



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: June 3, 2008

RE: Dresser Roots, Dresser Inc. / 041-26358-00010

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 1/2/08



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REGISTRATION OFFICE OF AIR QUALITY

**Dresser Roots, Dresser Inc.
900 West Mount Street
Connersville, Indiana 47331**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 041-26358-00010	
Issued by/Original Signed By: Alfred C. Dumauval, Ph. D., Section Chief Permits Branch Office of Air Quality	Issuance Date: June 3, 2008

SECTION A

SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary industrial and commercial blower and fan manufacturing source.

Source Address:	900 West Mount Street, Connersville, Indiana 47331
Mailing Address:	900 West Mount Street, Connersville, Indiana 47331
General Source Phone Number:	(765) 827-9272
SIC Code:	3564
County Location:	Fayette County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) natural gas-fired boiler, identified as b3, constructed in 1963, with a maximum capacity of 1 million British thermal units (mmBtu) per hour.
- (b) One (1) paint booth, identified as p.b. 1, constructed in 1990, with a maximum capacity of 0.33 large cast iron blowers per hour with an unknown capacity for various sized blowers, equipped with high volume low pressure (HVLP), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, and exhausting to stacks 1A, 1B, 1C and 1D.
- (c) One (1) paint booth, identified as p.b. 3, constructed in 1991, with a maximum capacity of 0.33 large cast iron blowers per hour with an unknown capacity for various sized blowers, equipped with high volume low pressure (HVLP), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, and exhausting to stack 2.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to Registration No. 041-26358-00010 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003

Indianapolis, IN 46204-2251

- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

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 this registration:

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

C.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) paint booth, identified as p.b. 1, constructed in 1990, with a maximum capacity of 0.33 large cast iron blowers per hour with an unknown capacity for various sized blowers, equipped with high volume low pressure (HVLP), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, and exhausting to stacks 1A, 1B, 1C and 1D.
- (b) One (1) paint booth, identified as p.b. 3, constructed in 1991, with a maximum capacity of 0.33 large cast iron blowers per hour with an unknown capacity for various sized blowers, equipped with high volume low pressure (HVLP), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, and exhausting to stack 2.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate Emissions [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes), surface coating processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device.
 - (1) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the particulate from the welding, cutting and machining operations shall not exceed 0.551 pounds per hour when the process weight rate is less than 100 pounds per hour.

D.1.2 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coating delivered to the applicators at the two (2) paint booths (p.b.1 and p.b.3), including hand touchup, shall be limited to 3.5 pounds of VOCs per gallon of coating less water.

- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

D.1.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-2] [326 IAC 8-1-4]

Compliance with the VOC content limitations contained in Conditions D.1.2(a), shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

SECTION D.2 OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) One (1) natural gas-fired boiler, identified as b3, constructed in 1963, with a maximum capacity of 1 million British thermal units (mmBtu) per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.2.1 Particulate Emissions [326 IAC 6-2]

Pursuant to 326 IAC 6-2-3, the particulate emissions from the one (1) boiler, identified as b3, with a maximum capacity of 1 mmBtu per hour shall in no case exceed 0.8 lb/mmBtu.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**REGISTRATION
ANNUAL NOTIFICATION**

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

Company Name:	Dresser Roots, Dresser Inc.
Address:	900 West Mount Street
City:	Connersville, Indiana 47331
Phone Number:	(765) 827-9272
Registration No.:	041-26358-0010

I hereby certify that Dresser Roots, Dresser Inc. is :

- still in operation.
- no longer in operation.

I hereby certify that Dresser Roots, Dresser Inc. is :

- in compliance with the requirements of Registration No. 041-26358-00010.
- not in compliance with the requirements of Registration No. 041-26358-00010.

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable State Operating Permit (FESOP) Transitioning to a Registration

Source Description and Location

Source Name:	Dresser Roots, Dresser Inc.
Source Location:	900 West Mount Street, Connersville, Indiana 47331
County:	Fayette
SIC Code:	3564
Registration No.:	041-26358-00010
Permit Reviewer:	Anne-Marie C. Hart

On December 12, 2005, the Office of Air Quality (OAQ) received an application from Dresser Roots, Dresser Inc., related to the renewal of their FESOP (F041-7130-00010), issued September 10, 2001. On April 2, 2008, Dresser Roots, Dresser Inc., sent a letter to the OAQ listing a number of emissions units that have been removed from the source and an application to transition their FESOP to a Registration. The potential to emit from the remaining units has been determined to be within the thresholds for a Registration. Therefore, Dresser Roots, Dresser Inc. will be issued a Registration.

Existing Approvals

The source has been operating under FESOP No. 041-7130-00010, issued on September 10, 2001.

Due to this application, the source is transitioning from a FESOP to a Registration.

County Attainment Status

The source is located in Fayette County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock,

Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.

- (4) 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 ozone. Fayette County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Fayette County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) Other Criteria Pollutants
Fayette County has been classified as attainment or unclassifiable in Indiana for SO₂, PM₁₀ and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.5 (Registrations) applicability.

Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Dresser Roots, Dresser Inc., on December 12, 2005, relating to the renewal of their FESOP (F041-7130-00010), issued September 10, 2001. After the removal of several emissions units and recalculation of potential emissions from remaining emissions units, the source-wide potential emissions qualify for a Registration.

The source consists of the following existing emission unit(s):

- (a) One (1) natural gas-fired boiler, identified as b3, constructed in 1963, with a maximum capacity of 1 million British thermal units (mmBtu) per hour.
- (b) One (1) paint booth, identified as p.b. 1, constructed in 1990, with a maximum capacity of 0.33 large cast iron blowers per hour with an unknown capacity for various sized blowers, equipped with high volume low pressure (HVLP), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, and exhausting to stacks 1A, 1B, 1C and 1D.
- (c) One (1) paint booth, identified as p.b. 3, constructed in 1991, with a maximum capacity of 0.33 large cast iron blowers per hour with an unknown capacity for various sized blowers, equipped with high volume low pressure (HVLP), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, and exhausting to stack 2.
- (d) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (e) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic

conveying, and woodworking operations.

The following units have been removed from the source:

- (a) One (1) paint booth, identified as p.b. 2, constructed before 1984, equipped with high volume low pressure (HVLV), air assisted airless, or electrostatic spray guns, and dry filters as overspray control, with a maximum capacity of 9 small cast iron blowers per hour with an unknown capacity for various sized blowers, and exhausting to stack 12.
- (b) One (1) natural gas-fired boiler, identified as b2, constructed in 1966, with a maximum heat input capacity of 25.1 mmBtu per hour, using no. 2 fuel oil as a backup fuel and exhausting to stack 9.
- (c) One (1) natural gas-fired boiler, identified as b1, constructed in 1983, with a maximum heat input capacity of 62.4 mmBtu per hour, using no. 2 fuel oil as a backup fuel and exhausting to stack 8.
- (d) One (1) abrasives blast booth, identified as s.b. 1, constructed in 1981, with a maximum capacity of 3,578 pounds per hour of aluminum oxide 20 grit, 1,994 pounds per hour of glass beads, or 500 pounds per hour of aluminum oxide 150 grit, with an unknown capacity for other abrasive materials, equipped with separate nozzles for aluminum oxide grit, glass beads, and other abrasives, and a baghouse for particulate matter control, and exhausting through stack 5.
- (e) Melting of Babbitt bars to make soft hammers as needed at this source.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Registration

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/Emission Unit	Potential To Emit of the Entire Source (tons/year)							
	PM	PM10 *	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
Paint Booth 1	2.83	2.83	0.00	0.00	5.01	0.00	0.17	0.17 (Xylene)
Paint Booth 2	2.12	2.12	0.00	0.00	9.42	0.00	0.00	N/A
Natural Gas Combustion	0.01	0.03	Negl.	0.44	0.02	0.37	Negl.	Negl. (Hexane)
Welding and Cutting Operations	7.92	7.92	0.00	0.00	0.00	0.00	1.01	1.01 (Magnesium)
Total PTE of Entire Source	12.88	12.90	0.003	0.44	14.45	0.37	1.19	1.01 (Magnesium)
Registration Levels	25	25	25	25	25	100	-	-

Process/Emission Unit	Potential To Emit of the Entire Source (tons/year)							
	PM	PM10*	SO ₂	NO _x	VOC	CO	Total HAPs	Worst Single HAP
negl. = negligible * Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.								

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM₁₀ and VOC are within the ranges listed in 326 IAC 2-5.5-1(b)(1). The PTE of all other regulated criteria pollutants are less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations). A Registration will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-5.5 (Registrations)
 Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
 The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
 Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte

County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

- (d) 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 this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) 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.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the source does not have potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (g) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
Each of the emission units at this source is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from each emission unit is less than twenty-five (25) tons per year.

Surface Coating Operation

- (h) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
- (a) Pursuant to 326 IAC 6-3-2(d) (Particulate Emission Limitations for Manufacturing Processes), surface coating processes shall be controlled by a dry particulate filter, waterwash, or an equivalent control device.
 - (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.
- (i) 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)
Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic

compound (VOC) content of coating delivered to the applicators at the two (2) paint booths (p.b.1 and p.b.3), including hand touchup, with a total potential to emit more than 15 pounds per day of VOC, shall be limited to 3.5 pounds of VOCs per gallon of coating less water.

Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, each of the spray booths is able to comply with this requirement.

Boiler

- (j) 326 IAC 6-2-3 (Particulate Emission Limitations for Source of Indirect Heating)
Pursuant to 326 IAC 6-2-3, the particulate emissions from the one (1) boiler, identified as b3, constructed in 1963, with maximum capacity of 1.00 million British thermal units per hour, shall be limited based upon the following calculation:

$$Pt = (C \times a \times h) / (76.5 \times Q^{0.75} \times N^{0.25})$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/MMBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (MMBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

C = Maximum ground level concentration with respect to distance from the point source at the "critical" wind speed for level terrain. This shall equal 50 micrograms per cubic meter for a period not to exceed a sixty (60) minute time period.

N = Number of stacks in fuel burning operation.

a = Plume rise factor which is used to make allowance for less than theoretical plume rise. The value 0.67 shall be used for Q less than or equal to 1,000 million British thermal units per hour heat input.

h = Stack height in feet. If a number of stacks of different heights exist, the average stack height will be computed using a weighted average of stack heights.

Pursuant to 326 IAC 6-2-3(d), particulate emissions from all facilities used for indirect heating purposes which were in existing and in operation on or before June 8, 1972, shall in no case exceed 0.8 lb/mmBtu heat input. The boiler identified as b3 has a potential to emit 0.002 pounds of PM per year. This is equivalent to 0.002 pounds of PM per mmBtu. Therefore, the boiler identified as b3 is able to comply with this limit.

Welding and Cutting Operations

- (k) Pursuant to 326 IAC 6-3-2(e)(2), the particulate from the welding, cutting and machining operations shall not exceed 0.551 pounds per hour when the process weight rate is less than 100

pounds per hour.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on April 2, 2008. Additional information was received on April 18, 2008.

The operation of this source shall be subject to the conditions of the attached proposed Registration No. 041-26358-00010. The staff recommends to the Commissioner that this Registration be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Anne-Marie C. Hart at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5401 or toll free at 1-800-451-6027 extension 4-5401.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emissions Calculations
Total Emissions

Company Name: Dresser Roots, Dresser Inc.
Address City IN Zip: 900 West Mount Street, Connersville, Indiana 47331
Permit Number: 041-26358-00010
Plt ID: 041-00010
Reviewer: Anne-Marie C. Hart
Date: April 1, 2008

Emission Unit	tons/year						
	PM	PM10	SO2	NOx	VOC	CO	HAP
Paint Booth 1*	2.83	2.83	0.00	0.00	5.01	0.00	0.17
Paint Booth 3*	2.12	2.12	0.00	0.00	9.42	0.00	0.00
Natural Gas Combustion	0.010	0.030	0.003	0.44	0.02	0.37	8.20E-03
Welding and Flame Cutting	7.920	7.920	0.000	0.000	0.000	0.000	1.010
Total	12.88	12.90	0.003	0.44	14.45	0.37	1.19

* Indicates worst-case coating

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: Dresser Roots, Dresser Inc.
Address City IN Zip: 900 West Mount Street, Connersville, Indiana 47331
Permit Number: 041-26358-00010
Plt ID: 041-00010
Reviewer: Anne-Marie C. Hart
Date: April 1, 2008**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Booth 1																
WR - 9143	8.71	71.20%	58.0%	13.2%	60.6%	23.40%	1.00000	0.330	2.92	1.15	0.38	9.10	1.66	0.91	4.91	75%
EM - 9304	8.69	41.03%	4.5%	36.6%	4.7%	48.96%	1.00000	0.330	3.33	3.18	1.05	25.16	4.59	1.85	6.49	75%
EM - 9341	7.50	46.13%	0.0%	46.1%	0.0%	45.20%	1.00000	0.330	3.46	3.46	1.14	27.40	5.00	1.46	7.65	75%
EM - 9330	7.85	43.26%	0.0%	43.3%	0.0%	45.74%	1.00000	0.330	3.40	3.40	1.12	26.90	4.91	1.61	7.42	75%
AWS - 8569	10.74	28.68%	0.0%	28.7%	0.0%	45.02%	1.00000	0.330	3.08	3.08	1.02	24.40	4.45	2.77	6.84	75%
EM - 9343	8.37	44.96%	4.9%	40.0%	4.9%	46.94%	1.00000	0.330	3.52	3.35	1.11	26.53	4.84	1.66	7.14	75%
AWS - 3313H	11.29	30.68%	0.0%	30.7%	0.0%	51.86%	1.00000	0.330	3.46	3.46	1.14	27.43	5.01	2.83	6.68	75%
WR - 9219	8.46	73.32%	59.6%	13.8%	60.6%	23.37%	1.00000	0.330	2.95	1.16	0.38	9.21	1.68	0.82	4.98	75%
Booth 3																
EM - 9081	9.24	36.58%	0.0%	36.6%	0.0%	47.57%	1.00000	0.330	3.38	3.38	1.12	26.77	4.89	2.12	7.11	75%
EM - 9134	7.54	54.93%	17.6%	37.4%	15.9%	36.77%	1.00000	0.330	3.35	2.82	0.93	22.30	4.07	0.00	7.66	100%
Break-away Solvent	6.52	100.00%	0.0%	100.0%	0.0%	0.00%	1.00000	0.330	6.52	6.52	2.15	51.64	9.42	0.00	0.00	75%

State Potential Emissions

14.43

4.95

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Company Name: Dresser Roots, Dresser Inc.
Address City IN Zip: 900 West Mount Street, Connersville, Indiana 47331
Permit Number: 041-26358-00010
Plt ID: 041-00010
Permit Reviewer: Anne-Marie C. Hart
Date: April 1, 2008

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethylene Glycol	Weight % Diethylethanamin	Xylene Emissions (ton/yr)	Ethylene Glycol Emissions (ton/yr)	Diethylethanamine Emissions (ton/yr)
Booth 1									
WR - 9143	8.71	1.000000	0.33	0.00%	10.57%	2.22%	0.00	1.33	0.28
EM - 9304	8.69	1.000000	0.33	0.00%	0.00%	0.00%	0.00	0.00	0.00
EM - 9341	7.53	1.000000	0.33	1.14%	0.00%	0.00%	0.12	0.00	0.00
EM - 9330	7.85	1.000000	0.33	1.51%	0.00%	0.00%	0.17	0.00	0.00
AWS - 8569	10.74	1.000000	0.33	0.00%	0.00%	0.00%	0.00	0.00	0.00
EM - 9343	8.37	1.000000	0.33	0.47%	0.00%	0.00%	0.06	0.00	0.00
AWS - 3313H	11.29	1.000000	0.33	0.00%	0.00%	0.00%	0.00	0.00	0.00
WR - 9219	8.41	1.000000	0.33	0.00%	0.00%	2.38%	0.00	0.00	0.29
Booth 3									
EM - 9134	7.54	1.000000	0.33	0.00%	0.00%	0.00%	0.00	0.00	0.00
EM - 9081	9.24	1.000000	0.33	0.00%	0.00%	0.00%	0.00	0.00	0.00

Total State Potential Emissions

0.17 1.33 0.29

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Company Name: Dresser Roots, Dresser Inc.

Address City IN Zip: 900 West Mount Street, Connerville, Indiana 47331

Permit Number: 041-26358-00010

041-00010

Reviewer: Anne-Marie C. Hart

Date: April 1, 2008

Heat Input Capacity

Potential Throughput

MMBtu/hr

MMCF/yr

1.0

8.8

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.01	0.03	0.003	0.44	0.02	0.37

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 5 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

HAPs Emissions

Company Name: Dresser Roots, Dresser Inc.

Address City IN Zip: 900 West Mount Street, Connerville, Indiana 47331

Permit Number: 041-26358-00010

Pit ID: 041-00010

Reviewer: Anne-Marie C. Hart

Date: April 1, 2008

HAPs - Organics					
Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/	9.198E-06	5.256E-06	3.285E-04	7.884E-03	1.489E-05

HAPs - Metals					
Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	2.190E-06	4.818E-06	6.132E-06	1.664E-06	9.198E-06
Total HAPs:					8.266E-03

Methodology is the same as page 4.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations
Welding and Thermal Cutting**

Company Name: Dresser Roots, Dresser Inc.
Address City IN Zip: 900 West Mount Street, Connersville, Indiana 47331
Permit Number: 041-26358-00010
Plt ID: 041-00010
Reviewer: Anne-Marie C. Hart
Date: April 1, 2008

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr		
WELDING													
Submerged Arc	2	10		0.036	0.011			0.720	0.220	0.000		0	0.220
Metal Inert Gas (MIG)(carbon steel)	6	2		0.0055	0.0005			0.066	0.006	0.000		0	0.006
Stick (E7018 electrode)	2	1.65		0.0211	0.0009			0.070	0.003	0.000		0	0.003
Tungsten Inert Gas (TIG)(carbon steel)	1	1		0.0055	0.0005			0.006	0.001	0.000		0	0.001
Oxyacetylene(carbon steel)	0			0.0055	0.0005			0.000	0.000	0.000		0	0.000
FLAME CUTTING	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)	
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr		
Oxyacetylene	3	2	15	0.1622	0.0005	0.0001	0.0003	0.876	0.000	0.000	0.000	0	0.000
Oxymethane	0			0.0815	0.0002		0.0002	0.000	0.000	0.000	0.000	0	0.000
Plasma**	2	0.375	150	0.0039				0.070	0.000	0.000	0.000	0	0.000
EMISSION TOTALS													
Potential Emissions lbs/hr	29							1.81					0.23
Potential Emissions lbs/day	694							43.37					5.51
Potential Emissions tons/year	127							7.92					1.01

Actual Potentials

Based on (5 Welders on 1st & 2 Welderson 2nd shift)
or 6 actual welders(12 Hr. Shifts)

3 Stations 24 hrs. per day

2 Stations 12 hrs. per day

	Emmissions	HAPS
Potential Emissions lbs/hr.	10.86	1.38
Potential Emissions lbs/day	260.22	33.06
Potential Emissions lbs/year	47.52	6.06

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.

**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission factor for plasma cutting is for 8 mm thick rather than 1 inch, and the maximum metal thickness is not used in calculating the emissions.

Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick

Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)

Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.