

LANE REGIONAL AIR PROTECTION AGENCY

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Standard
AIR CONTAMINANT DISCHARGE PERMIT

Issued in accordance with provisions of Title 37, Lane Regional Air Protection Agency's Rules and Regulations, and based on the land use compatibility findings included in the permit record.

Issued To:

GLE

92757 Highway 99

Junction City, Oregon 97448

Land Use Compatibility Statement:

From: Lane County

Dated: June 22, 2010

Mailing Address:

1328 West 2nd Avenue

Eugene, OR 97402

Fee Basis:

Title 37, Table 1: Part B: 25

Electric Power Generation from
Combustion (excluding units used
exclusively as emergency generators)

Part C.4: Source subject to NSPS

Permit Number: 203147

Permit Type: Standard

SIC: 4911 Electrical Power Generation

Date Issued: September 6, 2011

Expiration Date: September 6, 2016

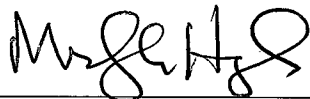
Permitted Sources:

1 Internal Combustion Engine

Generator, Biogas-fired subject to
NSPS Subpart JJJJ

Issued

By: _____



Merlyn L. Hough, Director

Effective

Date: _____

SEP - 6 2011

Permitted Activities

1. Until this permit expires or is revoked, the permittee is herewith allowed to discharge air contaminants only in accordance with the permit application and the requirements, limitations, and conditions contained in this permit. This specific listing of requirements, limitations, and conditions does not relieve the permittee from complying with all other rules of Lane Regional Air Protection Agency (LRAPA).

Emission Unit Description

2. The emission units regulated by this permit are the following:

Emission Unit	Pollutants Emitted
EG1: One Biogas-fired Engine Generator: Manufactured by GE Jenbacher (Jenbacher) in 2010, Rated at 1059 ekW, (at 1800 rpm, 60Hz), and waste biogas flare. <ul style="list-style-type: none"> • Biogas-derived fuel = 9.3 MM Btu/hr and 79,236 MM Btu/yr (anaerobic digester using green feedstock). 	PM, PM ₁₀ , PM _{2.5} , NO _x , CO, VOC, and SO ₂

Performance Standards and Limitations

Plant Site Emission Limits (PSELs)

3. Total 12-month rolling plant site emissions shall not exceed the following PSELs. Any changes in operation that may increase the emissions above the PSEL must be approved by LRAPA. Failure to do so may result in enforcement action by LRAPA. [LRAPA 42-0040]

**Annual (12-month rolling) PSEL
(tons/year)**

Source	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO
Totals	24	14	9	39	39	39	99

General Standards

4. The permittee shall not cause, suffer, allow, or permit the emission of any air contaminant, excluding uncombined water, into the atmosphere from any air contaminant source for a period or periods aggregating more than three (3) minutes in any one (1) hour which is equal or greater than 20 percent opacity. [LRAPA 32-010-1 and 3]
5. The maximum allowable emission of particulate matter from any combustion source installed, constructed, or modified after June 1, 1970 shall not exceed 0.1 grains per cubic foot of exhaust gas, adjusted to 50 percent excess air or calculated to 12 percent carbon dioxide. [LRAPA 32-030]

Operation and Maintenance Requirements

6. The generator used for power production must be tuned at least once per calendar year. The tune-up must include an inspection of the emissions control system. If the emissions control system is not working properly, it must either be repaired or replaced. [LRAPA 32-007]
7. The permittee shall ensure that the excess biogas flare is operated in a manner to maximize efficiency, as follows: [LRAPA 32-007 and 40 CFR 60.18(b)]
 - a. The flare shall be operated with a continuous pilot flame (with biogas) when there is a demand to combust biogas. The pilot flame must be continuously monitored using a thermocouple or equivalent device. The flame shall be monitored for on/off status and for flame failure, and the system equipped with alarms to signal such events. If any excess emission events occur due to pilot flame ignition malfunction then the flare shall be operated with a continuous pilot flame regardless of the demand to combust biogas.
 - b. The flare shall be operated with supplemental fuel (natural gas, propane) to assist biogas combustion unless the heating value of the biogas is 200 btu/scf or greater. As necessary, the net heating value is to be determined as described in 40 CFR 60.18.
 - c. The flare shall be designed and operated with no visible emissions as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

New Source Performance Standards (NSPS)

8. The permittee shall operate the generator in Emission Unit EG1 in accordance with the requirements specified in the Spark Ignition Reciprocating Internal Combustion Engines (SI-RICE) NSPS (40 CFR 60 Subpart JJJJ).
 - a. The engine shall meet the emission standards from Subpart JJJJ, Table 1 for landfill/digester gas engines with maximum engine power greater than or equal to 500Hp as follows:
 - i. NO_x emissions shall be less than 2.0 g/Hp-hr or 150 ppmvd at 15% O₂
 - ii. CO emissions shall be less than 5.0 g/Hp-hr or 610 ppmvd at 15% O₂
 - iii. VOC emissions shall be less than 1.0 g/Hp-hr or 80 ppmvd at 15% O₂. For purposes of this condition, when calculating emissions of VOCs, emissions of formaldehyde should not be included.
 - b. The permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
 - c. ***Within 1 year of engine startup, the permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years,***

whichever comes first, thereafter to demonstrate compliance with the emission standards in Condition 8.a above. All testing shall be in accordance with the requirements and methods specified in 40 CFR 60.4244 and the Oregon DEQ *Source Sampling Manual*.

Monitoring, Recordkeeping and Reporting

Monitoring and Recordkeeping

9. **By the tenth (10th) day of each month**, the permittee shall record the following information for EG1. A record of the following data shall be maintained for a period of two (2) years at the plant site and shall be available for inspection by authorized representatives of LRAPA: [LRAPA 35-0160]

Monitoring or Recordkeeping Parameter	Minimum Recording Frequency
Biogas burned in the engine generator (MMBtu)	Monthly
Biogas burned by the excess biogas flare (MMBtu)	Monthly
Hours of Operation for the engine generator (hrs)	Monthly
Information from equipment manufacturer(s) regarding engine emissions and the efficiency of any pollution control equipment	These records must be retained on-site for as long as the generator is used for power production.
Description of any major maintenance to the generator as required by Condition 8.b	Upon occurrence
Any odor complaints received by the permittee	Upon occurrence
Results of biogas fuel analysis for heat content and/or composition	Upon occurrence

10. Compliance with the PSEs in Condition 3 is determined for each 12-month rolling period based on the following calculation for each pollutant for all processes: [LRAPA 35-0160]

$$E = \Sigma(EF \times P)/2000$$

where,

- Σ = symbol representing "summation of"
- E = pollutant emissions (tons/year);
- EF = pollutant emission factor (lb/MMBtu, see Condition 11);
- P = biogas combusted (MMBtu, generator and flare)

11. The permittee shall use the following emission factors to estimate emissions in accordance with Condition 10: [LRAPA 35-0160]

Pollutant	Emission Factor (lb/MMBtu)	Reference
PM/PM ₁₀ /PM _{2.5}	0.011	Facility application

VOC*	0.115	GE Jenbacher
SO ₂	0.092	Fuel content estimate/calculation
NO _x	0.383	GE Jenbacher
CO	0.870	GE Jenbacher

*VOC as defined in 40 CFR 51.100(s). For the purposes of Subpart JJJJ, when calculating emissions of VOCs, emissions of formaldehyde should not be included.

Reporting

12. An annual summary shall be submitted for the information as required per Conditions 9 and 10, and G15. **The report shall be submitted by March 15 of each year.** [LRAPA 35-0160]
13. The annual summary shall include greenhouse gases if applicable and as required by ODEQ Division 215 [OAR 340-215-0030]
14. Unless otherwise specified, all reports, test results, notifications, etc., required by the above terms and conditions shall be reported to the following office: [LRAPA 35-0160]

Lane Regional Air Protection Agency
1010 Main Street
Springfield, Oregon 97477
(541) 736-1056

Fee Schedule

15. In accordance with adopted regulations, the permittee shall be invoiced by 10/1 each year for the Annual Fee due 12/1 each year. [LRAPA 37-0060 Table 2]

Max/cmw
0713/11

GENERAL PERMIT CONDITIONS

General Conditions and Disclaimers

- G1. A copy of the permit application and this Air Contaminant Discharge Permit (ACDP) must be available on site for inspection upon request.
- G2. The permittee shall allow the Director or his/her authorized representatives access to the plant site and pertinent records at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant discharge records and otherwise conducting necessary functions related to this permit in accordance with ORS 468.095. [LRAPA 13-020(1)(h)]
- G3. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

Performance Standards and Emission Limits

- G4. No person shall not cause or permit the emissions of any particulate matter which is greater than 250 microns in size if such particulate matter does or will deposit upon the real property of another person when notified by LRAPA that the deposition exists and must be controlled. [LRAPA 32-055]
- G5. No person shall discharge from any source whatsoever such quantities of air contamination which cause injury or damage to any persons, the public, business or property. Such determination to be made by LRAPA. [LRAPA 32-090-1]
- G6. The permittee shall not cause or permit emission of water vapor if the water vapor causes or tends to cause detriment to the health, safety or welfare of any person or causes, or tends to cause damage to property or business. [LRAPA 32-090-2]
- G7. The permittee shall not willfully cause or permit the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminants emitted, conceals emissions of air contaminants which would otherwise violate LRAPA rules. [LRAPA 33-030-1]
- G8. The permittee shall not cause or permit the installation or use of any device or use of any means designed to mask the emissions of an air contaminant which causes or tends to cause detriment to health, safety or welfare of any person. [LRAPA 33-030-2]
- G9. The permittee shall not allow any materials to be handled, transported, or stored; or a building, its appurtenances or road(s) to be used, constructed, altered, repaired, or demolished; or any equipment to be operated, without taking reasonable precautions to prevent particulate matter from being airborne. [LRAPA 48-015-2]
- G10. No person may cause or allow air contaminants from any source subject to regulation by LRAPA to cause nuisance. [LRAPA 49-010-1]

Excess Emissions: General Policy

- G11. Emissions of air contaminants in excess of applicable standards or permit conditions are unauthorized and are subject to enforcement action, pursuant to LRAPA 36-010 and 36-030.

These rules apply to any permittee operating a source which emits air contaminants in violation of any applicable air quality rule or permit condition, including but not limited to excess emissions resulting from the breakdown of air pollution control equipment or operating equipment, process upset, startup, shutdown, or scheduled maintenance. Sources that do not emit air contaminants in excess of any applicable rule or permit condition are not subject to the recordkeeping and reporting requirements in LRAPA Title 36. [LRAPA 36-001-1]

Excess Emissions: Notification and Record-keeping

- G12. For all other excess emissions not addressed in LRAPA Sections 36-010, 36-015, or 36-040, the following requirements apply. The owner or operator, of a small source, as defined by Section 36-005-7, need not notify LRAPA of excess emissions events immediately unless otherwise required by permit condition, written notice by LRAPA, or if the excess emission is of a nature that could endanger public health. [LRAPA 36-020-1]

Notification shall be made to the LRAPA office. The current LRAPA telephone number during regular business hours (8 a.m. - 5 p.m., M-F) is (541) 736-1056. During nonbusiness hours, weekends, or holidays, the permittee shall immediately notify LRAPA by calling the LRAPA Upset/Complaint Line. The current number is (541) 726-1930.

Follow-up reporting, if required by LRAPA, shall contain all information required by Condition G15.

- G13. At each annual reporting period specified in this permit, or sooner if required by LRAPA, the permittee shall submit a copy of the upset log entries for the reporting period, as required by Condition G15. [LRAPA 36-025-4]
- G14. Any excess emissions which could endanger public health or safety shall immediately be reported to the Oregon Emergency Response System (OERS) at 1-800-452-0311.
- G15. The permittee shall keep an upset log of all planned and unplanned excess emissions. [LRAPA 36-025-3 and 36-030-1] The upset log shall include the following:
- a. date and time each event was reported to LRAPA;
 - b. whether the process handling equipment and the air pollution control equipment were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - c. whether repairs or corrections were made in an expeditious manner when the permittee knew or should have known that emission limits were being or were likely to be exceeded;
 - d. whether the event was one in a recurring pattern of incidents which indicate inadequate design, operation, or maintenance; and
 - e. final resolution of the cause of the excess emissions.

Upset logs shall be kept by the permittee for five (5) calendar years.
[LRAPA 36-025-4]

Excess Emissions: Scheduled Maintenance

- G16. Where it is anticipated that shutdown, by-pass, or operation at reduced efficiency of production equipment or air pollution control equipment for necessary scheduled maintenance may result in excess emissions, the permittee must obtain prior LRAPA approval of procedures that will be

used to minimize excess emissions. Application for approval of procedures associated with the scheduled maintenance shall be submitted and received by LRAPA in writing at least seventy-two (72) hours prior to the event. [LRAPA 36-015-1] The application shall include the following:

- a. reasons explaining the need for maintenance, including why it would be impractical to shut down the source operation during the period, and why the by-pass or reduced efficiency could not be avoided through better scheduling for maintenance or through better operation and maintenance practices;
 - b. identification of the specific production or emission control equipment or system to be maintained;
 - c. nature of the air contaminants likely to be emitted during the maintenance period, and the estimated amount and duration of the excess emissions, including measures such as the use of overtime labor and contract services and equipment that will be taken to minimize the length of the maintenance period; and
 - d. identification of specific procedures to be followed which will minimize excess emissions.
- G17. No scheduled maintenance which is likely to result in excess emissions shall occur during any period in which an Air Pollution Alert, Air Pollution Warning, or Air Pollution Emergency has been declared, or during an announced "Stage I Red" woodstove advisory period, in areas determined by LRAPA as PM₁₀ Nonattainment Areas. [LRAPA 36-015-6]
- G18. In cases where LRAPA has not received notification of scheduled maintenance that is likely to cause excess emissions within the required seventy-two (72) hours prior to the event, or where such approval has not been waived pursuant to LRAPA 36-015-3, the permittee shall immediately notify LRAPA by telephone of the situation, and shall be subject to the requirements of Conditions G12 and G13. [LRAPA 36-015-7]

Air Pollution Emergencies

- G19. The permittee shall, upon declaration of an air pollution episode, take all actions specified in Tables 1, 2, and 3 of LRAPA's Title 51 (see Attachment A) and shall particularly put into effect the LRAPA-approved preplanned abatement strategy for such condition, if applicable. [LRAPA 51-015]

Notification of Construction/Modification

- G20. The permittee shall notify LRAPA in writing and obtain approval in accordance with LRAPA 34-035 before:
- a. constructing or installing any new source of air contaminant emissions, including air pollution control equipment; or
 - b. modifying or altering an existing source that may significantly affect the emissions of air contaminants, or
 - c. making any physical change which increases emissions; or
 - d. changing the method of operation, the process, or the fuel use, or increasing the normal hours of operation to levels above those contained in the permit application and reflected in this permit and which result in increased emissions.

Notification of Name Change

- G21. The permittee shall notify LRAPA in writing, using an LRAPA Application for Administrative Amendment to ACDP form, within 60 days after legal change of the registered name of the company with the Corporation Division of the State of Oregon.

Applicable administrative fees must be submitted with an application for the name change.

Permit Renewal

- G22. Application for renewal of this permit must be submitted not less than 60 days prior to the permit expiration date. [LRAPA 37-0040]
- G23. The procedure for issuance of a permit shall apply to renewal of a permit. If a completed application for a renewal of a permit is filed with LRAPA in a timely manner, prior to the expiration date of the permit, the permit shall not be deemed to expire until final action has been taken on the renewal application to issue or deny a permit. [LRAPA 37-0082-1]

Termination Conditions

- G24. This permit shall be automatically terminated upon: [LRAPA 37-0082]
- a. Issuance of a renewal or new ACDP for the same activity or operation;
 - b. Written request of the permittee, if LRAPA determines that a permit is no longer required;
 - c. Failure to submit a timely application for permit renewal. Termination is effective on the permit expiration date; or;
 - d. Failure to pay annual fees within 90 days of invoice by LRAPA, unless prior arrangements for payment have been approved in writing by LRAPA.
- G25. If LRAPA determines that a permittee is in noncompliance with the terms of the permit, submitted false information in the application or other required documentation, or is in violation of any applicable rule or statute, LRAPA may revoke the permit. Notice of the intent to revoke the permit will be provided to the permittee in accordance with LRAPA Title 14. The notice will include the reasons why the permit will be revoked, and include an opportunity for hearing prior to the revocation. A written request for hearing must be received within 60 days from service of the notice, and must state the grounds of the request. The hearing will be conducted as a contested case hearing in accordance with LRAPA Title 14. The permit will continue in effect until the 60 days expires, or until a final order is issued if an appeal is filed, whichever is later. [LRAPA 37-0082-4]
- G26. A permit automatically terminated under 37-0082-2.B. through 2.D. may only be reinstated by the permittee by applying for a new permit, including the applicable new source permit application fees as set forth in Title 37. [LRAPA 37-0082-3]
- G27. If LRAPA finds there is a serious danger to the public health, safety or the environment caused by a permittee's activities, LRAPA may immediately revoke or refuse to renew the permit without prior notice or opportunity for a hearing. If no advance notice is provided, notification will be provided to the permittee as soon as possible as provided in LRAPA Title 14. The notification will set forth the specific reasons for the revocation or refusal to renew. For the permittee to contest LRAPA's revocation or refusal to renew LRAPA must receive a written request for a hearing within 90 days of service of the notice and the request must state the grounds for the request. The hearing will be conducted as a contested case hearing in accordance with LRAPA Title 14.

The revocation or refusal to renew becomes final without further action by LRAPA if a request for a hearing is not received within the 90 days. [LRAPA 37-0082-4.B]

G28. Any hearing requested shall be conducted pursuant to the rules of LRAPA. [LRAPA Title 31]

G29. The permittee may be required to submit, by April 20 of each year, the emission inventory form provided by LRAPA. [LRAPA 34-015]

Max/DW/bp [revised 10/24/01, 4/18/06, 3/9/09, 5/6/09, 12/11/09, 2/8/11]

ATTACHMENT B: Air Pollution Emergencies

Table I

AIR POLLUTION EPISODE: **ALERT CONDITION**

EMISSION REDUCTION PLAN

Part A: Pollution Episode Conditions for Carbon Monoxide or Ozone

For **Alert Conditions** due to excessive levels of carbon monoxide or ozone, persons operating motor vehicles shall be requested to voluntarily curtail or eliminate all unnecessary operations within the designated **Alert Area**, and public transportation systems shall be requested to provide additional services in accordance with a preplanned strategy.

Part B: Pollution Episode Conditions for Particulate Matter

For **Alert Conditions** resulting from excessive levels of particulate matter, the following measures shall be taken in the designated area:

1. There shall be no open burning by any person of any material.
2. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.
3. Persons responsible for the operation of any source of air contaminants listed below shall take all required actions for the **Alert Level**, in accordance with the preplanned strategy:

Source of Contamination	Control Actions — Alert Level
A. Coal, oil, or wood-fired facilities.	1) Utilization of electric generating fuels having low ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Diverting electric power generation to facilities outside of Alert Area .
B. Coal, oil, or wood-fired process steam generating facilities.	1) Utilization of fuel having low ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing.

Source of Contamination	Control Actions — <i>Alert Level</i>
	3) Substantial reduction of steam load demands consistent with continuing plant operations.
C. Manufacturing industries of the following classifications: <ul style="list-style-type: none"> - Primary Metals Industries - Petroleum Refining - Chemical Industries - Mineral Processing Indus. - Grain Industries - Paper and Allied Products - Wood Processing Industry 	1) Reduction of air contaminants from manufacturing operations by curtailing postponing, or deferring production and all operations. 2) Reduction by deferring trade waste disposal operations which emit solid particle gas vapors or malodorous substance. 3) Reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Table II

AIR POLLUTION EPISODE: *WARNING CONDITIONS*

EMISSION REDUCTION PLAN

Part A: Pollution Episode Conditions for Carbon Monoxide or Ozone

For ***Warning Conditions***, resulting from excessive levels of carbon monoxide or ozone, the following measures shall be taken:

1. Operation of motor vehicles carrying fewer than three (3) persons shall be prohibited within designated areas during specified hours. Exceptions from this provision are:
 - A. Public transportation and emergency vehicles
 - B. Commercial vehicles
 - C. Through traffic remaining on Interstate or primary highways.
2. At the discretion of the Agency, operations of all private vehicles within designated areas or entry of vehicles into designated areas may be prohibited for specified periods of time.
3. Public transportation operators shall, in accordance with a pre-planned strategy, provide the maximum possible additional service to minimize the public's inconvenience as a result of No. 1 or No. 2. above.
4. For ozone episodes the following additional measures shall be taken:
 - A. No bulk transfer of gasoline without vapor recovery from 2:00 a.m. to 2:00 p.m.
 - B. No service station pumping of gasoline from 2:00 a.m. to 2:00 p.m.
 - C. No operation of paper coating plants from 2:00 a.m. to 2:00 p.m.
 - D. No architectural painting or auto finishing;
 - E. No venting of dry cleaning solvents from 2:00 a.m. to 2:00 p.m. (except perchloroethylene).
5. Where appropriate for carbon monoxide episodes during the heating season, and where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.

Part B: Pollution Episode Conditions for Particulate Matter

For ***Warning Conditions*** resulting from excessive levels of particulate matter, the following measures shall be taken:

1. There shall be no open burning by any person of any material.
2. The use of incinerators for the disposal of solid or liquid wastes shall be prohibited.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.
4. Where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces for domestic space heating, except where such devices provide the sole source of heat.

5. Persons responsible for the operation of any source of air contaminants listed below shall take all required actions for the **Warning Level**, in accordance with a preplanned strategy:

Source of Contamination	Control Actions — Warning Level
<p>A. Coal, oil, or wood-fired electric power generating facilities.</p>	<ol style="list-style-type: none"> 1) Maximum utilization of fuels having lowest ash and sulfur content. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Diverting electric power generation to facilities outside of Warning Area. 4) Prepare to use a plan of action if an Emergency Condition develops. 5) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
<p>B. Coal, oil, or wood-fired process steam generating facilities.</p>	<ol style="list-style-type: none"> 1) Maximum utilization of fuels having the lowest ash and sulfur content. 2) Utilization of mid-day (12: 00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Prepare to use a plan of action if an Emergency Condition develops. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
<p>C. Manufacturing industries which require considerable lead time for shut-down including the following classifications:</p> <ul style="list-style-type: none"> - Petroleum Refining - Chemical Industries - Primary Metals Industries - Glass Industries - Paper and Allied Products 	<ol style="list-style-type: none"> 1) Reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operations. 2) Reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances. 3) Maximum reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence of boiler lancing or soot blowing.

Source of Contamination	Control Actions — <i>Warning Level</i>
D. Manufacturing industries which require relatively short time for shut-down.	<ol style="list-style-type: none">1) Elimination of air contaminants from manufacturing operations by ceasing, allied operations to the extent possible without causing injury to persons or damage to equipment.2) Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances.3) Reduction of heat load demands for processing.4) Utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Table III

AIR POLLUTION EPISODE: **EMERGENCY CONDITIONS**
EMISSION REDUCTION PLAN

1. There shall be no open burning by any person of any material.
2. The use of incinerators for the disposal of solid or liquid wastes shall be prohibited.
3. All places of employment, commerce, trade, public gatherings, government, industry, business, or manufacture shall immediately cease operation, except the following:
 - A. Police, fire, medical and other emergency services;
 - B. Utility and communication services;
 - C. Governmental functions necessary for civil control and safety;
 - D. Operations necessary to prevent injury to persons or serious damage to equipment or property;
 - E. Food stores, drug stores and operations necessary for their supply;
 - F. Operations necessary for evacuation of persons leaving the area;
 - G. Operations conducted in accordance with an approved preplanned emission reduction plan on file with the Agency.
4. All commercial and manufacturing establishments not included in these rules shall institute such actions as will result in maximum reduction of air contaminants from their operations which emit air contaminants, to the extent possible without causing injury or damage to equipment.
5. The use of motor vehicles is prohibited except for the exempted functions in 3, above.
6. Airports shall be closed to all except emergency air traffic.
7. Where legal authority exists, governmental agencies shall prohibit all use of wood stoves and fireplaces.
8. Any person responsible for the operation of a source of atmospheric contamination listed below shall take all required control actions for this **Emergency Level**.

Source of Contamination	Control Actions — Emergency Level
A. Coal, oil, or wood-fired electric power generating facilities.	1) Maximum utilization of fuels having lowest ash and sulfur content.
	2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

Source of Contamination	Control Actions — <i>Emergency Level</i>
	3) Diverting electric power generation to facilities outside of Emergency area. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
B. Coal, oil, or wood-fired steam generating facilities.	1) Reducing heat and steam process demands to absolute necessities consistent with preventing equipment damage. 2) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing. 3) Taking the action called for in the emergency plan. 4) Cease operation of facilities not related to safety or protection of equipment or delivery of priority power.
C. Manufacturing industries of the following classifications: - Primary Metals Industry - Petroleum Refining Operations - Chemical Industries - Mineral Processing Industries - Paper and Allied Products - Grain Industry - Wood Processing Industry	1) The elimination of air of contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. 2) Elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances. 3) Maximum reduction of heat load demands for processing. 4) Utilization of mid-day (12:00 noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing.