



# 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](http://www.idem.IN.gov)

TO: Interested Parties / Applicant

DATE: November 17, 2011

RE: Kentuckiana Railcar Repair / 019 - 31034 - 00129

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

## Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

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 from 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  
FNPER-AM.dot12/3/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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November 17, 2011

Steve Lurie  
Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
11452 Hwy 62, Gate 19, Bldg 717  
Charlestown, IN 47111

Re: Exempt Construction and Operation Status,  
019-31034-00129

Dear Mr. Lurie:

The application from Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services, received on October 17, 2011, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following stationary railcar maintenance, modification, and rebuilding facility located at 11452 Hwy 62, Gate 19, Bldg 717, Charlestown, IN 47111 is classified as exempt from air pollution permit requirements:

- (a) one (1) train car refurbishing operation, constructed in 1998, designated as EU01, with a maximum throughput of four (4) train cars per day, consisting of the following:
  - (1) one (1) touchup painting operation, utilizing manual roller application, brush application, spray application, or aerosol can application to apply touchup paint to train cars, uncontrolled, and exhausting to the indoors;
  - (2) cleanup operations utilizing mineral spirits, uncontrolled, and exhausting to the indoors;
- (b) one (1) arc welding operation, constructed in 1998, for repairing railcar axles, wheels, and metal components with a maximum wire usage rate of 4.0 pounds per hour of flux cored welding wire (FCAW Wire Type E71T) and 3.0 pounds per hour of a shielded metal welding rod (SMAW Wire Type E7018), uncontrolled, and exhausting to the indoors;
- (c) one (1) oxypropane metal cutting station, constructed in 1998, with a maximum metal cutting rate of 2.0 feet per hour, uncontrolled, and exhausting to the indoors;
- (d) degreasing operations utilizing hand application of water-based fluids;
- (e) one (1) 550 gallon gasoline storage tank, constructed in 2011;
- (f) one (1) 550 gallon diesel storage tank, constructed in 2011;
- (g) Insignificant activities consisting of the following:
  - (1) paved roads and parking lots;
  - (2) operation of propane-fueled forklifts; and
  - (3) hand-held surface grinding;

The following conditions shall be applicable:

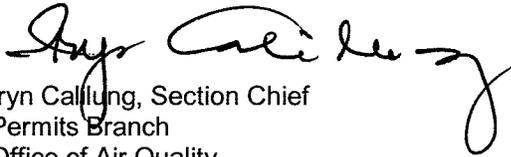
- (a) 326 IAC 5-1 (Opacity Limitations)  
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (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.
- (b) 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.
- (c) 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)  
Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain a record and submit to IDEM, OAQ a report containing the following information for the fuel storage tanks:
- (1) the tank identification number;
  - (2) the tank dimensions; and
  - (3) the tank capacity.

Pursuant to 326 IAC 8-9-6(a), these records shall be maintained for the life of the tank.

This exemption supersedes Exemption No.: 019-25231-00129 issued on November 13, 2007. A copy of the Exemption is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. 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](http://www.idem.in.gov)

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. If you have any questions on this matter, please contact Sarah Germann, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251, at 317-232-8427 or at 1-800-451-6027 (ext 2-8427).

Sincerely,

  
Iryn Callung, Section Chief  
Permits Branch  
Office of Air Quality

IC/sg

Attachments: Technical Support Document (TSD)  
Appendix A to TSD - Emissions Calculations

cc: File - Clark County  
Clark County Health Department  
Compliance and Enforcement Branch  
Billing, Licensing and Training Section

## Indiana Department of Environmental Management Office of Air Quality

### Technical Support Document (TSD) for an Exemption

#### Source Description and Location

<b>Source Name:</b>	<b>Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services</b>
<b>Source Location:</b>	<b>11452 Hwy 62, Gate 19 Bldg 717, Charlestown, IN, 47111</b>
<b>County:</b>	<b>Clark</b>
<b>SIC Code:</b>	<b>4789 (Railroad car repair)</b>
<b>Registration (or Exemption) No.:</b>	<b>EX 019-31034-00129</b>
<b>Permit Reviewer:</b>	<b>Sarah Germann</b>

On October 17, 2011, the Office of Air Quality (OAQ) received an application from Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services related to the construction and operation of new emission units and the continued operation of an existing stationary railcar maintenance, modification, and rebuilding facility.

#### Existing Approvals

The source has been operating under Exemption No. 019-25231-00129, issued on November 13, 2007.

The Office of Air Quality (OAQ) has reviewed an application, submitted by Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services on October 17, 2011 relating to the replacement of fuel storage tanks with two new storage tanks. The following emission units listed in Exemption No. 019-25321-00129 have been removed from the source:

- (e) one (1) 250 gallon gasoline storage tank, constructed in 1998;
- (f) one (1) 250 gallon diesel storage tank, constructed in 1998;

#### County Attainment Status

The source is located in Clark County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective July 19, 2007, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment, effective October 18, 2000, for the 1-hour ozone standard, which was revoked effective June 15, 2005. Basic nonattainment designation effective federally April 5, 2005, for PM <sub>2.5</sub> .	

- (a) **Ozone Standards**  
 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. Clark County has been designated as attainment

or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM<sub>2.5</sub>**  
Clark County has been classified as nonattainment for PM<sub>2.5</sub> in 70 FR 943 dated January 5, 2005. On May 8, 2008, U.S. EPA promulgated specific New Source Review rules for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. Therefore, direct PM<sub>2.5</sub> and SO<sub>2</sub> emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**  
Clark County has been classified as attainment or unclassifiable in Indiana for all the other regulated criteria pollutants. 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, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-1.1-3 (Exemptions) applicability.

### **Background and Description of Emission Units and Pollution Control Equipment**

The Office of Air Quality (OAQ) has reviewed an application, submitted Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services on October 17, 2011 relating to the replacement of fuel storage tanks with two new storage tanks. The replacement of storage tanks does not increase the source's potential to emit (PTE) over the Exemption thresholds; therefore, IDEM, OAQ is issuing an Exemption that will supercede the current Exemption No. 019-25231-00129.

The source consists of the following existing emission units:

- (a) one (1) train car refurbishing operation, constructed in 1998, designated as EU01, with a maximum throughput of four (4) train cars per day, consisting of the following:
  - (1) one (1) touchup painting operation, utilizing manual roller application, brush application, spray application, or aerosol can application to apply touchup paint to train cars, uncontrolled, and exhausting to the indoors;
  - (2) cleanup operations utilizing mineral spirits, uncontrolled, and exhausting to the indoors;
- (b) one (1) arc welding operation, constructed in 1998, for repairing railcar axles, wheels, and metal components with a maximum wire usage rate of 4.0 pounds per hour of flux cored welding wire (FCAW Wire Type E71T) and 3.0 pounds per hour of a shielded metal welding rod (SMAW Wire Type E7018), uncontrolled, and exhausting to the indoors;
- (c) one (1) oxypropane metal cutting station, constructed in 1998, with a maximum metal cutting rate of 2.0 feet per hour, uncontrolled, and exhausting to the indoors;
- (d) degreasing operations utilizing hand application of water-based fluids;
- (e) Reserved.
- (f) Reserved.
- (g) Insignificant activities consisting of the following:

- (1) paved roads and parking lots;
- (2) operation of propane-fueled forklifts; and
- (3) hand-held surface grinding;

The following is a list of the new emission units:

- (e) one (1) 550 gallon gasoline storage tank, constructed in 2011;
- (f) one (1) 550 gallon diesel storage tank, constructed in 2011;

<b>Enforcement Issues</b>
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There are no pending enforcement actions related to this source.

<b>Emission Calculations</b>
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- (a) See Appendix A of this TSD for detailed emission calculations.
- (b) The potential to emit (PTE) calculations for each of the fuel storage tanks and dispensing was provided by the source in the permit application. The source calculated the PTE using the Environmental Protection Agency's (EPA) TANKS Version 4.09b program. The calculations were verified by IDEM, OAQ using the EPA's TANKS Version 4.09b program. The PTE of VOC's was calculated at 0.18 tons per year and the PTE of total HAPs was negligible.

<b>Permit Level Determination – Exemption</b>
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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*	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Touchup Painting	0.14	0.14	0.14	0	0	1.35	0	0	0.11	0.07 Naphthalene
Aerosol Spot Marking/ Touchup	0.11	0.11	0.11	0	0	0.70	0	0	0.35	0.30 Toulene
Welding	0.46	0.46	0.46	0	0	0	0	0	0.03	0.025 Manganese
Cutting	0.02	0.02	0.02	0	0	0	0	0	6.66E-05	5.08 E-05 Manganese
Grinding	2.69	2.21	2.21	0	0	0	0	0	0	0
Fuel Storage/ Dispensing	0	0	0	0	0	0.18	0	0	negl.	negl.
Propane Combustion	1.72E-03	6.03E-03	6.03E-03	1.72E-04	0.11	8.62E-03	0.06	110	0	0
Paved Roads	negl.	negl.	negl.	0	0	0	0	0	0	0
<b>Total PTE of Entire Source</b>	<b>3.41</b>	<b>2.94</b>	<b>2.94</b>	<b>1.72E-04</b>	<b>0.11</b>	<b>2.24</b>	<b>0.06</b>	<b>110</b>	<b>0.48</b>	<b>0.30 Toulene</b>
Exemptions Levels**	5	5	5	10	10	10	25	100,000	25	10
Registration Levels**	25	25	25	25	25	25	100	100,000	25	10
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". **The 100,000 CO <sub>2</sub> e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.										

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of all regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(e)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) 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.
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

### **Federal Rule Applicability Determination**

#### New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard (NSPS), 40 CFR 60.110, Subpart Kb (Volatile Organic Liquid Storage Vessels) are not included in the permit, because this source does not have storage tanks with a capacity greater than or equal to 75 cubic meters (19,813 gallons).
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

#### National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (c) 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)

- (d) 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 2-1.1-3 (Exemptions)  
Exemption applicability is discussed under the Permit Level Determination – Exemption 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)  
This source is located in Clark County (Charlestown Township). Therefore, 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 6.5 (Particulate Matter Limitations Except Lake County)  
Since this source is located in Clark County, is not specifically listed in 326 IAC 6.5-2 and does not have the potential to emit one hundred (100) tons or more before add-on controls or have actual PM emissions that exceed ten (10) tons per year, the requirements of 326 IAC 6.5 are not applicable.
- (h) 326 IAC 8-1-6 (VOC rules: General Reduction Requirements for New Facilities)  
The requirements of 326 IAC 8-1-6 are not applicable, since each of the emission units at this source does not have the potential to emit greater than twenty-five (25) tons of VOCs per year.
- (i) 326 IAC 8-7 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)  
The requirements of 326 IAC 8-7 are not applicable, since this source does not have the potential to emit greater than one hundred (100) tons of VOCs per year and the source does not have coating facilities with the potential to emit greater than ten (10) tons of VOCs per year.
- (j) 326 IAC 10-1 (Nitrogen Oxides Control in Clark and Floyd Counties)  
The requirements of 326 IAC 10-1 are not applicable to this source, because the potential to emit NOx is less than forty (40) tons per year.

#### Touchup Paint Operations

- (k) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(15), the touchup paint operations are exempt from the provisions of 326 IAC 6-3 because they use less than five (5) gallons of coating per day. Additionally, pursuant to 326 IAC 6-3-1(b)(6) and (8), surface coating using roll and brush coatings are each exempt from the requirements of 326 IAC 6-3.
- (l) 326 IAC 8-2-9 (Miscellaneous metal coating operations)  
Pursuant to 326 IAC 8-2-1, the provisions of 326 IAC 8-2-9 apply to miscellaneous metal coating operations constructed after July 1, 1990, located in any county, and which have actual emissions of greater than fifteen (15) pounds per day before add-on controls. The potential to emit of the touchup painting operation is less than fifteen (15) pounds per day. Therefore, the requirements of 326 IAC 8-2-9 are not applicable.

#### Welding Operations

- (m) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(9), the arc welding operation is exempt from the requirements of 326 IAC 6-3 because it consumes less than 625 pounds of rod or wire per day.

#### Hand Held Surface Grinding and Torch Cutting Equipment

- (n) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-1(b)(10), torch cutting equipment is exempt from the requirements of 326 IAC 6-3, because less than 3,400 inches per hour of stock one (1) inch thickness or less is cut. Pursuant to 326 6-3-1(b)(13), hand-held surface grinding equipment is exempt from the requirements of 326 IAC 6-3, because it is defined as a trivial activity pursuant to 326 IAC 2-7-1(40)(F)(xii).

#### Fuel Storage Tanks

- (o) 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)  
The fuel storage tanks have a storage capacity less than thirty-nine thousand (39,000) gallons; therefore, they are not subject to the requirements of 326 IAC 8-4-3.
- (p) 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels)  
The fuel storage tanks are subject to the requirements of 326 IAC 8-9, because they were constructed after October 1, 1995 in Clark County, are not subject to 40 CFR 60, Subpart Kb, and will store a volatile organic liquid (VOL) as defined by 326 IAC 8-9-3(10). Pursuant to 326 IAC 8-9, the fuel storage tanks will be subject to the following reporting and recordkeeping requirements:

Pursuant to 326 IAC 8-9-1(b), each stationary vessel with a capacity of less than thirty-nine thousand (39,000) gallons is subject to the following reporting and record keeping provisions of 326 IAC 8-9-6(a) and (b) and is exempt from all other provisions of 326 IAC 8-9.

Pursuant to 326 IAC 8-9-6(b), the Permittee shall maintain a record and submit to IDEM, OAQ a report containing the following information for the fuel storage tanks:

- (1) the tank identification number;
- (2) the tank dimensions; and
- (3) the tank capacity.

Pursuant to 326 IAC 8-9-6(a), these records shall be maintained for the life of the tank.

#### **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 October 17, 2011.

The operation of this source shall be subject to the conditions of the attached proposed Exemption No. 019-31034-00129. The staff recommends to the Commissioner that this Exemption be approved.

#### **IDEM Contact**

- (a) Questions regarding this proposed permit can be directed to Sarah Germann 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) 232-8253 or toll free at 1-800-451-6027 extension 2-8253.
- (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.in.gov/idem](http://www.in.gov/idem)

**Appendix A: Emissions Calculations  
Summary of Emissions**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

Potential to Emit (PTE) (tons/yr)										
Process	PM	PM10	PM2.5	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	GHGs as CO <sub>2</sub> e**	Total HAPs	Worst Single HAP
Touchup Painting	0.14	0.14	0.14	0	0	1.35	0	0	0.11	0.07 Naphthalene
Aerosol Spot Marking/Touchup	0.11	0.11	0.11	0	0	0.70	0	0	0.35	0.30 Toulene
Welding	0.46	0.46	0.46	0	0	0	0	0	0.03	0.025 Manganese
Cutting	0.02	0.02	0.02	0	0	0	0	0	6.66E-05	5.08E-05 Manganese
Grinding	2.69	2.21	2.21	0	0	0	0	0	0	0
Fuel Storage/Dispensing	0	0	0	0	0	0.18	0	0	negligible	negligible
Propane Combustion	1.72E-03	6.03E-03	6.03E-03	1.72E-04	0.11	8.62E-03	0.06	110	0	0
Paved Roads	negligible	negligible	negligible	0	0	0	0	0	0	0
<b>Total</b>	<b>3.41</b>	<b>2.94</b>	<b>2.94</b>	<b>1.72E-04</b>	<b>0.11</b>	<b>2.24</b>	<b>0.06</b>	<b>110</b>	<b>0.48</b>	0.30 Toulene
Exemptions Levels**	5	5	5	10	10	10	25	100,000	25	10

\*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".

\*\*The 100,000 CO<sub>2</sub>e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

**Appendix A: Emissions Calculations  
VOC and HAPs  
From Touchup Painting and Cleanup Operations**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

Uncontrolled Potential to Emit VOCs and PM/PM10 (PTE)															
Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Material (gal/unit)	Maximum (units/day)	Pounds VOC per gallon of coating less water	Potential VOC (lbs/hr)	Potential VOC (lbs/day)	Potential VOC (tons/yr)	Worst Case Transfer Efficiency %	Potential PM/PM10 (lbs/hr)	Potential PM/PM10 (tons/yr)
Yellow TTX (Brush or Roller)	9.8	34.40%	0.0%	34.4%	0.0%	65.60%	0.21	3.60	3.354	0.11	2.57	0.47	100.00%	0.00	0.00
Yellow TTX (Spray)	9.8	34.40%	0.0%	34.4%	0.0%	65.60%	1.00	0.40	3.354	0.06	1.34	0.24	70.00%	0.03	0.14
Mineral Spirits	6.6	100.00%	0.0%	100.0%	0.0%	0.00%	0.132	4.00	6.589	0.14	3.48	0.63	100.00%	0.00	0.00
Decorative Enamel (Aerosol Can)	6.7	76.00%	0.0%	76.0%	0.0%	24.00%	0.190	4.00	5.071	0.16	3.85	0.70	50.00%	0.03	0.11
<b>Total</b>										<b>0.47</b>	<b>11.25</b>	<b>2.05</b>		<b>0.06</b>	<b>0.25</b>

**METHODOLOGY**

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

Uncontrolled Potential to Emit HAPs (Unlimited)												
Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (units/day)	Weight % Naphthalene	Weight % Xylene*	Weight % Toluene*	Weight % Ethylbenzene	Naphthalene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Total HAPs (tons/yr)
*Yellow TTX (Brush or Roller)	9.8	0.21	3.60	3.30%	0.23%	1.60%	0.00%	0.05	0.00	0.02	0.00	0.07
*Yellow TTX (Spray)	9.8	1.00	0.40	3.30%	0.23%	1.60%	0.00%	0.02	0.00	0.01	0.00	0.04
Mineral Spirits	6.6	0.132	4.00	0.03%	1.00%	0.00%	0.00%	0.00	0.01	0.00	0.00	0.01
<sup>1,2</sup> Decorative Enamel (Aerosol Can)	6.7	0.190	4.00	0.00%	5.25%	32.05%	0.05%	0.00	0.05	0.30	4.63E-04	0.35
<b>Total</b>								<b>0.07</b>	<b>0.06</b>	<b>0.33</b>	<b>4.63E-04</b>	<b>0.46</b>

**METHODOLOGY**

Potential HAPs Emissions (ton/yr) = Density (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/day) \* Weight % HAP \* 365 (days/yr) \* 1/2000 (ton/lbs)  
 \*Yellow TTX contains 23.2% mineral spirits (CAS # 8052-41-3). According to 40 CFR 63 stoddard solvent (CAS #8052-41-3) typically has an average organic HAP composition of 1% Xylene \* % mineral spirits = % Xylene  
<sup>1</sup>Decorative Enamel contains 5% Xylene (CAS #1330-20-7). Additionally, the decorative enamel contains 5% mineral spirits (CAS # 8052-41-3). According to 40 CFR 63, stoddard solvent (CAS #8052-41-3) typically has an average organic HAP composition of 1% Xylene \* % mineral spirits = % Xylene.  
<sup>2</sup>Decorative enamel contains 5% aromatic hydrocarbons (CAS # 64742-95-6). According to 40 CFR 63, aromatic solvents typically have an average organic HAP composition of 4% Xylene, 1% Toluene, and 1% Ethylbenzene (%HAP \* % aromatic hydrocarbon = % HAP).

**Appendix A: Emissions Calculations  
PM and HAPs  
From Arc Welding Operations**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

Process	Material Usage		Emission Factors (lb/10 <sup>3</sup> lb)					Potential to Emit (tons/yr)				
	(lb/hr)	(lbs/yr)	Chromium	Cobalt	Manganese	Nickel	PM/PM10	Chromium	Cobalt	Manganese	Nickel	PM/PM10
<b>Arc Welding</b>												
FCAW E71T Flux	4.0	35040	0.002	0.001	0.662	0.004	12.2	3.50E-05	1.75E-05	1.16E-02	7.01E-05	0.214
SMAW E7018 Metal Rod	3.0	26280	0.006	0.001	1.03	0.002	18.4	7.88E-05	1.31E-05	1.35E-02	2.63E-05	0.242
<b>Total</b>								<b>1.14E-04</b>	<b>3.07E-05</b>	<b>2.51E-02</b>	<b>9.64E-05</b>	<b>0.46</b>

**Methodology**

Potential to Emit (tons/yr) = Material Usage (lbs/yr) \* Emission Factor (lb/10<sup>3</sup> lb) \* 1/2000 (ton/lbs)

Emission Factors are from AP-42, Chapter 12.19, Table 12.19-1 and 12.19-2 (01/1995)

**Appendix A: Emissions Calculations  
PM and HAPs  
From Oxypropane Cutting Operations**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

<b>Process</b>	<b>Cutting Length (ft/hr)</b>	<b>Maximum (ft/yr)</b>	<b>PM/PM10 Emission Factor (lb/10<sup>6</sup> ft)</b>	<b>Manganese Emission Factor (lb/10<sup>6</sup> ft)</b>	<b>Chromium Emission Factor (lb/10<sup>6</sup> ft)</b>	<b>Nickel Emission Factor (lb/10<sup>6</sup> ft)</b>	<b>Cobalt Emission Factor (lb/10<sup>6</sup> ft)</b>	<b>PM/PM10 (tons/yr)</b>	<b>Manganese (tons/yr)</b>	<b>Chromium (tons/yr)</b>	<b>Nickel (tons/yr)</b>	<b>Cobalt (tons/yr)</b>
Propane Cutting	2.0	17520	978	2.9	0.2	0.5	0.2	0.017	5.08E-05	3.50E-06	8.76E-06	3.50E-06

**Methodology**

Potential to Emit (tons/yr) = Cutting Length (ft/hr) \* 8760 (hrs/yr) \* Emission Factor (lb/10<sup>6</sup> ft) \* 1/2000 (ton/lbs)

Emissions factors from Section 313 Reporting Issue Paper, Clarification and Guidance for the Metal Fabrication Industry. January 1990.

**Appendix A: Emissions Calculations  
PM/PM10 Emissions  
From Hand Held Metal Surface Grinding**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

<b>Potential to Emit PM/PM10 (tons/yr)</b>				
<b>Process</b>	<b>Grinding Wheel Usage (unit/hr)</b>	<b>Grinding Wheel Usage (unit/yr)</b>	<b>Wheel Weight (lb/unit)*</b>	<b>Potential PM/PM10 Emissions (tons/yr)</b>
4.5" grinding wheels	0.52	4555.2	0.33	0.75
7" grinding wheels	0.32	2803.2	1	1.40
<b>Total</b>				<b>2.15</b>

**Methodology**

Potential PM/PM10 Emissions (tons/yr) = Material Used (unit/yr) \* Weight (lb/unit) \* 1 \* 1 \* 1/2000 (ton/lbs)

\*Assumes that 100% of each grinding wheel is consumed and 100% becomes airborne PM/PM10 emissions

Source provided methodology

<b>Potential to Emit PM/PM10 (tons/yr)</b>						
<b>Process</b>	<b>Maximum Process Weight Rate (lb/unit)</b>	<b>Maximum Process Weight Rate (units/yr)</b>	<b>PM Emission Factor (lbs/ton)</b>	<b>PM10 Emission Factor (lbs/ton)</b>	<b>Potential PM Emissions (tons/yr)</b>	<b>Potential PM10 Emissions (tons/yr)</b>
<b>Hand Held Metal Surface Grinding</b>	100	1261.44	17	1.7	0.54	0.054

<b>Total PM</b>	<b>2.69</b>
<b>Total PM10</b>	<b>2.21</b>

**Methodology**

PM/PM10 Emission Factors for Secondary Metal Production, Grey Iron Foundries, Grinding/Cleaning (SCC 30400340) (Source: EPA WebFIRE)

Potential PM/PM10 Emissions (tons/yr) = Weight (lb/unit) \* Maximum (units/yr) \* Emission Factor (lbs/ton) \* 1/2000 (ton/lbs) \* 1/2000 (ton/lbs)

Total Potential PM/PM10 Emissions = Sum of source provided methodology + Sum of WebFIRE methodology

**Appendix A: Emissions Calculations  
VOC and HAPs  
From Fuel Storage & Dispensing**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

**Diesel Storage Tank**

Type of Tank	Dimensions (ft)	Volume (gallons)	Turnovers/year	Net throughput (gal/year)	VOC emissions (lb/year)	VOC emissions (tons/year)	HAP emissions
Horizontal Fixed Roof	6.20 x 4.00	460	3	950	354.45	0.177225	negligible

<b>Total for both tanks</b>	
VOC emissions (tons/year)	0.18
HAP emissions (tons/year)	negligible

**Propane Storage Tank**

Type of Tank	Dimensions (ft)	Volume (gallons)	Turnovers/year	Net throughput (gal/year)	VOC emissions (lb/year)	VOC emissions (tons/year)	HAP emissions
Horizontal Fixed Roof	6.20 x 4.00	317	3	950	0.24	0.00012	negligible

The potential to emit (PTE) calculations for each of the fuel storage tanks and dispensing was provided by the source in the permit application. The source calculated the PTE using the Environmental Protection Agency's (EPA) TANKS Version 4.09b program. The calculations were verified by IDEM, OAQ using the EPA's TANKS Version 4.09b program

**Appendix A: Emission Calculations  
LPG-Propane Usage Propane Cutting**

**Company Name:** Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
**Address City IN Zip:** 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
**Permit Number:** EX 019-31034-00129  
**Reviewer:** Sarah Germann  
**Date:** 11/2/2011

Heat Input Capacity  
MMBtu/hr

Potential Throughput  
kgals/year

SO2 Emission factor = 0.10 x S  
 S = Sulfur Content =  grains/100ft<sup>3</sup>

Emission Factor in lb/kgal	Pollutant						
	PM*	PM10*	direct PM2.5**	SO2	NOx	VOC	CO
	0.2	0.7	0.7	0.0 (0.10S)	13.0	1.0 **TOC value	7.5
Potential Emission in tons/yr	1.72E-03	6.03E-03	6.03E-03	1.72E-04	0.11	8.62E-03	0.06

\*PM emission factor is filterable PM only. PM emissions are stated to be all less than 10 microns in aerodynamic equivalent diameter, footnote in Table 1.5-1, therefore PM10 is based on the filterable and condensable PM emission factors.

\*\* No direct PM2.5 emission factor was given. Direct PM2.5 is a subset of PM10. If one assumes all PM10 to be all direct PM2.5, then a worst case assumption of direct PM2.5 can be made.

\*\*The VOC value given is TOC. The methane emission factor is 0.2 lb/kgal.

**Methodology**

1 gallon of LPG has a heating value of 94,000 Btu

1 gallon of propane has a heating value of 91,500 Btu (use this to convert emission factors to an energy basis for propane)

(Source - AP-42 (Supplement B 10/96) page 1.5-1)

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.0915 MMBtu

Emission Factors are from AP42 (7/08), Table 1.5-1 (SCC #1-02-010-02)

Propane Emission Factors shown. Please see AP-42 for butane.

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

See following page for Greenhouse Gas calculations.

**Appendix A: Emission Calculations  
LPG-Propane Usage Propane Cutting  
Greenhouse Gas**

**Company Name: Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail Services  
Address City IN Zip: 11452 Hwy 62, Gate 19 Bldg 717, Charlestown, Indiana 47111  
Permit Number: EX 019-31034-00129  
Reviewer: Sarah Germann  
Date: 11/2/2011**

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	12,500	0.2	0.9
Potential Emission in tons/yr	108	0.0	0.0
Summed Potential Emissions in tons/yr	108		
CO2e Total in tons/yr	110		

**Methodology**

The CO2 Emission Factor for Propane is 12500. The CO2 Emission Factor for Butane is 14300.

Emission Factors are from AP 42 (7/08), Table 1.5-1 (SCC #1-02-010-02)

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).



# 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](http://www.idem.IN.gov)

## **SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED**

**TO:** Steve Lurie  
Kentuckiana Railcar Repair  
10600 Hwy 62, Gate 19, Bldg 717  
Charlestown, IN 47111

**DATE:** November 17, 2011

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Exemption  
019 - 31034 - 00129

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Stephen Tew, Dir Environmental Services  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

IDEM Staff	LPOGOST 11/17/2011 Kentuckiana Railcar Repair, LLC Subsidiary of Progress Rail 019 - 31034 - 00129		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	

**CERTIFICATE OF MAILING ONLY**

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											Remarks
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2		Stephen Tew Dir Environmental Services Kentuckiana Railcar Repair, LLC Subsidiary of Prog PO Box 1037 Albertville AL 35950 (RO CAATS)									
3		Ms. Rhonda England 17213 Persimmon Run Rd Borden IN 47106-8604 (Affected Party)									
4		Ms. Betty Hislip 602 Dartmouth Drive, Apt 8 Clarksville IN 47129 (Affected Party)									
5		Mrs. Sandy Banet 514 Haddox Rd Henryville IN 47126 (Affected Party)									
6		Charlestown City Council and Mayors Office 304 Main Cross Street Charlestown IN 47111-1230 (Local Official)									
7		Mr. Robert Bottom Paddlewheel Alliance P.O. Box 35531 Louisville KY 40232-5531 (Affected Party)									
8		Clark County Board of Commissioners 501 E. Court Avenue Jeffersonville IN 47130 (Local Official)									
9		Clark County Health Department 1320 Duncan Avenue Jeffersonville IN 47130-3723 (Health Department)									
10											
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