



February 1, 2005

Mr. Doug Morris
Clarian Lab Consolidation
1801 N. Capital, Suite 300
Indianapolis, IN 46207

Certified Mail: 7000 0600 0023 5187 9291

Re: Registered Construction and Operation Status,
097-19893-00549

Dear Mr. Morris:

The application from Clarian Lab Consolidation, received on November 19, 2004, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.1, it has been determined that the following operation of an emergency generator for the medical pathology laboratory, to be located at 360 W. 11th Street, Indianapolis, Indiana, is classified as registered:

- (a) One (1) Caterpillar emergency generator identified as unit 01 to be constructed in 2005 with a maximum rated capacity of 4.6 MMBTU/hr, and burning diesel fuel exhausting to stack S1.

The following conditions shall be applicable:

Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Indiana Department of Environmental Management, Office of Air Quality, and Indianapolis Office of Environmental Services that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.1-2(f)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
P.O. Box 6015
Indianapolis, IN 46206-6015

and

**Department of Public Works
Office of Environmental Services**
2700 South Belmont Avenue (317) 327-2234
Indianapolis, Indiana 46221 (fax) 327-2274
(TDD) 325-5186
www.indygov.org

Office of Environmental Services
Compliance Data Group
2700 South Belmont Avenue
Indianapolis, IN 46221

no later than March 1 of each year, with the annual notice being submitted in the format attached.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) and OES if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

ORIGINAL SIGNED BY

John B. Chavez
Administrator

tle

cc: File (2)
Air Compliance – Matt Mosier
IDEM, OAQ – Mindy Hahn
US EPA R5
Marion Co. Health Dept.

Registration Annual Notification

This form should be used to comply with the notification requirements under **326 IAC 2-5.1-2(f)(3) or 326 IAC 2-5.5-4(a)(3)**

Company Name:	Clarian Lab Consolidation
Address:	360 W. 11th Street
City:	Indianapolis, IN
Authorized individual:	Doug Morris
Phone #:	(317)962-2839
Registration #:	097-19893-00549

I hereby certify that Clarian Lab Consolidation is still in operation and is in compliance with the requirements of Registration 097-19893-00549.

Name (typed):
Title:
Signature:
Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
and
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

Technical Support Document (TSD) for a Registration

Source Background and Description

Source Name:	Clarian Lab Consolidation
Source Location:	360 W. 11th Street, Indianapolis, Indiana 46202
County:	Marion
SIC Code:	8071
Operation Permit No.:	097-19893-00549
Permit Reviewer:	TJ Edwards

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed an application from Clarian Lab Consolidation relating to the construction and operation of an emergency generator for the medical pathology laboratory.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices

- (a) One (1) Caterpillar emergency generator identified as unit 01 to be constructed in 2005 with a maximum rated capacity of 4.6 MMBTU/hr, and burning diesel fuel exhausting to stack S1.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on November 19, 2004.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

Potential to Emit (of the Source or Revision) Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant,

including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	0.3
PM-10	0.1
SO ₂	1.8
VOC	0.3
CO	2.5
NO _x	10.9

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) regulated pollutants are less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A registration will be issued.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO ₂	maintenance
NO ₂	attainment
8 hour Ozone	Basic nonattainment
1 hour Ozone	Maintenance
CO	maintenance
Lead	maintenance

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	0.3
PM-10	0.1
SO ₂	1.8
VOC	0.3
CO	2.5
NO _x	10.9
Single HAP	neg
Combination HAPs	neg

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and nonattainment NSR requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this source.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) applicable to this source.

State Rule Applicability – Entire Source

326 IAC 2-1.1-5

This is a minor source because all nonattainment pollutants are less than 100 tons per year.

326 IAC 2-2 (PSD)

This is a minor source, because the total source potential to emit of all attainment pollutants, is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) will not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1(a)(1), (2), and (3), this source is not subject to 326 IAC 2-6 (Emission Reporting) because, as a Registration source, it is not required to have an operating permit under 326 IAC 2-7, it does not emit lead into the ambient air at levels equal to or greater than five (5)

tons per year, and it is not located in Lake or Porter Counties. However, pursuant to 326 IAC 2-6-1(b), as a permitted source in Indiana, it is subject to 326 IAC 2-6-5 (Additional Information Requests).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 6-1 (Particulate Matter)

This source is not subject to 326 IAC 6-1 because it does not have the potential to emit 100 tons or more, or have actual emissions of ten (10) tons or more of particulate matter per year.

326 IAC 6-2

The source is not subject to 326 IAC 6-2 because it is not a source of indirect heating.

326 IAC 6-3-2

The source is not subject to 326 IAC 6-3-2 because the burning of diesel fuel is not considered a process operation.

326 IAC 7-1 (Sulfur Dioxide Limit)

Since the source does not have the potential to emit (25) tons per year or ten pounds per hour of sulfur dioxide, then 326 IAC 7-1.1-1 does not apply.

Conclusion

The construction and operation of this emergency generator for the medical pathology laboratory shall be subject to the conditions of the New Source Construction Registration Permit 097-19893-00549.

**Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Turbine (>600 HP)**

Company Name: Clarian Lab Consolidation
Address City IN Zip: 360 W. 11th Street, Indianapolis, IN 46202
Permit Number: 097-19893-00549
Reviewer: TJ Edwards
Date: December 29, 2004

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity MM Btu/hr S= = WEIGHT % SULFUR

Emission Factor in lb/l	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
0.1	0.0573	0.5 (1.01S)	3.2	**see below	0.1	0.85
Potential Emission in tons/yr	0.1	0.1	0.6	3.7	0.1	1.0

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

B. Emissions calculated based on output rating (hp)

Heat Output Capacity Horsepower (hp) Potential Throughput hp-hr/yr S= = WEIGHT % SULFUR

Emission Factor in lb/hp-hr	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
0.0007	0.0573	0.0040 (.00809S)	0.024	**see below	0.00071	0.00550
Potential Emission in tons/yr	0.3	0.0	1.8	10.9	0.3	2.5

**NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr
 Note that the PM10 emission factor in lb/hp-hr is not provided in the Supplement B update of AP-42.
 An average conversion factor of 1hp-hr = 7,000Btu is provided below.

Methodology

Potential Throughput (hp-hr/yr) = hp * 500 hr/yr

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2

1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 500 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*No information was given regarding which method was used to determine the PM emission factor or whether condensable PM
 The PM10 emission factor is filterable and condensable PM10 combined.

M is included.