONOTCH301, EUCATNOTCHSHRED, EUANONOTCHSHRED
FGELECTROLYTE	Battery cell packaging process where each cell is filled with electrolyte material.	EUELECTROLYTE1, EUELECTROLYTE2, EUELECTROLYTE3, EUELECTROLYTE4, EUELECTROLYTE5
FGDCBOILERS	Natural gas-fired boilers with a rated heat input of between 10 and 100 MMBtu/hr	EUHWBOIL2, EUHWBOIL3, EUHWBOIL4, EUHOBOIL1, EUHOBOIL2

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGEMERGENCYGENS	2 maximum 15 MMBtu/hr diesel-fired emergency generators.	EUEMERGGEN1, EUEMERGGEN2
FGELECTRODEMIXII	Anode and cathode material metering and mixing lines consisting of product collectors, weigh and check scales, and a mixing tank to produce anode and cathode slurries. Emissions controlled by six dust collectors and four absorption columns.	EUANOMIXII1 EUANOMIXII2 EUANOMIXII3 EUANOMIXII4 EUANOMIXII5 EUANOMIXII6 EUANOMIXII7 EUANOMIXII8 EUANOMIXII9 EUANOMIXII10 EUANOMIXII11 EUANOMIXII12 EUCATMIXII1 EUCATMIXII2 EUCATMIXII3 EUCATMIXII4 EUCATMIXII5 EUCATMIXII6 EUCATMIXII7 EUCATMIXII8 EUCATMIXII9
FGSLRYAPPII	Anode and cathode slurry coating line. Emissions are controlled by N-methyl-2-pyrrolidone (NMP) recovery system.	EUANOCOATERII1 EUANOCOATERII2 EUANOCOATERII3 EUCATCOATERII1 EUCATCOATERII2 EUCATCOATERII3
FGSLITTINGII	Phase II anode and cathode material slitting process. Particulate emissions are controlled by six dust collectors. Dust collectors do not vent to ambient air.	EUCATHSLITII1 EUANOHSLITII1 EUCATHSLITII2 EUANOHSLITII2 EUCATHSLITII3 EUANOHSLITII3
FGNOTCHINGII	Anode and cathode notching lines. Particulate emissions are controlled by five scrap collectors and five cyclones. Dust collectors do not vent to ambient air.	EUANONOTCHII1 EUANONOTCHII2 EUANONOTCHII3 EUANONOTCHII4 EUANONOTCHII5 EUANONOTCHII6 EUANONOTCHII7 EUANONOTCHII8 EUANONOTCHII9 EUANONOTCHII10 EUCATNOTCHII1 EUCATNOTCHII2 EUCATNOTCHII3 EUCATNOTCHII4 EUCATNOTCHII5 EUCATNOTCHII6 EUCATNOTCHII7 EUCATNOTCHII8 EUCATNOTCHII9 EUCATNOTCHII10

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGELECTROLYTEII	Cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions are controlled by 3 absorption columns,	EUELECTROLYTEII1 EUELECTROLYTEII2 EUELECTROLYTEII3 EUELECTROLYTEII4 EUELECTROLYTEII5 EUELECTROLYTEII6 EUELECTROLYTEII7 EUCESS
FGBOILERSII	Hot oil, steam, and hot water boilers with low NOx burners.	EUBOILHOII1 EUBOILHOII2 EUBOILHOII3 EUBOILHOII4 EUBOILHOII5 EUBOILHOII6 EUBOILSTEAMII1 EUBOILSTEAMII2 EUBOILHWII1 EUBOILHWII2 EUBOILHWII3 EUBOILHWII4
FGEMERGGENSII	800 kW diesel emergency generators for emergency use only.	EUEMGENII1 EUEMGENII2
FGTACS	Process units affected by emissions limits under R 336.1225(1).	EUCATMIX1, EUANOMIX1, EUCATMIX2, EUANOMIX2, EUCATHSLIT1, EUANOHSLIT1, EUCATHSLIT2, EUANOHSLIT2, EUCATHSLIT3, EUANOHSLIT3, EUCATNOTCH1, EUANONOTCH1, EUCATNOTCH2, EUANONOTCH2, EUCATNOTCH7, EUANONOTCH7, EUCATNOTCH8, EUANONOTCH8, EUCATNOTCH9, EUANONOTCH9, EUCATNOTCH10, EUANONOTCH10, EUCATNOTCH101, EUANONOTCH101, EUCATNOTCH201, EUANONOTCH201, EUCATNOTCH301, EUANONOTCH301, EUCATNOTCHSHRED, EUANONOTCHSHRED

**FGELECTRODEMIX
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Anode and cathode material metering and mixing process. Particulate emissions from all emission units are controlled by a dust collector.

Emission Unit: EUCATMIX1, EUANOMIX1, EUCATMIX2, EUANOMIX2

POLLUTION CONTROL EQUIPMENT

One (1) Dust collector

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	9.84×10 ⁻⁴ pph	Hourly	FGELECTRODEMIX	SC V.1	R 336.1205, 40 CFR 52.21(c) and (d)
2. PM2.5	9.84×10 ⁻⁴ pph	Hourly	FGELECTRODEMIX	SC V.1	R 336.1205, 40 CFR 52.21(c) and (d)
3. VOC	0.14 tpy	12-month rolling time period as determined at the end of each calendar month	FGELECTRODEMIX	SC VI.4	R 336.1225, R 336.1702(a)

4. There shall be no visible emissions from FGELECTRODEMIX. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMIT(S)

- The permittee shall not process more than 8,000 batches of material in EUCATMIX1 and EUCATMIX2 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**
- The permittee shall not process more than 8,000 batches of material in EUANOMIX1 and EUANOMIX2 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate FGELECTRODEMIX unless the dust collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

2. The permittee shall not operate FGELECTRODEMIX unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the dust collector, is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the FGELECTRODEMIX dust collector on a continuous basis. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
2. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the product collectors in FGELECTRODEMIX on a continuous basis. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from FGELECTRODEMIX by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10, PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1910)**

2. The permittee shall record the pressure drop for the FGELECTRODEMIX dust collector once per day, while operating. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
3. The permittee shall record the pressure drop for the product collector portion of FGELECTRODEMIX once per week, while operating. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
4. The permittee shall keep the following information on a monthly basis for FGELECTRODEMIX:
 - a) The number of batches processed per calendar month.
 - b) The number of batches processed per 12-month rolling time period as determined at the end of each calendar month.
 - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a))**

5. The permittee shall monitor the dust collector emission points to verify the filters are operating properly, by taking visible emission readings for FGELECTRODEMIX a minimum of once per calendar week. A “visible emissions reading” refers to a survey to be performed for the purpose of determining if there is the presence of visible emissions or if there are no visible emissions, other than uncombined water vapor. Visible emission readings shall be taken at least once per week, for one minute in duration, during daylight hours and during routine operating conditions. This can be performed by either a certified or non-certified reader. Such readings do not have to be conducted per the requirements of Method 9. Multiple stacks may be observed simultaneously. If any visible emissions (other than uncombined water vapor) are observed, the permittee shall immediately inspect the filters and perform any required maintenance. **(R 336.1910)**
6. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGELECTRODEMIX. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1303, R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCATMIX	21	8	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVANOMIX	31	13.3	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart CCCCCC, as they apply to each emission unit in FGELECTRODEMIX. **(40 CFR Part 63 Subpart CCCCCC, 40 CFR 63.11599)**

Footnotes:

**FGSLRYAPP
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Anode and cathode slurry application process. Emissions from the cathode portion of the slurry application process are controlled by two (2) absorption columns.

Emission Unit: EUCATSLRYAPP1, EUANOSLRYAPP1, EUCATSLRYAPP2, EUANOSLRYAPP2, EUSVNTRCVY

POLLUTION CONTROL EQUIPMENT

Two Absorption Columns (On EUCATSLRYAPP1 & EUCATSLRYAPP2)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	10.54 tpy	12-month rolling time period as determined at the end of each calendar month	EUCATSLRYAPP1 and EUCATSLRYAPP2 combined	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)
2. VOC	106 lb/yr	12-month rolling time period as determined at the end of each calendar month	EUSVNTRCVY	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)
3. VOC	0.02 pph	Hourly	EUSVNTRCVY	SC V.2	R 336.1205, R 336.1225, R 336.1702(a)
4. VOC	0.54 tpy	12-month rolling time period as determined at the end of each calendar month	EUANOSLRYAPP1 and EUANOSLRYAPP2 combined	SC VI.3	R 336.1225, R 336.1702(a)

EUSVNTRCVY Emission Factor:

VOC = 1.0×10^{-5} lb/lb solvent (N-methyl-2-pyrrolidone) processed

II. MATERIAL LIMIT(S)

1. The permittee shall not process more than 10,545,000 pounds of N-methyl-2-pyrrolidone (CAS No. 872-50-4) in EUCATSLRYAPP1 and EUCATSLRYAPP2 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702(a))**
2. The permittee shall not process more than 135,000 pounds of Diacel2200 in EUANOSLRYAPP1 and EUANOSLRYAPP2 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUCATSLRYAPP1 or EUCATSLRYAPP2 unless its associated absorption column is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each absorption column includes a minimum control efficiency of 99.85 percent (by weight). **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate FGSLRYAPP unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the absorption columns is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify the control efficiency across each absorption column by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
2. Upon request of the AQD District Supervisor, the permittee shall verify the VOC emission rate from EUSVNTRCVY by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD

Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall keep the following information on a monthly basis for EUCATSLRYAPP1 and EUCATSLRYAPP2 combined and EUSVNTRCVY:
 - a) The amount of NMP, in pounds, processed per 12-month rolling time period, as determined at the end of each calendar month.
 - b) VOC emission calculations determining the monthly emission rate in tons per calendar month from EUCATSLRYAPP1 and EUCATSLRYAPP2 combined.
 - c) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month from EUCATSLRYAPP1 and EUCATSLRYAPP2 combined.
 - d) VOC emission calculations determining the monthly emission rate in tons per calendar month from EUSVNTRCVY.
 - e) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month from EUSVNTRCVY.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

3. The permittee shall keep the following information on a monthly basis for EUANOSLRYAPP1 and EUANOSLRYAPP2 combined:
 - a) The amount of Diacel2200, in pounds, processed per 12-month rolling time period, as determined at the end of each calendar month.
 - b) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - c) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCATSLRYAPP1	42	65.5	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVCATSLRYAPP2	42	65.5	R 336.1225, 40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
3. SVANOSLRYAPP1 *	30 x 30	44.25	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVANOSLRYAPP2 *	30 x 30	44.25	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVSVNTRCVY1	1	9	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVSVNTRCVY2	1.5	9	R 336.1225, 40 CFR 52.21(c) & (d)
* May be discharged horizontally			

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart CCCCCC, as they apply to each emission unit in FGSLRYAPP. **(40 CFR Part 63 Subpart CCCCCC, 40 CFR 63.11599)**

Footnotes:

**FGSLITTING
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Anode and cathode material slitting process. Particulate emissions from all emission units are controlled by six (6) dust collectors.

Emission Unit: EUCATHSLIT1, EUANOHSLIT1, EUCATHSLIT2, EUANOHSLIT2, EUCATHSLIT3, EUANOHSLIT3

POLLUTION CONTROL EQUIPMENT

Six (6) Dust collectors

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	6.40x10 ⁻⁶ pph	Hourly	Each Emission Unit in FGSLITTING	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)
2. PM2.5	6.40x10 ⁻⁶ pph	Hourly	Each Emission Unit in FGSLITTING	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)

3. There shall be no visible emissions from any emission unit in FGSLITTING. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate an emission unit in FGSLITTING unless its associated dust collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FGSLITTING unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the dust collectors, is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the pressure drop for each FGSLITTING dust collector on a continuous basis. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from FGSLITTING by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10, PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1910)**
2. The permittee shall record the pressure drop for the FGSLITTING dust collector once per day, while operating. **(R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**
3. The permittee shall monitor the dust collector emission points to verify the filters are operating properly, by taking visible emission readings for FGSLITTING a minimum of once per calendar week. A "visible emissions reading" refers to a survey to be performed for the purpose of determining if there is the presence of visible emissions or if there are no visible emissions, other than uncombined water vapor. Visible emission readings shall be taken at least once per week, for one minute in duration, during daylight hours and during routine operating conditions. This can be performed by either a certified or non-certified reader. Such readings do not have to be conducted per the requirements of Method 9. Multiple stacks may be observed simultaneously. If any visible emissions (other than uncombined water vapor) are observed, the permittee shall immediately inspect the filters and perform any required maintenance. **(R 336.1910)**

4. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGSLITTING. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1303, R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVCATSLIT1	14.5	7.5	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVANOSLIT1	14.5	7.5	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVCATSLIT2	14.5	7.5	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVANOSLIT2	14.5	7.5	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVCATSLIT3	14.5	7.5	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVANOSLIT3	14.5	7.5	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

FGNOTCHING FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Anode and cathode material notching process. Particulate emissions from all emission units are controlled by twelve (12) dust collectors.

Emission Unit: EUCATNOTCH1, EUANONOTCH1, EUCATNOTCH2, EUANONOTCH2, EUCATNOTCH7, EUANONOTCH7, EUCATNOTCH8, EUANONOTCH8, EUCATNOTCH9, EUANONOTCH9, EUCATNOTCH10, EUANONOTCH10, EUCATNOTCH101, EUANONOTCH101, EUCATNOTCH201, EUANONOTCH201, EUCATNOTCH301, EUANONOTCH301, EUCATNOTCHSHRED, EUANONOTCHSHRED

POLLUTION CONTROL EQUIPMENT

Twelve (12) Dust collectors

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	4.00x10 ⁻⁴ pph ^b	Hourly	EUCATNOTCH1, EUCATNOTCH2, EUCATNOTCH7, EUCATNOTCH8, EUCATNOTCH9, EUCATNOTCH10, EUCATNOTCH101, EUCATNOTCH201, EUCATNOTCH301 combined	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)
2. PM10	4.00x10 ⁻⁴ pph ^b	Hourly	EUANONOTCH1, EUANONOTCH2, EUANONOTCH7, EUANONOTCH8, EUANONOTCH9, EUANONOTCH10, EUANONOTCH101, EUANONOTCH201, EUANONOTCH301 combined	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)
3. PM10	4.00x10 ⁻⁴ pph ^b	Hourly	EUCATNOTCHSHRED, SVANONOTCHSHRED , separately	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)
4. PM2.5	4.00x10 ⁻⁴ pph ^b	Hourly	EUCATNOTCH1, EUCATNOTCH2, EUCATNOTCH7, EUCATNOTCH8, EUCATNOTCH9, EUCATNOTCH10, EUCATNOTCH101, EUCATNOTCH201, EUCATNOTCH301 combined	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
5. PM2.5	4.00×10 ⁻⁴ pph ^b	Hourly	EUANONOTCH1, EUANONOTCH2, EUANONOTCH7, EUANONOTCH8, EUANONOTCH9, EUANONOTCH10, EUANONOTCH101, EUANONOTCH201, EUANONOTCH301 combined	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)
6. PM2.5	4.00×10 ⁻⁴ pph ^b	Hourly	EUCATNOTCHSHRED, SVANONOTCHSHRED , separately	SC V.1	R 336.1205, 40 CFR 52.21(c) & (d)

7. There shall be no visible emissions from any emission unit in FGNOTCHING. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMIT(S)

1. The permittee shall not process more than 90,000,000 meters of cathode-coated material per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205(3), R 336.1331)**
2. The permittee shall not process more than 90,000,000 meters of anode-coated material per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205(3), R 336.1331)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGNOTCHING unless each associated dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining the dust collectors according to the operation and maintenance plan specified in SC III.2. **(R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FGNOTCHING unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the dust collectors, is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement. F of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for each FGNOTCHING dust collector on a continuous basis. **(R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates from FGNOTCHING by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10, PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall record the pressure drop for the FGNOTCHING dust collector once per day, while operating. **(R 336.1301, R 336.1331, R 336.1910)**
3. The permittee shall keep, in a satisfactory manner, records of the amount of cathode-coated material, in meters, processed in per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1331)**
4. The permittee shall keep, in a satisfactory manner, records of the amount of anode-coated material, in meters, processed in per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1331)**
5. The permittee shall monitor the dust collector emission points to verify the filters are operating properly, by taking visible emission readings for FGNOTCHING a minimum of once per calendar week. A "visible emissions reading" refers to a survey to be performed for the purpose of determining if there is the presence of visible emissions or if there are no visible emissions, other than uncombined water vapor. Visible emission readings shall be taken at least once per week, for one minute in duration, during daylight hours and during routine operating conditions. This can be performed by either a certified or non-certified reader. Such readings do not have to be conducted per the requirements of Method 9. Multiple stacks may be observed simultaneously. If any visible emissions (other than uncombined water vapor) are observed, the permittee shall immediately inspect the filters and perform any required maintenance. **(R 336.1910)**
6. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGNOTCHING. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1303, R 336.1910)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

	Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SVCATNOTCH1	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
2.	SVCATNOTCH2	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
3.	SVCATNOTCH3	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
4.	SVCATNOTCH4	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
5.	SVCATNOTCH5	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
6.	SVANONOTCH1	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
7.	SVANONOTCH2	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
8.	SVANONOTCH3	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
9.	SVANONOTCH4	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
10.	SVANONOTCH5	10 x 11.5 in	8.75	R 336.1225, 40 CFR 52.21(c) & (d)
11.	SVCATNOTCHSHRED *	16.25 x 18.5 in	12	R 336.1225, 40 CFR 52.21(c) & (d)
12.	SVANONOTCHSHRED *	16.25 x 18.5 in	12	R 336.1225, 40 CFR 52.21(c) & (d)

* May be discharged horizontally

IX. OTHER REQUIREMENT(S)

NA

FGELECTROLYTE FLEXIBLE GROUP CONDITIONS
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DESCRIPTION

Battery cell packaging process where each cell is filled with electrolyte material.

Emission Unit: EUELECTROLYTE1, EUELECTROLYTE2, EUELECTROLYTE3, EUELECTROLYTE4, EUELECTROLYTE5

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	0.18 tpy	12-month rolling time period as determined at the end of each calendar	FGELECTROLYTE	SC VI.2	R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

1. The permittee shall not produce more than 28,000,000 cells in FGELECTROLYTE per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**

2. The permittee shall keep the following information on a monthly basis for FGELECTROLYTE:
- a) The number of cells produced.
 - b) The number of cells produced per 12-month rolling time period, as determined at the end of each calendar month.
 - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1225, R 336.1702(a))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVELECTROLYTE1	30	13.3	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVELECTROLYTE2	30	13.3	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

**FGDCBOILERS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Natural gas-fired boilers with a rated heat input of between 10 and 100 MMBtu/hr.

Emission Unit: EUHWBOIL2, EUHWBOIL3, EUHWBOIL4, EUHOBOIL1, EUHOBOIL2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO _x	1.24 pph	Hourly	EUHWBOIL2, EUHWBOIL3, EUHWBOIL4,	SC V.1	40 CFR 52.21(c) & (d)
2. NO _x	1.64 pph	Hourly	EUHOBOIL1, EUHOBOIL2	SC V.1	40 CFR 52.21(c) & (d)
3. NO _x	30.7 tpy	12-month rolling time period as determined at the end of each calendar month	FGDCBOILERS	SC VI.5	40 CFR 52.21(c) & (d)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in each boiler in FGDCBOILERS. (R 336.1205, R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The heat input capacity of EUHWBOIL2, EUHWBOIL3, and EUHWBOIL4, individually, shall not exceed a maximum of 12.6 MM BTU per hour. (R 336.1205, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)
2. The heat input capacity of EUHOBOIL1, and EUHOBOIL2, individually, shall not exceed a maximum of 16.75 MM BTU per hour. (R 336.1205, 40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. Upon request of the AQD District Supervisor, the permittee shall verify NO_x emission rates from FGDCBOILERS by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
NO _x	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall monitor, in a satisfactory manner, the natural gas usage rate for each FGDCBOILERS boiler on a monthly basis. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))**
3. The permittee shall keep, in a satisfactory manner, all monthly fuel use records for each FGDCBOILERS boiler, as required by SC VI.1., on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))**
4. The permittee shall monitor emissions, operating information, and keep records for each FGDCBOILERS boiler in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. The permittee shall make all records available to the Department upon request. **(40 CFR Part 60 Subparts A & Dc)**
5. The permittee shall calculate the NO_x emission rates from FGDCBOILERS for each calendar month and 12-month rolling time period, using fuel usage records and an emission factor (AP-42, manufacturer's or test data) that is approved by the AQD District Supervisor. **(40 CFR 52.21(c) & (d))**

VII. REPORTING

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVHWBOIL2	22.5	43	40 CFR 52.21(c) & (d)
2. SVHWBOIL3	22.5	43	40 CFR 52.21(c) & (d)
3. SVHWBOIL4	22.5	43	40 CFR 52.21(c) & (d)
4. SVHOBUILD1	36	48	40 CFR 52.21(c) & (d)
5. SVHOBUILD2	36	48	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to each FGDCBOILERS boiler.
(40 CFR Part 60 Subparts A & Dc)

Footnotes:

**FGEMERGENCYGENS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two (2) maximum 15 MMBtu/hr diesel-fired emergency generators.

Emission Unit: EUEMERGGEN1, EUEMERGGEN2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. HC	1.3 g/kW-hr	Hourly	Each FGEMERGENCYGENS engine	SC VI.3	40 CFR 60.4205(a)
2. NO _x	9.2 g/kW-hr	Hourly	Each FGEMERGENCYGENS engine	SC VI.3	40 CFR 60.4205(a)
3. CO	11.4 g/kW-hr	Hourly	Each FGEMERGENCYGENS engine	SC VI.3	40 CFR 60.4205(a)
4. PM	0.54 g/kW-hr	Hourly	Each FGEMERGENCYGENS engine	SC VI.3	40 CFR 60.4205(a)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel/No. 2 fuel oil with sulfur content of 0.05 percent or less in each FGEMERGENCYGENS engine. **(R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.4207(a) & (b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate each FGEMERGENCYGENS engine greater than 500 hours per year, based on a 12-month rolling time period. **(R 336.1225, 40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a non-resettable device to monitor and record the hours of operation for each FGEMERGENCYGENS engine. **(R 336.1225, 40 CFR 52.21(c) & (d), 40 CFR 60.4209(a))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall record hours of operation for each FGEMERGENCYGENS engine, in a format acceptable to the AQD District Supervisor, indicating the hours on a calendar month basis, and a 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, 40 CFR 52.21(c) & (d))**
3. The permittee shall keep records of the following for each FGEMERGENCYGENS engine: **(40 CFR 60.4211(b))**
 - a. All notifications.
 - b. All maintenance performed on the engine.
 - c. If using a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards of 40 CFR Part 60, Subpart IIII.
 - d. If not using a certified engine, documentation that the engine meets the emission standards, which shall be demonstrated with an initial performance test within one year of engine installation.
4. The permittee shall keep a complete copy of the diesel fuel/No. 2 fuel oil analysis including the sulfur content in percent, as supplied by the vendor, for each shipment of diesel fuel/No. 2 fuel oil received. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.4207(a) & (b))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEMERGGEN1	4	7	40 CFR 52.21(c) & (d)
2. SVEMERGGEN2	4	7	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and IIII, as they apply to each FGEMERGENCYGENS engine. **(40 CFR Part 60 Subparts A & IIII)**

Footnotes:

**FGELECTRODEMIXII
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Phase II anode and cathode material metering and mixing lines consisting of product collectors, weigh and check scales, and a mixing tank to produce anode and cathode slurries. Emissions controlled by six dust collectors and four absorption columns.

Emission Unit: EUANOMIXII1, EUANOMIXII2, EUANOMIXII3, EUANOMIXII4, EUANOMIXII5, EUANOMIXII6, EUANOMIXII7, EUANOMIXII8, EUANOMIXII9, EUANOMIXII10, EUANOMIXII11, EUANOMIXII12, EUCATMIXII1, EUCATMIXII2, EUCATMIXII3, EUCATMIXII4, EUCATMIXII5, EUCATMIXII6, EUCATMIXII7, EUCATMIXII8, EUCATMIXII9

POLLUTION CONTROL EQUIPMENT

Six (6) dust collectors and four absorption columns.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM10	0.025 pph	Hourly	FGELECTRODEMIXII	SC V.2	R 336.1205, 40 CFR 52.21(c) and (d)
2. PM2.5	0.025 pph	Hourly	FGELECTRODEMIXII	SC V.2	R 336.1205, 40 CFR 52.21(c) and (d)
3. VOC	14.3 lb/yr	12-month rolling time period as determined at the end of each calendar month	FGELECTRODEMIXII	SC VI.4	R 336.1225, R 336.1702(a)

4. There shall be no visible emissions from FGELECTRODEMIXII. **(R 336.1301, R 336.1331, 40 CFR 52.21(c) & (d))**

II. MATERIAL LIMIT(S)

1. The permittee shall not process more than 34,000 batches of material in EUANOMIXII1 through EUANOMIXII12 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702(a))**
2. The permittee shall not process more than 20,000 batches of material in EUCATMIXII1 through EUCATMIXII9 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGELECTRODEMIXII unless the dust collectors are installed, maintained, and operated in a satisfactory manner. **(R 336.1205, R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**

2. The permittee shall not operate FGELECTRODEMIXII unless the pressure drop across each dust collector is one (1) inch of water or more but not more than (6) inches of water. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall not operate FGELECTRODEMIXII unless the associated absorption columns are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each absorption column includes a minimum control efficiency of 98 percent (by weight). **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall not operate FGELECTRODEMIXII unless the pressure drop across each absorption column is seven (7) inches of water or more but not more than (11) inches of water. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
5. The permittee shall not operate FGELECTRODEMIXII unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the dust collectors and absorption columns is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the FGELECTRODEMIXII dust collectors and absorption columns on a continuous basis. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify the control efficiency across each absorption column by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

2. Upon request of the AQD District Supervisor, the permittee shall verify PM10 and PM2.5 emission rates, and visible emissions, from FGELECTRODEMIXII by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
PM10, PM2.5	40 CFR Part 51, Appendix M
Visible Emissions	40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1224, R 336.1225, R 336.1910)
2. The permittee shall record the pressure drop for the FGELECTRODEMIXII dust collector once per calendar day, while operating. (R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)
3. The permittee shall keep the following information on a monthly basis for FGELECTRODEMIXII:
 - a) The number of batches processed per calendar month.
 - b) The number of batches processed per 12-month rolling time period as determined at the end of each calendar month.
 - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. (R 336.1702(a))

4. The permittee shall monitor the dust collector emission points to verify the filters are operating properly, by taking visible emission readings for FGELECTRODEMIXII a minimum of once per calendar week. A "visible emissions reading" refers to a survey to be performed for the purpose of determining if there is the presence of visible emissions or if there are no visible emissions, other than uncombined water vapor. Visible emission readings shall be taken at least once per week, for one minute in duration, during daylight hours and during routine operating conditions. This can be performed by either a certified or non-certified reader. Such readings do not have to be conducted per the requirements of Method 9. Multiple stacks may be observed simultaneously. If any visible emissions (other than uncombined water vapor) are observed, the permittee shall immediately inspect the filters and perform any required maintenance. (R 336.1910)
5. The permittee shall monitor and record the pressure drop across each absorption column at least once on each calendar day FGELECTRODEMIXII is operated, during operation, with instrumentation acceptable to the AQD District Supervisor. The permittee shall keep these records on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)
6. The permittee shall keep, in a satisfactory manner, all records of carbon replacement for the absorption columns on file at the facility and make them available to the Department upon request. (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)

7. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for FGELECTRODEMIXII. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1301, R 336.1303, R 336.1910)**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGELECTRODEMIXII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVANMXDCII1	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVANMXDCII2	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVANMXDCII3	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVCAMXDCII1	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVCAMXDCII2	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVCAMXDCII3	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVCAMXACII1	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVCAMXACII2	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVCAMXACII3	26	82	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVCAMXACII4	26	82	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart CCCCCC, as they apply to each emission unit in FGELECTRODEMIXII. **(40 CFR Part 63 Subpart CCCCCC, 40 CFR 63.11599)**

FGSLRYAPP II
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Phase II anode and cathode slurry application process. Emissions from the cathode portion of the slurry application process are controlled by an N-methyl-2-pyrrolidone (NMP) Recovery System.

Emission Unit: EUANOCOATERII1, EUANOCOATERII2, EUANOCOATERII3, EUCATCOATERII1, EUCATCOATERII2, EUCATCOATERII3

POLLUTION CONTROL EQUIPMENT

N-methyl-2-pyrrolidone (NMP) Recovery System.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	3.40 tpy	12-month rolling time period as determined at the end of each calendar month	EUCATCOATERII1, EUCATCOATERII2, EUCATCOATERII3	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)
2. VOC	2.50 tpy	12-month rolling time period as determined at the end of each calendar month	EUANOCOATERII1, EUANOCOATERII2, EUANOCOATERII3	SC VI.3	R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

1. The permittee shall not process more than 11,000,000 pounds of NMP (CAS No. 872-50-4) in EUCATCOATERII1 through EUCATCOATERII3 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1205, R 336.1225, R 336.1702(a))**
2. The permittee shall not process more than 615,000 pounds of Diacel2200 in EUANOCOATERII1 through EUANOCOATERII3 combined per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUCATCOATERII1 through EUCATCOATERII3 unless the liquid flow rate of the wet scrubber is at a minimum of 20 gallons per minute. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall not operate EUCATCOATERII1 through EUCATCOATERII3 if the temperature in the NMP recovery system absorption column exceeds 360°F. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
3. The permittee shall not operate EUCATCOATERII1 through EUCATCOATERII3 if the temperature in the distillation units in the NMP recovery system are outside the following range:
 - a) Distillation Unit 1: 85-350°F
 - b) Distillation Unit 2: 190-250°F**(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**

4. The permittee shall not operate FGSLRYAPP11 unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the NMP Recovery System is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify the VOC emission rate from EUCATCOATER11 through EUCATCOATER13 combined by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1205, R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall record the temperature in both distillation units and the absorption column in the NMP recovery system once per calendar day, while operating. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
3. The permittee shall keep the following information on a monthly basis for EUCATCOATER11 through EUCATCOATER13 combined:
 - a) The amount of NMP, in pounds, processed per 12-month rolling time period, as determined at the end of each calendar month.

- b) VOC emission calculations determining the monthly emission rate in tons per calendar month from EUCATCOATERII1 through EUCATCOATERII3 combined.
- c) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month from EUCATCOATERII1 through EUCATCOATERII3 combined.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1205, R 336.1225, R 336.1702(a))**

4. The permittee shall keep the following information on a monthly basis for EUANOCOATERII1 through EUANOCOATERII3 combined:
 - a) The amount of Diacel2200, in pounds, processed per 12-month rolling time period, as determined at the end of each calendar month.
 - b) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - c) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGSLRYAPPII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVANOCOATERII1	53	56	40 CFR 52.21(c) & (d)
2. SVANOCOATERII2	53	56	40 CFR 52.21(c) & (d)
3. SVANOCOATERII3	53	56	40 CFR 52.21(c) & (d)
4. SVANOCOATERII4	53	56	40 CFR 52.21(c) & (d)
5. SVANOCOATERII5	53	56	40 CFR 52.21(c) & (d)
6. SVANOCOATERII6	53	56	40 CFR 52.21(c) & (d)
7. SVSVNTRCVYII	1	9	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subpart CCCCCC, as they apply to each emission unit in FGSLRYAPPII. **(40 CFR Part 63 Subpart CCCCCC, 40 CFR 63.11599)**

**FGSLITTINGII
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Phase II anode and cathode material slitting process. Particulate emissions are controlled by six dust collectors. Dust collectors do not vent to ambient air.

Emission Unit: EUCATHSLITII1, EUANOHSPLITII1, EUCATHSLITII2, EUANOHSPLITII2, EUCATHSLITII3, EUANOHSPLITII3

POLLUTION CONTROL EQUIPMENT

Six (6) dust collectors

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGSLITTINGII unless each associated dust collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FGSLITTINGII unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the dust collectors is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGSLITTINGII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from FG-SLITTINGII shall be released only into the general in-plant environment. **(40 CFR 52.21 (c) & (d))**

IX. OTHER REQUIREMENT(S)

NA

**FGNOTCHINGII
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Anode and cathode notching lines. Particulate emissions are controlled by five scrap collectors and five cyclones. Dust collectors do not vent to ambient air.

Emission Unit:	EUANONOTCHII1,	EUANONOTCHII2,	EUANONOTCHII3,	EUANONOTCHII4,
	EUANONOTCHII5,	EUANONOTCHII6,	EUANONOTCHII7,	EUANONOTCHII8,
	EUANONOTCHII10,	EUCATNOTCHII1,	EUCATNOTCHII2,	EUCATNOTCHII3,
	EUCATNOTCHII5,	EUCATNOTCHII6,	EUCATNOTCHII7,	EUCATNOTCHII8,
	EUCATNOTCHII10			EUCATNOTCHII9,

POLLUTION CONTROL EQUIPMENT

Ten (10) dust collectors and ten (10) cyclones.

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGNOTCHINGII unless each associated dust collector is installed, maintained, and operated in a satisfactory manner. **(R 336.1910, 40 CFR 52.21(c) & (d))**
2. The permittee shall not operate FGNOTCHINGII unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the dust collectors is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1205, R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

NA

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGNOTCHINGII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

1. The exhaust gases from FG-NOTCHINGII shall be released only into the general in-plant environment. **(40 CFR 52.21 (c) & (d))**

IX. OTHER REQUIREMENT(S)

NA

**FGELECTROLYTEII
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Cell assembly operations including addition of electrolyte materials to pouches and sealing of pouches. VOC emissions are controlled by 3 absorption columns.

Emission Unit: EUELECTROLYTEII1, EUELECTROLYTEII2, EUELECTROLYTEII3, EUELECTROLYTEII4, EUELECTROLYTEII5, EUELECTROLYTEII6, EUELECTROLYTEII7, EUCESS

POLLUTION CONTROL EQUIPMENT

Three absorption columns.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	0.05 tpy	12-month rolling time period as determined at the end of each calendar	FGELECTROLYTEII	SC V.1, SC VI.2	R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

1. The permittee shall not produce more than 55,188,000 cells in FGELECTROLYTEII per 12-month rolling time period, as determined at the end of each calendar month. **(R 336.1225, R 336.1702(a))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate FGELECTROLYTEII unless the associated absorption columns are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of each absorption column includes a minimum control efficiency of 98 percent (by weight). **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not operate FGELECTROLYTEII unless the pressure drop across each absorption column is seven (7) inches of water or more but not nor more than (11) inches of water. **(R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c) & (d))**
3. The permittee shall not operate FGELECTROLYTEII unless a malfunction abatement plan (MAP), as described in Rule 911(2), for the absorption columns is implemented and maintained. The MAP shall, at a minimum, specify the following:
 - a) A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b) An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days if new equipment is installed, or upon request from the District Supervisor. The permittee shall submit the MAP, and any amendments to the MAP, to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor the pressure drop for the FGELECTROLYTEII absorption columns on a continuous basis. **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1910)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify the control efficiency across each absorption column by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method approved by the AQD supervisor. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall monitor and record the pressure drop across each absorption column at least once on each calendar day FGELECTROLYTEII is operated, during operation, with instrumentation acceptable to the AQD District Supervisor. The permittee shall keep these records on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall keep, in a satisfactory manner, all records of the carbon replacement for the absorption columns on file at the facility and make them available to the Department upon request. **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall keep the following information on a monthly basis for FGELECTROLYTEII:
 - a) The number of cells produced.
 - b) The number of cells produced per 12-month rolling time period, as determined at the end of each calendar month.
 - c) VOC emission calculations determining the monthly emission rate in tons per calendar month.
 - d) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. **(R 336.1702(a))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGELECTROLYTEII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVELECTROLYTEII1	26	56	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVELECTROLYTEII2	26	56	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVCESSACII	43	10	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

**FGBOILERSII
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Phase II natural gas-fired boilers with a rated heat input of between 10 and 100 MMBtu/hr.

Emission Unit: EUBOILHOI1, EUBOILHOI2, EUBOILHOI3, EUBOILHOI4, EUBOILHOI5, EUBOILHOI6, EUBOILSTEAMI1, EUBOILSTEAMI2, EUBOILHWI1, EUBOILHWI2, EUBOILHWI3, EUBOILHWI4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO _x	1.68 pph	Hourly	EUBOILHWI1, EUBOILHWI2, EUBOILHWI3, EUBOILHWI4	SC V.1	40 CFR 52.21(c) & (d)
1. NO _x	5.27 pph	Hourly	EUBOILHOI1, EUBOILHOI2, EUBOILHOI3, EUBOILHOI4, EUBOILHOI5, EUBOILHOI6	SC V.1	40 CFR 52.21(c) & (d)
1. NO _x	28.4 tpy	12-month rolling time period as determined at the end of each calendar month	FGBOILERSII	SC VI.5	40 CFR 52.21(c) & (d)

II. MATERIAL LIMIT(S)

1. The heat input capacity of EUBOILHWI1 through EUBOILHWI4, individually, shall not exceed a maximum of 12.0 MMBTU per hour. **(40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**
2. The heat input capacity of EUBOILHOI1 through EUBOILHOI6, collectively, shall not exceed a maximum of 150.6 MMBTU per hour, and 3,253 MMBTU per day. **(40 CFR 52.21(c) & (d), 40 CFR Part 60 Subpart Dc)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate more than one of the permitted steam boilers, EUBOILSTEAMI1 or EUBOILSTEAMI2, at any one time. **(40 CFR 52.21(c) & (d))**
2. The permittee shall not operate EUBOILHWI1 through EUBOILHWI4, individually, for than 5,475 hours per 12-month rolling time period as determined at the end of each calendar month. **(40 CFR 52.21(c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. Upon request of the AQD District Supervisor, the permittee shall verify NO_x emission rates from FGBOILERSII by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in the table below.

Pollutant	Test Method Reference
NO _x	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1225, R 336.1301, R 336.1331, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall monitor, in a satisfactory manner, the natural gas usage rate, in MMscf, for each FGBOILERSII boiler on a monthly basis. **(R 336.1224, R 336.1225, R 336.1702, 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))**
3. The permittee shall keep, in a satisfactory manner, all monthly fuel use records for each FGBOILERSII boiler, as required by SC VI.1, on file at the facility and make them available to the Department upon request. **(R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g))**
4. The permittee shall monitor emissions, operating information, and keep records for each FGBOILERSII boiler in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc. The permittee shall make all records available to the Department upon request. **(40 CFR Part 60 Subparts A & Dc)**
5. The permittee shall calculate the NO_x emission rates from FGBOILERSII for each calendar month and 12-month rolling time period, using fuel usage records and an emission factor (AP-42, manufacturer's or test data) that is approved by the AQD District Supervisor. **(40 CFR 52.21(c) & (d))**
6. The permittee shall keep, in a satisfactory manner, a log of the hours of operation of EUBOILHWI1 through EUBOILHWI4, individually. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(40 CFR 52.21)**

VII. REPORTING

1. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7. **(40 CFR 60.7)**

2. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGBOILERSII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILHOI1	76	69	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBOILHOI2	76	69	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVBOILHOI3	76	69	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVBOILHOI4	76	69	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVBOILHOI5	76	69	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVBOILHOI6	76	69	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVBOILSTEAMII1	20	40	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVBOILSTEAMII2	20	40	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVBOILHWII1	20	45	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVBOILHWII2	20	45	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVBOILHWII3	20	45	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVBOILHWII4	20	45	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to each FGDCBOILERS boiler. **(40 CFR Part 60 Subparts A & Dc)**

**FGEMERGGENSII
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two (2) 800 kW (1,073 hp), 2022 model year diesel emergency generators for emergency use only.

Emission Unit: EUEMERGGENI1, EUEMERGGENI2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NMHC + NO _x	6.4 g/kW-hr	Hourly ^A	Each engine In FGEMERGGENSII	SC VI.3	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), Table 2 to Appendix I of 40 CFR Part 1039
2. CO	3.5 g/kW-hr	Hourly ^A	Each engine In FGEMERGGENSII	SC VI.3	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), Table 2 to Appendix I of 40 CFR Part 1039
3. PM	0.20 g/kW-hr	Hourly ^A	Each engine In FGEMERGGENSII	SC VI.3	40 CFR 60.4205(b), 40 CFR 60.4202(a)(2), Table 2 to Appendix I of 40 CFR Part 1039

II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel/No. 2 fuel oil with sulfur content of 0.05 percent or less in each FGEMERGGENSII engine. **(R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.4207(a) & (b))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate each FGEMERGGENSII engine greater than 500 hours per year, based on a 12-month rolling time period as determined at the end of each calendar month. **(R 336.1225, 40 CFR 52.21(c) & (d))**
2. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart IIII, for the same model year, the permittee shall meet the following requirements for each FGEMERGGENSII engine:
 - a) Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
 - b) Change only those emission-related settings that are permitted by the manufacturer, and
 - c) Meet the requirements as specified in 40 CFR 89, 94 and/or 1068, as they apply to the engine.

If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211(a) & (c))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a non-resettable device to monitor and record the hours of operation for each FGEMERGGENSII engine. **(R 336.1225, 40 CFR 52.21(c) & (d), 40 CFR 60.4209(a))**
2. The maximum rated power output of each engine in FGEMERGGENSII shall not exceed 1,073 HP (800 kW), as certified by the equipment manufacturer. **(R 336.1225, R 336.1702(a), 40 CFR 60.4202, 40 CFR 60.4205)**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. If each engine in FGEMERGGENSII is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
 - a) Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
 - b) If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.
 - c) Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years thereafter, whichever comes first, to demonstrate compliance with the applicable emission standards.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4211(g)(3), 40 CFR 60.4212)**

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
2. The permittee shall record hours of operation for each FGEMERGGENSII engine, in a format acceptable to the AQD District Supervisor, indicating the hours on a calendar month basis, and a 12-month rolling time period basis. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1225, 40 CFR 52.21(c) & (d))**
3. The permittee shall keep records of the following for each FGEMERGGENSII engine:
 - a) All notifications.
 - b) All maintenance performed on the engine.
 - c) If using a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards of 40 CFR Part 60, Subpart IIII.
 - d) If not using a certified engine, documentation that the engine meets the emission standards, which shall be demonstrated with an initial performance test within one year of engine installation.**(40 CFR 60.4211(b))**
4. The permittee shall keep a complete copy of the diesel fuel/No. 2 fuel oil analysis including the sulfur content in percent, as supplied by the vendor, for each shipment of diesel fuel/No. 2 fuel oil received. The permittee shall keep all records on file at the facility and make them available to the Department upon request. **(R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.4207(a) & (b))**

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of FGEMERGGENSII. **(R 336.1201(7)(a))**

VIII. STACK/VENT RESTRICTION(S)

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEMERGGENII1	8	15	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVEMERGGENII2	8	15	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and IIII, as they apply to each engine in FGEMERGGENSII. **(40 CFR Part 60 Subparts A & IIII)**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each engine in FGEMERGGENSII. **(40 CFR Part 63, Subparts A & ZZZZ, 40 CFR 63.6585)**

**FGTACS
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Process units affected by emissions limits under R 336.1225(1).

Emission Unit: EUCATMIX1, EUANOMIX1, EUCATMIX2, EUANOMIX2, EUCATHSLIT1, EUANOHSLIT1, EUCATHSLIT2, EUANOHSLIT2, EUCATHSLIT3, EUANOHSLIT3, EUCATNOTCH1, EUANONOTCH1, EUCATNOTCH2, EUANONOTCH2, EUCATNOTCH7, EUANONOTCH7, EUCATNOTCH8, EUANONOTCH8, EUCATNOTCH9, EUANONOTCH9, EUCATNOTCH10, EUANONOTCH10, EUCATNOTCH101, EUANONOTCH101, EUCATNOTCH201, EUANONOTCH201, EUCATNOTCH301, EUANONOTCH301, EUCATNOTCHSHRED, EUANONOTCHSHRED

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. Manganese (weighted emissions from various compounds)	125 lb/yr ¹	12-month rolling time period as determined at the end of each calendar month	FGTACS	SC VI.2	R 336.1225(1)
2. Cobalt (weighted emissions from various compounds)	24 lb/yr ¹	12-month rolling time period as determined at the end of each calendar month	FGTACS	SC VI.2	R 336.1225(1)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1225)**
2. The permittee shall calculate the manganese and cobalt emission rates from FGTACS monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.¹ **(R 336.1225(1))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b).