217/782-2113

REVISED
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Bushnell Municipal Electric Light and Power
Attn: Mike McCleery
148 East Hail Street
Bushnell, Illinois 61422-1340

Application No.: 95080034 ID No.: 109015AAH
Applicant=s Designation: GENERATORS Date Received: May 6, 1999
Operation of: Power Plant
Date Issued: January 8, 2001 Expiration Date: January 8, 2006
Source Location: 175 Charles Street, Bushnell
Responsible Official: Mike McCleery, Superintendent

This permit is hereby granted to the above-designated Permittee to operate a power plant peaking station, pursuant to the above-referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Youra Benofamil at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:YB:jar

cc: Illinois EPA, FOS, Region 2
USEPA

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## 1.0 SOURCE IDENTIFICATION

### 1.1 Source

Bushnell Municipal Electric Light & Power
175 Charles Street
Bushnell, Illinois 61422-1340
309/772-3527

I.D. No.: 109015AAH
Standard Industrial Classification: 4911, Electric Generation

### 1.2 Owner/Parent Company

City of Bushnell
138 East Hail Street
Bushnell, Illinois 61422-1340

### 1.3 Operator

Bushnell Municipal Utilities
148 East Hail Street
Bushnell, Illinois 61422-1340

Mike McCleery
309/772-2029

### 1.4 General Source Description

The City of Bushnell - Power Plant includes seven engine driven electric generators. The source operates as a peaking station, generating electric power for the community and surrounding area when the normal sources of electric power are not available, due to planned repair and maintenance, unexpected breakdowns, or high levels of electricity consumption.

### 1.5 Description of Revisions

On (date of issuance), the permit was revised to address the operation of two additional engine generators (Group 3 engines), pursuant to Construction Permit 99050019. The provisions of the permit addressing startup of the engines were also revised to allow auto start of the engines without personnel at the source.

## 2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

| | |
|---|---|
| Act | Environmental Protection Act [415 ILCS 5/1 et seq.] |
| Agency or IEPA | Illinois Environmental Protection Agency |
| AP-42 | Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717 |
| Btu | British thermal unit |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] |
| CAAPP | Clean Air Act Permit Program |
| CFR | Code of Federal Regulations |
| $ft^3$ | cubic foot |
| gal | gallon |
| hr | hour |
| HAP | Hazardous Air Pollutant |
| IAC | Illinois Administrative Code |
| lb | pound |
| MBtu | Million Btus |
| MBtu/hr | Million Btus per hour |
| mo | month |
| $NO_x$ | Nitrogen Oxides |
| NSPS | New Source Performance Standard |
| PM | Particulate Matter |
| $PM_{10}$ | Particulate matter less than 10 microns in diameter |
| ppmv | parts per million volume |
| scf | Standard cubic feet |
| $SO_2$ | Sulfur Dioxide |
| USEPA | United States Environmental Protection Agency |
| VOM | Volatile Organic Material |
| yr | year |

## 3.0 INSIGNIFICANT ACTIVITIES

### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the IEPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Storage tanks of virgin or rerefined distillate oil.

Boiler/heaters, each with heat input less than 1.0 MBtu/hr that fire natural gas.

3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

### 3.2 Revisions to Lists of Insignificant Activities or Emission Levels

3.2.1 The Permittee is not required to notify the IEPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.2.2 The Permittee must notify the IEPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a)and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.2.3 The Permittee is not required to notify the IEPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

## 4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| Emission Unit | Groups | Description | Emission Control Equipment |
|---|---|---|---|
| Unit 1 (Group 1, Group 2 and Group 3 engines) | | | |
| Group 1 | Group 1 engines including 1, 2 and 5 (See Attachment 1 for details) | Internal combustion engines fired solely with distillate fuel oil | None |
| Group 2 | Group 2 engines including 3 and 4 (See Attachment 1 for details) | Internal combustion engines fired either with distillate fuel oil or a combination of distillate fuel oil and natural gas | None |
| Group 3 | Group 3 engines including 6 and 7 (See Attachment 1 for details) | Internal combustion engines fired solely with distillate fuel oil, constructed after August 1, 1980 | None |

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of $NO_x$ emissions.

5.1.2 This permit is issued based on the source not being a major source of HAPs.

### 5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations and/or requirements as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

a. No person shall cause or allow the emissions of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent into the atmosphere from any emission unit, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 201.162, 212.123(b) and 212.124.

c. No person shall cause or allow the emissions of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppmv pursuant to 35 IAC 214.301.

5.2.3 The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3 Non-Applicable Regulations

N/A

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding all emission unit emissions. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

| Pollutant | Tons/Year |
|---|---|
| Volatile Organic Material (VOM) | 9.92 |
| Sulfur Dioxide ($SO_2$) | 30.5 |
| Particulate Matter (PM) | 22.1 |
| Nitrogen Oxides ($NO_x$) | 355.0 |
| HAP, not included in VOM or Particulate | --- |
| TOTAL | 418.0 |

* The Permittee has determined its emissions for purposes of fees based on 20% of the theoretical capacity of the source, even though this is much greater than the normal annual operation of this peaking station, which is on the order of less than 2% of the theoretical capacity. The source has set its permitted emissions at this higher level to satisfy its obligation for availability of reserve electrical generating capacity.

5.5.2 Emissions of Hazardous Air Pollutants

The emissions of HAPs as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons/year of a single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish by regulation so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, or Section 502(b)(10) of the CAA.

5.6 General Recordkeeping Requirements

5.6.1 Fuel and Emissions Records for Engines at the Source

a. The Permittee shall maintain records for each shipment of fuel oil received, of the amount, maximum sulfur content, and supplier.

b. The Permittee shall maintain records of the sulfur content of the fuel oil supply to the engines, based on the weighted average of material in the storage tank, or the sulfur content of the supply shall be assumed to be the highest sulfur content in any shipment in the tank.

c. The Permittee shall maintain monthly records of the following items so as to demonstrate compliance with the limits in Condition 5.5:

i. Total usage of fuel oil for the engines, gal/mo;

ii. Total usage of natural gas for the engines, million scf/mo;

iii. Usage of fuel oil for Group 2 engines, gal/mo, as determined from fuel oil usage logs or calculated from the usage of fuel oil that would be used in conjunction with the total amount of natural gas used (gallons of fuel oil/scf of natural gas), with supporting calculations;

iv. Usage of fuel oil for Group 1 and Group 3 engines, determined as the total usage (Item i.) less usage for Group 2 engines (Item iii.); and

v. Emissions of each, $NO_x$, $SO_2$, VOM, and PM, tons/mo, with supporting calculations.

5.6.2 General Records for Operating Scenarios

None

5.6.3 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision), shall be kept at a location at the source that is readily accessible to the IEPA or USEPA, and shall be made available for inspection or copying by the IEPA and USEPA upon request.

b. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an IEPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

None

5.8 General Operational Flexibility/ Anticipated Operating Scenarios

None

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the records required by Condition 5.6 and the use of USEPA emissions estimating guidance, i.e. AP-42, Table 3.4.

a. Fuel oil only - Use the Group 1 and Group 3 fuel oil usage, the heat content of the fuel, and the following emission factors.

| Pollutant | Factor (lb/MBtu) |
|---|---|
| $NO_x$ | 3.2 |
| CO | 0.85 |
| $SO_2$ | $1.01S_{FO}$ |
| VOM | 0.09 |
| PM | 0.0697 |

Where $S_{FO}$ represents the percent sulfur in the fuel oil.

The heat content of distillate fuel oil shall be assumed to be 137,000 Btu/gal as per AP-42.

Group 1 and Group 3 emissions shall be calculated by the following:

Emissions = Fuel Oil Usage x Heat Content of Fuel Oil x Emission Factor

b. Dual fuel - Use the Group 2 fuel oil usage and the natural gas usage, the heat content of these fuels, and the following emission factors.

| Pollutant | Factor (lb/MBtu) |
|---|---|
| $NO_x$ | 2.7 |
| CO | 1.16 |
| $SO_2$ | $0.05S_{FO} + 0.895S_{NG}$ |
| VOM | 0.2 |
| PM | 0.0697 |

Where:

$S_{FO}$ = The % sulfur in the fuel oil; and

$S_{NG}$ = The % sulfur in the natural gas

The heat content of the fuels shall be assumed to be 137,000 Btu/gal for fuel oil and 1,050 Btu/scf for natural gas unless specifications for the fuels are lower, as shown on purchasing records.

Group 2 emissions shall be calculated by the following:

Emissions = (Fuel Oil Usage x Heat Content of Fuel Oil + Natural Gas Usage x Heat Content of Natural Gas) x Emission Factor

c. Total emissions are to be determined by combining the results of a. and b. above.

6.0 NOT APPLICABLE TO THIS PERMIT

## 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Unit 1 Internal Combustion Engines

#### 7.1.1 Description

The Permittee operates internal combustion engines for electric generation that are only fired with distillate fuel oil (Group 1 and Group 3) or are dual fuel fired (Group 2) used for peak electric generation or emergency electric generation. In addition to actual operation to generate electricity, each engine must be periodically Aexercised@ to confirm the engine will operate when needed to generate electricity.

The Group 3 engines are new engines constructed pursuant to Construction Permit 99050019. Conditions 7.1.5 and 7.1.6 are conditions that were initially established by this Construction Permit, to address applicability of the federal rules for Prevention of Significant Deterioration of Air Quality (PSD). This permit was based upon these engines not constituting a new major source subject to 40 CFR 52.21, Prevention of Significant Deterioration of Air Quality (PSD). Emissions from the two new engines and from existing engines at the source are both less than major. As a consequence of the construction of these new engines, the source became major for purposes of PSD.

#### 7.1.2 List of Emission Equipment and Pollution Control Equipment

| Engine # | Description | Emission Control Equipment |
|---|---|---|
| Group 1 | | |
| Engine #1 | Fairbanks-Morse 32E14 | None |
| Engine #2 | Fairbanks-Morse 32E14 | None |
| Engine #5 | General Motors 567C | None |
| Group 2 | | |
| Engine #3 | Fairbanks-Morse 38TDD8-1/8 | None |
| Engine #4 | Fairbanks-Morse 38TDD8-1/8 | None |
| Group 3 | | |
| Engine #6 | EMD 20-645E | None |
| Engine #7 | EMD 20-645E | None |

#### 7.1.3 Applicable Provisions

a. An Aaffected@ engine for the purpose of these unit specific conditions is an internal combustion engine which is used to generate electricity. As of the Adate issued@ as shown on page 1 of this permit, the affected engines are identified in Condition 7.1.2.

b. Applicable Emission Limits

Each affected engine is subject to the emission limits identified in Condition 5.2.2(b) and (c).

c. Startup Provisions

The Permittee is authorized to operate an affected engine in violation of the applicable limit of Condition 5.2.2(b) (i.e., 35 IAC 212.123) during startup pursuant to 35 IAC 201.262, as the Permittee has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual starts, and frequency of startups. This authorization is subject to the following:

i. This authorization only extends for a period of up to two-hours following initial firing of fuel during each startup event.

ii. The Permittee shall take the following measures to minimize startup emissions, the duration of startups and minimize the frequency of startups:

A. Implementation of established startup procedures, including preheating an engine prior to startup when sufficient time is available; and

B. Operating the engines as peaking units.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.1.9(b) and 7.1.10(b).

7.1.4 Non-Applicable Regulations

This permit is issued based on affected engines not being subject to the requirements of 35 IAC 212.321 or 212.322 because due to the unique nature of these processes, such rules cannot reasonably be applied.

7.1.5 Operational and Production Limits and Work Practices

a. i. Fuels with a sulfur content greater than 0.05 weight percent shall not be fired in the Group 3 engines, pursuant to the Permittee's representation that the Units are exempt from the Acid Rain Program by meeting the new units exemption requirement of 40 CFR 72.7(a). The engines are subject to the Acid Rain Program

provisions of 40 CFR 72.2 through 72.7 and 72.10 through 72.13.

ii. The Permittee shall use the following equation to address compliance with the above sulfur limit pursuant to 40 CFR 72.7(d)(3):

$$\%S_{annual} = \frac{\sum_{n=1}^{last} \%S_n M_n d_n}{\sum_{n=1}^{last} M_n d_n}$$

Where:

$\% S_{annual}$ = Annual average sulfur content of the fuel burned during the year by the unit, as a percentage by weight;

$\% S_n$ = Sulfur content of the nth sample of the fuel delivered during the year to the unit, as a percentage by weight;

$M_n$ = Mass of the nongaseous fuel in a delivery during the year to the unit of which the nth sample is taken, in lb; or for fuel delivered during the year to the unit continuously by pipeline, mass of the nongaseous fuel delivered starting from when the nth sample of such fuel is taken until the next sample of such fuel is taken, in lb;

$d_n$ = Density of the nth sample of the fuel delivered during the year to the unit, in lb per gallon; and

n = Each sample taken of the fuel delivered during the year to the unit, taken at least once for each delivery; or, for fuel that is delivered during the year to the unit continuously by pipeline, at least once each quarter during which the fuel is delivered, as required by 40 CFR 72.7(d)(2).

b. i. The only fuel fired in the Group 1 engines (#1, #2, and #5) shall be distillate fuel oil.

ii. The only fuel fired in Group 2 engines (#3 and #4) shall be distillate fuel oil and natural gas.

iii. The only fuel fired in the Group 3 engines (#6 and #7) shall be distillate fuel oil.

c. i. Total usage of fuel oil in the Group 3 Engines shall not exceed 694,000 gallons/year. Compliance with this limit shall be determined from a running total of 12 months of data.

ii. The total usage of fuel in the Group 1 and 2 engines, shall not exceed 1,040,000 gallons per year. For the purpose of this condition, natural gas shall be included at an equivalent rate of 7.88 gallons per thousand standard cubic feet of gas burned. Compliance with this limit shall be determined from a running total of 12 months of data.

d. The Illinois EPA shall be allowed to sample all fuels stored at the source.

7.1.6 Emission Limitations

a. Emissions from the Group 3 Engines shall not exceed the following limits. These limits are based on the information provided in the application. Compliance with the annual limits shall be determined from a running total of 12 months of data with emissions calculated using standard emission factors, e.g., USEPA, AP-42 $NO_x$ emission factor of 3.2 lb/MBtu (438.4 lb/1,000 gallons), unless other factors are approved by the Illinois EPA. These limitations were originally established in Construction Permit 99050019. [See also Condition 5.9.1)]

| | | L I M I T S | |
|---|---|---|---|
| Pollutant | Rate (Lb/1,000 Gallon) | Hourly (Each) (Lb/Hr) | Annual (Each) (Ton/Yr) |
| $NO_x$ | 438.4 | 86.9 | 152.2 |
| CO | 116.5 | 23.1 | 40.4 |
| $SO_2$ | 69.0 | 1.4 | 2.4 |
| VOM | 12.3 | 2.5 | 4.3 |
| PM | 9.6 | 1.9 | 3.3 |

b. i. Emissions of nitrogen oxides ($NO_x$) and carbon monoxide (CO) from Group 1 and Group 2 engines (Engine #1 through #5) combined at the source, shall each not exceed 202.8 tons/year. These limits are based on the information provided in the permit application to demonstrate that the facility is not currently a major source pursuant to 40 CFR 52.21, the federal rules for Prevention of Significant Deterioration (PSD).

ii. Emissions of $NO_x$ and CO from each existing engine shall not exceed 3.2 lb/MBtu and 1.16 lb/MBtu, respectively.

7.1.7 Testing Requirements

a. The Permittee shall startup and operate an affected engine with its operating personnel or air environmental staff present to observe opacity at least once for every 200 hours of engine operation or once a month, whichever is less frequent, provided that observations shall always be conducted at least once per year. Observations shall be conducted during daylight hours with weather conditions suitable to observe opacity.

b. i. Within 45 days of a written request by the Illinois EPA, the Permittee shall have the opacity of an affected engine determined by a certified observer in accordance with USEPA Test Method 9 during representative operating conditions of the engine as specified by the Illinois EPA. The Illinois EPA may require such observations if, based on its observations if the engine opacity does not comply with 35 IAC 212.123, or the affected engine is poorly maintained or operated so as to make compliance with 35 IAC 212.123 uncertain.

ii. A. The Permittee shall notify the Illinois EPA at least 15 days in advance of the date and time of observations, in order to allow the Illinois EPA to witness the observations. This notification shall include the name and employer of the certified observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified conditions;

B. The Permittee shall promptly notify the Illinois EPA of any changes in the date and time of observation; and

C. The Permittee shall provide a copy of its observers readings to the Illinois EPA at the time of observations, if Illinois EPA personnel are present at the conclusion of observations.

D. The Permittee shall submit a written report for these observations within 15 days of the date of observation. This report shall include:

- Date, place, and time of observations;
- Name and employer of certified observer;
- Copy of current certification;
- Description of observation conditions;
- Description of engine operating conditions;
- Raw data;
- Opacity determination; and
- Conclusion.

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

a. In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected engine to demonstrate compliance with Condition 7.1.3(b) pursuant to Section 39.5(7)(b) of the Act:

i. The following records with respect to compliance with Condition 5.2.2(c):

A. The maximum sulfur content of fuel oil that may be burned in the engine and

comply with Condition 5.2.2(c), with supporting calculations; and

B. Operation of an engine with an oil in excess of this sulfur content (as recorded pursuant to Condition 7.1.9(a)), as determined from the records required by Condition 5.6.1, with date duration, sulfur content of oil, and explanation;

ii. The following records for Group 3 engines:

A. Records of the sulfur content of the fuel oil supply to Group 3 engines, with supporting calculations using the equation in Condition 7.1.5(a)(ii); and

B. Records of operation of an engine with an oil in excess of the applicable sulfur content (Condition 7.1.5(a)(i)), with date, duration, sulfur content of oil, and explanation.

iii. Operation of an engine following the end of startup or two hours of operation, whichever occurs first, with opacity above normal, with explanation, whether opacity may have exceeded the limits of Condition 5.2.2(b), and duration of operation until achievement of normal opacity or shutdown.

b. Records for Startup and Excess Opacity

The Permittee shall maintain records, pursuant to Section 39.5(7)(b) of the Act, for each startup of an affected engine, which at a minimum shall include:

i. The following information for each startup of an affected engine:

A. Date and type of startup;

B. Whether startup is Aremote@, i.e., initiated by off-site personnel or automated procedures;

C. Whether operating personnel for the engines or air environmental staff are on site during startup, even if startup is remote; and

D. A description of startup, if operating problems are identified during the startup.

ii. The following information for each affected engine when above normal opacity has been observed by source personnel as identified in (i)(C) above:

A. Name of observer, position and reason for being at site;

B. Date and duration of above normal opacity, including start time and time normal operation was achieved;

C. If normal operation was not achieved within 30 minutes, an explanation why normal operation could not be achieved in 30 minutes;

D. A detailed description of the startup, including reason for operation and an explanation why established startup procedures could not be performed, if not performed;

E. The nature of opacity following the end of startup or two hours of operation, whichever occurs first, and duration of operation until achievement of normal opacity or shutdown; and

F. Whether exceedance of Condition 5.2.2 may have occurred during startup, with explanation, if a qualified observer was on-site.

c. The Permittee shall maintain records of the following items to address compliance with the limits in Conditions 7.1.5 and 7.1.6.

i. Total usage of fuel for the engines (new engines and existing engines separately), i.e., gal/month and mmscf/month;

ii. Fuel usage of individual engines and other operating data, e.g., hours of operation or megawatts generated from each engine, to allow total fuel usage, as recorded above, to be apportioned among the individual engines as necessary to calculate emissions;

iii. Emissions of $NO_x$ in tons/month from the new engines with supporting calculations; and

iv. Emissions of $NO_x$ and CO in tons/month and tons/year from the source (facility total), with supporting calculations.

d. The Permittee shall keep a maintenance and repair log for each engine, listing each activity performed with date.

7.1.10 Reporting Requirements

a. Notifications

The Permittee shall promptly notify the IEPA, Compliance Section of noncompliance with an emission limit as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

i. Notification within 60 days of operation of an affected engine that may not have been in compliance with the opacity limitations in Condition 5.2.2(b), other than during startup as addressed by Condition 7.1.3(c), as determined from the records required by Condition 7.1.9(b), with a copy of such record for each incident; and

ii. Notification within 30 days of any operation of an affected engine that is not in compliance with the $SO_2$ emission limitations in Conditions 5.2.2(c), as determined from the records required by Condition 5.6.1 and 7.1.9(a) and (b), with a copy of such records for each incident.

b. Reporting for Startups of Engines

The Permittee shall provide an annual report, submitted with the Annual Emission Report, to the IEPA, Compliance Section and Regional Field Office, pursuant to Section 39.5(7)(b) of the Act, concerning startup of engines subject to Condition 7.1. At a minimum, this report shall include:

i. For each engine, the total number of startups and the total number of startups that may have resulted in opacity in excess of Condition 5.2.2(b) (i.e., 35 IAC 212.123); and

ii. For each engine, the estimated duration of excess opacity during startup, minutes/year.

c. Reporting for Changes Made in Accordance with Operation Flexibility

The Permittee shall notify the Illinois EPA, Compliance Section within 30 days of any change in the type of fuel routinely combusted in a Group 2 engine as allowed in accordance with the Operational Flexibility provisions of Condition 7.1.11.

For the purpose of this reporting requirement the periodic firing of dual fuel (95/5) to confirm that an engine is able to start of the firing of dual fuel when the distillate fuel supply is interrupted shall not be considered a change in the type of fuel routinely combusted. Operation of a dual-fuel engine or natural gas in other circumstances, or the subsequent return to natural gas operation shall be considered a change in the type of fuel routinely combusted.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to affected engines without prior notification to the IEPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

a. Group 1 Engines

None

b. Group 2 Engines

Changes in the type of fuel combusted in affected engines from distillate oil to a combination of distillate fuel oil and natural gas or natural gas only.

c. Group 3 engines

None

7.1.12 Compliance Procedures

The testing, monitoring, recordkeeping and reporting requirements in Conditions 7.1.7, 7.1.8, 7.1.9 and 7.1.10 shall be used to demonstrate compliance with the requirements of Condition 7.1.3 and 7.1.5.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements as of the date the proposed permit for this source was issued. This shield is granted based on the Illinois EPA's review of the permit application for this source and its determination that all applicable requirements are specifically identified in this permit. If the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to the source, the Illinois EPA's written determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after March 21, 1997 unless the permit has been modified to reflect such new requirements.

The Permittee shall not be required to have a certified opacity reader on site unless requested by the Illinois EPA.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, or other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement. [Section 39.5(7)(o)(vii) of the Act]

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes without applying for or obtaining an amendment to this permit, provided that the changes do not

constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and the Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

a. Describe the physical or operational change;

b. Identify the schedule for implementing the physical or operational change;

c. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

e. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other process, emissions, or composition parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

A report summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

| Monitoring Period | Report Due Date |
|---|---|
| January - June | September 1 |
| July - December | March 1 |

All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in the permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;

e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use on an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in the permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests and/or analyses; and

g. The operating conditions at the time of the sampling or measurements.

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. IEPA - Air Compliance Unit

Illinois Environmental Protection Agency (MC 40)
Bureau of Air
Compliance Section
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. IEPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
5415 North University
Peoria, Illinois 61614

iii. IEPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency
Divisions of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA - Air Branch

United States EPA (AR - 18J)
Air & Radiation Branch (Illinois - Indiana)
77 West Jackson Boulevard
Chicago, Illinois 60604

b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the IEPA - Air Compliance Section with a copy sent to the IEPA - Air Regional Field Office.

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in the permit and as allowed by law and rule. [Section 39.5(7)(j)(iv) of the Act]

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the Clean Air Act, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the Clean Air Act; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

### 9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Air Act and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or

operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi)] The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(p)(ii) of Act]:

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of the permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, operations regulated or required under the permit;

d. Sample or monitor any substances or parameters at any location:

i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA, or this Act.

e. Obtain and remove samples of any discharge or emission of pollutants; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source.

9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

## 9.6 Recordkeeping

### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes.

### 9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [Section 39.5(7)(e)(ii) of the Act]

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

## 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

## 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

a. The certifications shall include descriptions on means to monitor the compliance of the source including emissions limitations, standards, and work practices in accordance with applicable requirements and permit conditions. The certification shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance

was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications must be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by a CAAPP permit shall contain certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defenses to Enforcement Action

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operation logs, or other relevant evidence:

i. An emergency occurred as provided in Subsection 7(k) of Section 39.5 of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working day of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any

steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in the permit.

b. This provision is in addition to any emergency or upset provisions contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless the permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on the permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

The permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

9.12.2 Reopening and Revision

The permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that the permit contains a material mistake or inaccurate statement when establishing the emission standards or

limitations, or other terms or conditions of the permit; and

d. The Illinois EPA or USEPA determines that the permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(a)(iii) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality. [Section 39.5(7)(o)(v) of the Act]

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if the permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions. [Section 39.5(5)(l) and (n) of the Act]

## 10.0 ATTACHMENTS

### 10.1 Attachment 1 - Description of Emission Units

| Group/Engine # | Rated or Design Capacity (MBtu/hr) | Fuel Type | Manufacturer | Model #/Serial # | Date Constructed |
|---|---|---|---|---|---|
| Group 1 | | | | | |
| Engine #1 | 2.2 | Distillate Fuel Oil | Fairbanks-Morse | 32E14/810496 | 1941 |
| Engine #2 | 2.2 | Distillate Fuel Oil | Fairbanks-Morse | 32E14/816503 | 1941 |
| Engine #5 | 11.0 | Distillate Fuel Oil | General Motors | 567C/8454504 | 1955 |
| Group 2 | | | | | |
| Engine #3 | 24.2 | Distillate Fuel Oil or Dual Fuel - Distillate Fuel Oil and Natural Gas | Fairbanks-Morse | 38TDD8-1/8 970527 | 1963 |
| Engine #4 | 24.2 | Distillate Fuel Oil or Dual Fuel - Distillate Fuel Oil and Natural Gas | Fairbanks-Morse | 38TDD8-1/8 970497 | 1963 |
| Group 3 | | | | | |
| Engine #6 | 27.14 | Distillate Fuel Oil | EMD | EMD 20-645-E | 1999 |
| Engine #7 | 27.14 | Distillate Fuel Oil | EMD | EMD 20-645-E | 1999 |

10.2 Attachment 2 - Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel property gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

YB:jar