# Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Air Quality Control

#### REVISED RACT APPROVAL

#### PERMIT NUMBER : OP 33-137

Owner:

Cogentrix of Pennsylvania Inc.

Source &

See Attached

Address:

9405 Arrowpoint Blvd.

Air Cleaning Page 3

Dage 2

Charlotte, NC 28273-8110

Device

Attention:

Mr. Mark A. Casper

Location:

Ringgold Township

Director, Environmental Affairs

Jefferson County

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P. L. 2119, as amended, and with Chapter 127 of the Rules and Regulations of the Department of Environmental Resources, the Department on January 27, 1998 approved plans for achieving compliance by the above indicated air contamination source(s) with the requirements of 25 Pa Code Section 129.91 through 129.95.

The operating permit is subject to the following conditions:

- This Revised RACT Approval supersedes the previous RACT Approval issued June 27, 1995.
- The facility is to be operated in accordance with the plan submitted with the application as approved herein.
- 3. The facility shall implement the RACT plan by May 31, 1995.
- 4. NOx emissions for each Wartsila engine (#1, #2, and #3) shall not exceed 5g/HP-hr, 76.8 lb/hr, and 326.7 ton/yr. The annual emission rate of 326.7 ton shall be calculated on a 12 month rolling basis.
- 5. Auxiliary boilers #1 and #2 shall comply with the requirements of 25 Pa Code 129.93(b)(2)(3)(4)(5).
- 6. See attached.

Larry W. Wonders

Regional Air Quality Manager

- All monitoring and record keeping requirements for the auxiliary boiler shall comply
  with the requirements of 25 Pa Code 129.95. The auxiliary boiler shall comply with
  all monitoring and record keeping conditions as stated from the existing Plan
  Approval/Operating Permit 33-302-014. (See attachment)
- The Wartsila engines (#1, #2, and #3) shall comply with all monitoring and recordkeeping conditions as stated from the existing Plan Approval/Operating Permit #33-399-004.(See attachment)
- 7. This RACT approval applies to the emission of NOx and VOC pollutants only. Emissions of other pollutants, including criteria pollutants, shall be governed by the existing Plan Approvals, Operating Permits, any applicable requirements, and other Rules and Regulations of the Department. Such approval, permits, and requirements are incorporated herein by reference and made part of this permit.
- Any information required to be submitted as part of the above conditions should be submitted to Mr. Devendra Verma, Chief, Engineering Services, Air Quality Program, Northwest Regional Office, 230 Chestnut Street, Meadville, Pa 16335.

# SOURCE AND AIR CLEANING DEVICE

3 Gas/Oil Fired Stationary Reciprocating Engines

(Wartsila Model 18v32GD)

Catalytic Convertor

(Mechanical Equip., Inc., or equivalent)

2 Gas/#2 Oil Hot Water Boilers

(Cleaver Brooks - CB-200-500)

- Hsbg. (Abt. & Cor

Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Air Quality Control

PLAN APPROVAL

PERMIT NUMBER: 33-302-014

Owner:

Cogentrix of Pennsylvania, Inc.

Source &

Two(2) gas/#2 oil hot water boilers

Address:

Highway LR 33001

Air

(Cleaver Brooks)

Ringgold, Pennsylvania

15770

Cleaning

Device

Attention: William C. Campbell, III

V. President Env. Affairs

Location

Highway LR 33001 Ringgold Township

Jefferson County

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P. L. 2119, as amended, and with Chapter 127 of the Rules and Regulations of the Department of Environmental Resources, the Department on NOV 15 1990 approv approved plans for the construction of the above indicated a

THIS PLAN APPROVAL expires AHG 3 1 1991 .

The plan approved is subject to the following conditions:

- 1. The construction is to be completed in accordance with the plan submitted with the application (as approved herein).
- 2. If construction cannot be completed before the expiration date of thi plan approval, then in order to continue construction, an extension o the expiration date must be obtained. Request for extensions must be postmarked at least thirty (30) days prior to the expiration date. T Department cannot issue an extension after the expiration date.
- This approval authorizes construction and is not an operating permit. Prior to start-up of the facility, a temporary operating permit must be obtained pursuant to 25 PA Code Section 127.23. The request must be in writing and received at least two weeks prior to initial operation. Operation without a valid operating permit may be subject to enforcement action.
- See attached.

Wonders

Regional Air Pollution Control Enginee

Meadville Regional Office

ditions continued -

- 4. When fining #2 fuel oil, the following restrictions shall apply to each boller.
  - a. Duration of operation shall not exceed 4380 hours per year.
  - b. The sulfur content by weight in the fuel shall not exceed 0.3%.
  - c. Fuel usage shall not exceed 663,350 gallons per year.
  - d. Records of operation shall be maintained for at least two years and shall be made available upon request to the Department personnel.
- 5. Within thirty (30) days of the end of each calendar quarter the company shall submit to the Meadville Regional Office the hours of operation of each boiler with #2 fuel oil, the amount in gallons of #2 fuel oil fired in each boiler during the quarter and the cumulative total of each for the calendar year. The quarterly report shall also contain information on sulfur content of the fuel in percent by weight. Solfur in fuel analysis shall be done at least once every quarter.
- 6. Issuance of an operating permit is contingent upon inspection to confirm compliance with 25 PA Code Section 123.41 and other applicable Roles and Regulations of the Department.

bcc: A -Meadville -Knox - Air Quality -Habg. - New Source Review Sect.

## Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Air Quality Control

#### OPERATING PERMIT (RENEWAL)

In accordance with provisions of the Air Pollution Control Act of January 8. 1960, P. L. 2119, as amended, and Section 127,24 of Chapter 127 of the rules and regulations of the Department of Environmental Resources, the Department nereby reissues this permit for the operation of the air contamination sources described below:

#### PERMIT NUMBER: 33-302-014

Owner:

Cogentrix of Pennsylvania, Inc

Source & 2 (Two) - gas/#2 oil hot water boilers

Address:

Highway LR 33001

AIL

(Cleaver Brooks)

Ringgold, Pennsylvania

Cleaning

15770

Device

Attention: Mr. Steve Chowan

Plant Manager

Location

Highway LR 33001 Ringgold Township Jefferson County

permit is subject to the following conditions: TI

- (1) That the source and any associated air cleaning devices are to be:
  - (a) operated in such a manner as not to cause air pollution:
    - (b) in compliance with the specifications and conditions of the plan approval under the same number:
    - (c) operated and maintained in a manner consistent with good operating and maintenance practices.

(2) This permit is valid for a limited time and may be renewed pursuant to 25 PA Code Section 127.24 before its expiration. Requests for permit renewal must be in writing and must be accompanied by a permit fee in the amount of \$200 00 (two hundred dollars) payable to the "Clean Air Fund" pursuant to 25 PA Code Section 127.34.

Failure to comply with the conditions placed on this permit is a violation of Section 127.25. Violation of this or any other provision of Article III of the rules and regulations of the Department of Environmental Resources will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

MAY 31, 1993

W. Wonders

Regional Air Quality Manager

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## Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Air Quality Control

name change

#### PLAN APPROVAL

#### PERMIT NUMBER: 33-399-004

Owner: Address:

9405 Arrowpoint Boulevard Charlotte, North Carolina

28217

Air

Device

\* Cogentrix of Pennsylvania, Inc. Source & 3 Gas/Oil Fired Stationary Reciprocating Engines (Wartsila Model #18V32GD):

Cleaning Catalytic Converter (Mechanical Equip.,

Inc. or equivalent)

Attention: Mr. Frank J. Benner Sr. Vice Pres., Operations Location

Ringgold Power Plant, Dora Ringgold Township Jefferson County

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P. L. 2119, as amended, and with Chapter 127 of the Rules and Regulations of the Department of Environmental Resources, the Department on October 31, 1988 approved plans for construction of the above indicated air contamination source(s).

S PLAN APPROVAL expires April 28, 1990.

ine plan approved is subject to the following conditions:

- The construction is to be completed in accordance with the plan submitted with the application (as approved herein).
- See attached.

Notify the person noted below when the installation is completed so that the source can be inspected for issuance of an OPERATING PERMIT.

NOTE:

Praful R. Shah Bureau of Air Quality Control 1012 Water Street Meadville, Pennsylvania 16335 Telephone: (814)332-6940

W. Wonders

Regional Air Pollution Control Engineer

Meadville Regional Office

- 3. On or before October 31, 1989 a test procedure and a sketch with dimensions indicating the location of sampling ports and other data to ensure the
- 4. On or before December 31, 1989 or within 60 days of the completion of construction, whichever occurs earlier, stack test(s) shall be performed in accordance with the provisions of Chapter 139 to show compliance with the emission rates specified below. The emission rates are for each 6968 BHP engine.

collection of representative samples shall be submitted to the Department.

- a) The NO $_{\infty}$  emissions shall not exceed 5 g/hp-hr, 76.8 lb/hour and  $\frac{326.7 \text{ tons/year}}{326.7}$ .
- b) The CO emissions shall not exceed 5.22 lb/hour and 22.8 tors/year, or must be reduced by 80%. In either case, actual percentage reduction shall be confirmed by stack test for each engine.
- c) The non-methane hydrocarbon emissions (NMHC) shall not exceed 3.23 lb/hour and 14.4 tons/year, or must be reduced by 70%. In either case, actual percentage reduction shall be confirmed by stack test for each engine.
- d) The SO2 emissions shall not exceed 1.5 lb/hour and 6.6 tons/year.
- e) The particulate matter emissions shall not exceed .07 b/hour and 0.3 tons/year.

The stack tests shall be performed while the aforementioned sources are operating at the maximum rated capacity as stated on the application. At the time of the stack test and thereafter on a daily basis for manned engines or on a weekly basis for unmanned engines, the company shall monitor and record the following parameters.

- a) Intake manifold temperature
- b) Intake manifold pressure
- c) Rack position
- d) Engine speed
  - e) Fuel injector timing
- 5. At least two weeks prior to the test, the Department shall be informed of the date and time of the test.
- 6. On or before February 28, 1990 or within 60 days after completion of the test, whichever occurs earlier, two copies of the complete test report, including all operating conditions, shall be submitted to the Department for approval.

- 7. The visible emissions shall not exceed 10% for any period or periods aggregating more than 3 minutes in any one hour nor equal to or exceed 30% at any time.
- 8. Magnehelic gauges shall be permanently installed at convenient locations and properly maintained to indicate pressure drop across each catalytic converter.
- 9. Temperature sensing and recording devices shall be installed to show that the temperature of the catalyst bed is as stated on the plan approval application.
- 10. The company shall perform quarterly tests to measure the CO and O2 (or CO2) concentration in the gases entering and leaving the catalytic unit and report the results within 30 days of the end of the quarter. All test procedures shall have prior approval of the Department.
- 11. Beginning with the last quarter of 1991 and every other year thereafter, the company shall perform stack tests as described in condition number 4 to gather information regarding the continued effectiveness of the catalytic unit. After sufficient information has been obtained, the Department upon written request from the Company, may allow discontinuance of such stack tests and incorporate such other conditions as it deems fit to assure continued compliance.
- 12. All plant roads used by trucks for delivering fuel and supplies and hauling away of wastes shall be paved. Remaining roads and areas shall be suitably maintained and dust suppressant applied at such intervals so as to minimize fugitive emissions.
- 13. The plan approval shall become invalid if construction is not commenced within 18 months after receipt of the approval or if the construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time.
- 14. Issuance of an operating permit is contingent upon satisfactory compliance with condition numbers 1 through 13 above, upon the source being constructed and operated as stated on the application, and upon satisfactory demonstration that the emissions from the source will not be in violation of applicable Rules and Regulations of the Department of Environmental Resources.
- 15. Any information required to be submitted as part of the above conditions should be submitted to Mr. William J. Charlton, Chief, Engineering Services Section, Bureau of Air Quality Control, Meadville Regional Office, 1012 Water Street, Meadville, Pennsylvania 16335.
- 16. This plan approval supersedes the approval issued to Xiox Corporation on October 31, 1988.

Meadville -Knox - Air Quality -Habe. - New Source Review Sect.

Commonwealth of Pennsylvania Department of Environmental Resources Bureau of Air Quality Control

#### OPERATING PERMIT (RENEWAL)

In accordance with provisions of the Air Pollution Control Act of January 8. 1960, P. L. 2119, as amended, and Section 127.24 of Chapter 127 of the rules and regulations of the Department of Environmental Resources, the Department hereby reissues this permit for the operation of the air contamination sources described below:

#### PERMIT NUMBER: 33-399-004

Owner: Address: Cogentrix of Pennsylvania, Inc.

Highway LR 33001

Ringgold, Pennsylvania

15770

Source &

Air

Cleaning

Engines (Wartsila-Model 18V32GD): Catal.

Converter (Emission Cont. Systems)

3 Gas/Oil Fired Stationary Reciprocating

Device

Attention: Mr. Steve Chowan

Plant Manager

Location

Highway LR 33001 Ringgold Township

Jefferson County

This permit is subject to the following conditions:

- (1) That the source and any associated air cleaning devices are to be:
  - (a) operated in such a manner as not to cause air pollution:
  - (b) in compliance with the specifications and conditions of the plan approval under the same number:
  - (c) operated and maintained in a manner consistent with good operating and maintenance practices.
- (2) This permit is valid for a limited time and may be renewed pursuant to 25 PA Code Section 127.24 before its expiration. Requests for permit renewal must be in writing and must be accompanied by a permit fee in the amount of \$200.00 (two hundred dollars) payable to the "Clean Air Fund" pursuant to 25 PA Code Section 127.34.

Failure to comply with the conditions placed on this permit is a violation of Section 127.25. Violation of this or any other provision of Article III of the rules and regulations of the Department of Environmental Resources will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

MAY 31. 1993

Regional Air Quality Manager