## Iowa Department of Natural Resources Air Quality Construction Permit

### Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

David Herrin Manager Environmental Compliance **Responsible Party:** 

Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

Permitted EquipmentEmission Unit(s):Railear Exterior Grit Blast Booth (EUI)Control Equipment:Baghouse EC L and Panel Filter EC 1A (Vents Inside)Emission Point:EP 1Equipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
93-A-251	92-256	Railcar Exterior Grit Blast Booth	6/22/93	No
93-A-251-S1	96-200	Change of Operating Limits	6/11/96	No
93-A-251-S2	00-142	Revise Conditions 14 and 15	4/26/00	No
93-A-251-S3	03-335	Replace Baghouse	8/18/03	No
93-A-251-S4	08-621	Now Venting Inside	10/29/09	No
93-A-251-S5	12-409	Establish PM <sub>2.5</sub> Limits	4/8/13	No

Under the Direction of the Director of the Department of Natural Resources

CPFP | 7001048 | 04082013 | 12409 | 93A251S5

#### PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

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#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

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It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

#### Union Tank

- 3. Construction (Continued)
  - (3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein: or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

#### Railcar Exterior Grit Blast Booth («EPID») 93-A-251-S5

Au incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	2.504	NA	0.05 gr/dscf	23.4(6)
PM <sub>10</sub>	0.504	NA	NA	NAAQS
PM <sub>2.5</sub>	0.01565	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	· NA	NA	NA
Volatile Organic Compounds	NA	NĄ	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
<sup>4</sup> Emission limit used to minimize the PTE.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

#### 11. Emission Point Characteristics

Union Tank

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value	
Stack Height, (ft, from the ground)	Vents Inside	
Discharge Style	NA	
Stack Opening, (inches, dia.)	36"	
Exhaust Temperature (°F)	90 °F	······································
Exhaust Flowrate (scfm)	16,000 scfm	

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and amhient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance Test	One Time
PM <sub>10</sub> PM <sub>2.5</sub>	Yes <sup>1</sup>	No	Performance Test	One Time
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
SO <sub>2</sub> NO <sub>X</sub> VOC CO Pb	No	No	NA	NA
HAP	No	No	NA	NA

<sup>1</sup> Testing is only required if EP 1 is vented to the atmosphere (currently permitted to vent inside).

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)		
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	9 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

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Muscatine,	Iowa

#### Railcar Exterior Grit Blast Booth («EPID») 93-A-251-S5

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

This emission unit is not subject to any applicable NSPS or NESHAP requirements as there are no applicable subparts at this time.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

A. Operating limits are not required at this time.

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. Operating condition monitoring is not required at this time.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
Н́АР	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code

Union Tank	Railcar Exterior Grit Blast Booth («EPID»)	Page 8 of 8
Muscatine, Iowa	93-A-251-S5	0
MMBtu	One million British thermal units	
' NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
NO <sub>X</sub>	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application	materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microus in aerodynamic diame	
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	

## END OF PERMIT CONDITIONS

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# Iowa Department of Natural Resources Air Quality Construction Permit

### Permit Holder

Firm: Union Tank Car Company – Muscatine Repair Shop

**Contact:** 

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168 高級運動機能力加速度制度でありためのあった特征の第二時で行った情報情報

175 W. Jackson Blvd. Chicago, Illinois 60604

Permitted EquipmentEmission Unit(s):Railcar Interior Grit Blast Booth (South) (EU-2)Control Equipment:Baghouse CE 2 and Panel Filters CE-2AEmission Point:EP 2 (Vents Inside)Equipment Location:2603 Dick Drake Way<br/>Muscatine Jowa 52761

**Plant Number:** 

1

70-01-048

Permit No.   Proj. No.		Description	Date	Testing
93-A-252	92-256	Railcar Interior Grit Blast Booth (South)	6/22/93	Yes
93-A-252-S1	96-200	Change of Operating Limits	6/11/96	Yes
93-A-252-82	00-142	Revise Conditions 14 and 15	4/26/00	No
93-A-252-83	00-144	Change Emission Point Characteristics	12/21/00	No
93-A-252-S4	08-621	Amend Emission Limit Based on Testing EP-3	10/29/09	No
93-A-252-85	12-409	Add Particulate Filters, Vent Inside, and Establish PM <sub>2.5</sub> Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

#### PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

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As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has heen issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

**3.** Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60,11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:

1. Oral excess emissions reports, in accordance with 567 IAC 24.1;

- 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
- 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Interior Grit Blast Booth (South) (EP 2)Muscatine, Iowa93-A-252-S58. Notification, Reporting, and Record Keeping (Continued)

#### E. The owner shall send reports and notifications to:

IDNR Field Office 6
1023 West Madison
Washington, Iowa 52353
Phone: (319) 653-2135
Fax: (319) 653-2856
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall he available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B,146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	$2.50^4$	NA	0.05 gr/dscf	23.4(6)
PM <sub>10</sub>	0.504	NA	NA	NAAQS
PM <sub>2.5</sub>	0.00955	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	. NA
(Total HAP)	NA	NA	NA	NA

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Emission limit used to minimize the PTE.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

#### 11. Emission Point Characteristics

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	Vents Inside
Discharge Style	NA
Stack Opening, (inches, dia.)	72" x 48"
Exhaust Temperature (°F)	68 °F
Exhaust Flowrate (scfm)	16,000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	ŇĂ
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance Test	One Time
PM <sub>2.5</sub>	Yes <sup>1</sup>	No	Performance Test	One Țime
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub> VOC	No	No	NA	NA
VOC	No	No	NA	NA
CO	Ňo	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

1 Testing is only required if EP 2 is vented to the atmosphere (currently permitted to vent inside).

<u>If an initial compliance demonstration specified above is testing</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hours	40 CFR 60, Appendix A, Method 5
<u> </u>		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hours	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	15 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub> VOC	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

#### Railcar Interior Grit Blast Booth (South) (EP 2) 93-A-252-S5

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must he approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation aud maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

This emission unit is not subject to any applicable NSPS or NESHAP requirements as there are no applicable subparts at this time.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-2A) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources

Union Tank Car	Railcar Interior Grit Blast Booth (South) (EP 2)	Page 8 of 8
Muscatine, Iowa	· 93-A-252-S5	
DNR	Iowa Department of Natural Resources	
gr/dscf	Grains per dry standard cubic foot	
HAP	Hazardous Air Pollutant(s)	
IAC	Iowa Administrative Code	
MMBtu	One million British thermal units	
NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
NOX	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	- This document including permit conditions and all submitted application t	naterials
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diamet	er
- scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	•
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	-
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END OF PERMIT CONDITIONS

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# Iowa Department of Natural Resources Air Quality Construction Permit

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**Plant Number:** 

• •	<u>Permit Holder</u>
Firm: Union Tank Car Company	y – Muscatine Repair Shop
Contact:	Responsible Party:
David Herrin Mánager Environmental Complia	ance Plant Manager
(312) 431-3111 Ext. 3168 175 W. Jackson Blvd. Chicago, Illinois 60604	
Control Equipment:	<b>Permitted Equipment</b> Railcar Interior Grit Blast Booth (North) (EU-3) Baghouse CE 3 and Panel Filters CE-3A EP 3 (Vents Inside) 2603 Dick Drake Way Muscatine, Iowa 52761

Proj. No.	Description	Date	Testing
92-256	Railcar Interior Grit Blast Booth (South)	6/22/93	Yes
96-200	Change of Operating Limits	6/11/96	Yes
00-142	Revise Conditions 14 and 15	4/26/00	No
00-144	Change Emission Point Characteristics	12/21/00	No
08-621	Amend Emission Limit Based on Testing EP-3	10/29/09	No
12-409	Add Additional Particulate Filter, Vent inside building, and Establish PM <sub>2.5</sub> Limits	4/8/13	No
	92-256 96-200 00-142 00-144 08-621	92-256Railcar Interior Grit Blast Booth (South)96-200Change of Operating Limits00-142Revise Conditions 14 and 1500-144Change Emission Point Characteristics08-621Amend Emission Limit Based on Testing EP-312-409Add Additional Particulate Filter, Vent inside	92-256Railcar Interior Grit Blast Booth (South)6/22/9396-200Change of Operating Limits6/11/9600-142Revise Conditions 14 and 154/26/0000-144Change Emission Point Characteristics12/21/0008-621Amend Emission Limit Based on Testing EP-310/29/0912-409Add Additional Particulate Filter, Vent inside4/8/13

70-01-048

Under the Direction of the Director of the Department of Natural Resources

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#### **PERMIT CONDITIONS**

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561---7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f', this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

#### 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. **Credible Evidence**

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

#### Railcar Interior Grit Blast Booth (North) (EP 3) 93-A-253-S5

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

A. The owner shall furnish the DNR the following written notifications:

- 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
- 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
- 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
- 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
- 5. Transfer of equipment ownership, within 30 days of the occurrence;
- 6. Portable equipment relocation:
  - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
  - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899

Fax: (515) 242-5098

# Union Tank CarRailcar Interior Grit Blast Booth (North) (EP 3)Muscatine, Iowa93-A-253-S58. Notification, Reporting, and Record keeping (Continued)

#### E. The owner shall send reports and notifications to:

3	
Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	2.50 <sup>4</sup>	NA	0.05 gr/dscf	23.4(6)
PM <sub>10</sub>	0.504	NA	NA	NAAQS
PM <sub>2.5</sub>	0.00955	NA	NA	NAAQS
Opacity	NÁ	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	' NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total,

<sup>3</sup> An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Emission limit used to minimize the PTE.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

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#### Muscatine, Iowa 11. Emission Point Characteristics

Union Tank Car

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	Vents Inside
Discharge Style	NA
Stack Opening, (inches, dia.)	96" x 72"
Exhaust Temperature (°F)	68 °F
Exhaust Flowrate (scfin)	16,000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance Test	One Time
PM <sub>2.5</sub>	Yes <sup>2</sup>	No	Performance Test	One Time
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub>	No	No	NA	NA
VOC /	No	No	NA	NA
СО	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

<sup>1</sup> Testing is only required if EP 2 is vented to the atmosphere (currently permitted to vent inside).

 $^{2}$  PM<sub>2.5</sub> performance testing was successfully conducted March 19, 2012. Further testing is not warranted at this time.

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
······································		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	15 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO Pb	1 hour	40 CFR 60, Appendix A, Method 10
	1 hour	40 CFR 60, Appendix A, Method 12
Other .		

#### Railcar Interior Grit Blast Booth (North) (EP 3) 93-A-253-S5

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

This emission unit is not subject to any applicable NSPS or NESHAP requirements as there are no applicable subparts at this time.

#### **14.** Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-3A) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.

#### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations –
Department	Iowa Department of Natural Resources

Union Tank Car	Railcar Interior Grit Blast Booth (North) (EP 3)	Page 8 of 8
Muscatine, Iowa	93-A-253-85	x 460 0 01 0
gr/dscf	Grains per dry standard cubic foot	
HAP	Hazardous Air Pollutant(s)	
IAC	Iowa Administrative Code	
MMBtu	One million British thermal units	
NA	Not Applicable	т.
NAAQS	National Ambient Air Quality Standards	
NO <sub>X</sub>	Nitrogen Oxides	•
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application	materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diamet	er
scfm	Staudard cubic feet per minute	
SIP	State Implementation Plan	
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	
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END OF PERMIT CONDITIONS

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# Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168 175 W. Jackson Blyd. Chicago, Illinois 60604



Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
93-A-254	92-256	Original Permit	6/22/93	Yes
93-A-254-S1	99-184	Flaring Rate Increased	6/11/96	Yes
93-A-254-S1	08-621	Amend PM/PM <sub>10</sub> Emission Limits	4/26/00	No
93-A-254-S2	12-409	Establish PM <sub>2.5</sub> Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

#### **PERMIT CONDITIONS**

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person sball construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

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It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Vapor Removal System (EP 4)Muscatine, Iowa93-A-254-S38. Notification, Reporting, and Record keeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	· · · · · · · · · · · · · · · · · · ·

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional	Reference
			Limits	(567 IAC)
Particulate Matter (PM)	0.254	NA	0.1 gr/dscf	23.3(2)"a"
PM <sub>10</sub>	0.2504	NA	NA	NAAQS,
PM <sub>2.5</sub>	0.00755	NA	NA	NAAQS
Opacity_	NA	NA	40%3	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	500 ppm	23.3(3)"e"
Nitrogen Oxides (NO <sub>x</sub> )	NA	34.7 <sup>6</sup>	NA	NA
Volatile Organic Compounds	NA	6.88 <sup>7</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	· NA
(Single HAP)	NA	NA	NA	NÄ
(Total HAP)	NA	NA	NA	NA

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Emission limit used to minimize the PTE.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

 $^{6}$  NO<sub>x</sub> PTE based on combustion of NH<sub>3</sub> (25.71 tons/yr) and combustion of natural gas (8.99 tons/yr).

<sup>7</sup> VOC PTE based on 8760 hours of operation of the flare (emissions due to combustion).

#### 11. Emission Point Characteristics

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	55
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	8
Exhaust Temperature (°F)	1,300 °F
Exhaust Flowrate (scfin)	450 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	Ňo	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity .	No	No	NA	NA
SO <sub>2</sub> NO <sub>X</sub> VOC	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

1 Testing is only required if EP 2 is vented to the atmosphere (currently permitted to vent inside).

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hours	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	2 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
ԲԵ	1 hour	40 CFR 60, Appendix A, Method 12
Other		

#### Railcar Vapor Removal System (EP 4) 93-A-254-S3

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### **13. NSPS and NESHAP Applicability**

This emission unit is not subject to any applicable NSPS or NESHAP requirements as there are no applicable subparts at this time.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

A. Operating limits are not required at this time.

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. Operating condition monitoring is not required at this time.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units

Union Tank Car	Railcar Vapor Removal System (EP 4)	Page 8 of 8
Muscatine, Iowa	93-A-254-83	
NAAQS	National Ambient Air Quality Standards	
NOX	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application	materials
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diame	ter
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	• •

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## END OF PERMIT CONDITIONS,

## Iowa Department of Natural Resources Air Quality Construction Permit

### Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

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**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

Equipment

(312) 431-3111 Ext. 3168 175 W. Jackson Blyd.

Chicago, Illinois 60604

Emission Unit(s):Inline Tank Car Qualification Process<br/>Welding & Metal Are Cutting (EU 8)Control Equipment:Mini Pleat Filters CE M1Emission Point:EP M1Equipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

ermitted

Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
00-A-1086	00-144	Original Permit	8/9/94	No
00-A-1086-S1	08-621	Amend Emission Unit Identification	10/29/09	No
00-A-1086-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits, And Replace Fan To Increase Airflow From 5000 scfin to 20,000 scfm	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

Inline Tank Car Qualification Process (EP M1) 00-A-1086-S2

#### **PERMIT CONDITIONS**

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Union Tank Car

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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Union Tank Car Muscatine, Iowa

#### Inline Tank Car Qualification Process (EP M1) 00-A-1086-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

A. The owner shall furnish the DNR the following written notifications:

- 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
- 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
- 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
- 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
- 5. Transfer of equipment ownership, within 30 days of the occurrence;
- 6. Portable equipment relocation:
  - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
  - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098
# Union Tank CarInline Tank Car Qualification Process (EP M1)Muscatine, Iowa00-A-1086-S28. Notification, Reporting, and Recordkeeping (Continued)

# E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6	· ·
Air Quality Bureau	1023 West Madison	
Iowa Department of Natural Resources	Washington, Iowa 52353	
7900 Hickman Road, Suite 1	Phone: (319) 653-2135	
Windsor Heights, IA 50324	Fax: (319) 653-2856	
Telephone; (515) 281-8448		
Fax: (515) 242-5127	•	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

# 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.8	NA	0.1 gr/dscf	23.3(2)"a"
PM <sub>10</sub>	0.874	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0335	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	· NA	' NA
Lead (Pb)	. NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	ŃA	NA	NA	NA

# 10. Emission Limits

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

# 11. Emission Point Characteristics

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	27
Discharge Style	Vertical, Unobstructed
Stack Opening, (inches, dia.)	46
Exhaust Temperature (°F)	72
Exhaust Flowrate (scfm)	20,000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
$\frac{PM_{10}}{PM_{2.5}}$ $Opacity$ $SO_2$ $NO_X$ $VOC$	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO Pb	No	No	NA	NA
	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
	÷	40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

# Inline Tank Car Qualification Process (EP M1) 00-A-1086-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

A. This emission unit is not subject to any applicable NSPS NESHAP requirements as there are no applicable subparts at this time.

### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-M1) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.

# 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.

### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources

Union Tank Car	Inline Tank Car Qualification Process (EP M1) Page 8 of	8
Muscatine, Iowa	00-A-1086-S2	
HAP	Hazardous Air Pollutant(s)	
IAC	Iowa Administrative Code	
MMBtu	One million British thermal units	
NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
NOx	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application materials	
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diameter	
sefm	Standard cubic feet per minute	
SIP	State Implementation Plan	
$SO_2$	Sulfur Dioxide	
VOC	Volatile Organic Compound	

# **END OF PERMIT CONDITIONS**

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# Iowa Department of Natural Resources Air Quality Construction Permit

# Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop **Responsible Party:** Contact: Troy McKim David Herrin Manager Environmental Compliance Plant Manager (312) 431-3111 Ext. 3168 (1) 计问题语言的问题 (1) (1) 175 W. Jackson Blid. Chicago, Illinois 60604 **Permitted Equipment** Inline Tank Car Qualification Process **Emission Unit(s)**: Welding & Metal Arc Cutting (EU 8) Mini Pleat Filters CE M2 **Control Equipment:** 

 Emission Point:
 EP M2

 Equipment Location:
 2603 Dick Drake Way

 Muscatine, Iowa 52761

Plant Number:

## 70-01-048

Permit No.	Proj. No.	Description	Date	Testing
00-A-1087	00-144	Original Permit	8/9/94	Ňo
00-A-1087-S1	08-621	Amend Emission Unit Identification	10/29/09	No
00-A-1087-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits, And Replace Fan To Increase Airflow From 5000 scfm to 20,000 scfm	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

Inline Tank Car Qualification Process (EP M2) 00-A-1087-S2

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

# 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

# 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

# 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

# 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a mauner consistent with good practice for mininizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

# 7. Disposal of Contaminants

Union Tank Car

Muscatine. Iowa

The disposal of materials collected by the control equipment shall meet all applicable rules.

# 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarInline Tank Car Qualification Process (EP M2)Muscatine, Iowa00-A-1087-S28. Notification, Reporting, and Record keeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6	·	
Air Quality Bureau	1023 West Madison	· .	
Iowa Department of Natural Resources	Washington, Iowa 52353		
7900 Hickman Road, Suite 1	Phone: (319) 653-2135		
Windsor Heights, IA 50324	Fax: (319) 653-2856		
Telephone: (515) 281-8448			
Fax: (515) 242-5127.			

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

# **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1,8	NA	0.1 gr/dscf	23.3(2)"a"
PM <sub>10</sub>	0.874	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0335	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA ·	• NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NĂ
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	27
Discharge Style	Vertical, Unobstructed
Stack Opening, (inches, dia.)	46
Exhaust Temperature (°F)	72
Exhaust Flowrate (scfm)	20,000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NÁ	NA
PM <sub>2</sub> s	Yes <sup>1</sup>	No	Performance Test	One Time
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NÄ	ŇA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

<sup>1</sup> Performance test successfully completed April 4, 2012.

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table helow unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other	· · · · · · · · · · · · · · · · · · ·	

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# Inline Tank Car Qualification Process (EP M2) 00-A-1087-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

### 13. NSPS and NESHAP Applicability

A. This emission unit is not subject to any applicable NSPS NESHAP requirements as there are no applicable subparts at this time.

# 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-M2) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources

Union Tank Car	Inline Tank Car Qualification Process (EP M2)	Page 8 of 8
Muscatine, Iowa	00-A-1087-S2	Be o or o
HẠP	Hazardous Air Pollutant(s)	
IAC	Iowa Administrative Code	
MMBtu	One million British thermal units	
NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
NOX	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application	n materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diam	eter
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	

# **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

	<u>Permit Holder</u>
Firm: Union Tank Car Compa	ny – Muscatine Repair Shop
Contact:	<b>Responsible Party:</b>
David Herrin Manager Environmental Compl	Troy McKim iance Plant Manager
(312) 431-3111 Ext. 3168 175 W. Jackson Blod. Chicago, Illinois 60604	
Emission Unit(s):	<b><u>Permitted Equipment</u></b> Inline Tank Car Qualification Process Welding & Metal Arc Cutting (EU 8)
Control Equipment:	Mini Pleat Filters CE M3
Emission Point: Equipment Location:	EP M3 2603 Dick Drake Way Muscatine, Iowa 52761
Plant Number:	70-01-048

Permit No.	Proj. No.	Description	Date	Testing
00-A-1088	00-144	Original Permit	8/9/94	No
00-A-1088-S1	08-621	Amend Emission Unit Identification	10/29/09	No
00-A-1088-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits, And Replace Fan To Increase Airflow From 5000 scfm to 20,000 scfm	4/8/13	No

neutrick Under the Direction of the Director of

Under the Direction of the Director of the Department of Natural Resources

# **PERMIT CONDITIONS**

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561--7.5.

### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

# 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

# 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

# 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void,

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

## 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

. . .

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

# 7. Disposal of Contaminants

Union Tank Car

Muscatine, Iowa

The disposal of materials collected by the control equipment shall meet all applicable rules.

# 8. Notification, Reporting, and Record keeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarInline Tank Car Qualification Process (EP M3)Muscatine, Iowa00-A-1088-S28. Notification, Reporting, and Record keeping (Continued)

# E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

# 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

# **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.8	NA	0.1 gr/dscf	23.3(2)"a"
PM <sub>10</sub>	0.874	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0335	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plau; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

# **11. Emission Point Characteristics**

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	27
Discharge Style	Vertical, Unobstructed
Stack Opening, (inches, dia.)	46
Exhaust Temperature (°F)	72
Exhaust Flowrate (scfin)	20,000

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub> NO <sub>X</sub> VOC CO	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub> VOC	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

# Inline Tank Car Qualification Process (EP M3) 00-A-1088-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

# 13. NSPS and NESHAP Applicability

A. This emission unit is not subject to any applicable NSPS NESHAP requirements as there are no applicable subparts at this time.

### **14.** Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-M3) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.

### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources

Union Tank Car	Inline Tank Car Qualification Process (EP M3)	Page 8 of 8
Muscatine, Iowa	00-A-1088-S2	
HÁP	Hazardous Air Pollutant(s)	÷
IAC	Iowa Administrative Code	
MMBtu	One million British thermal units	•
NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
NO <sub>X</sub> .	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application	materials
. PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diame	eter
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
$SO_2$	Sulfur Dioxide	
VOC	Volatile Organic Compound	

# END OF PERMIT CONDITIONS

# Iowa Department of Natural Resources Air Quality Construction Permit

# Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

 

 Permitted Equipment

 Emission Unit(s):
 Railcar Exterior Paint Room (EU 5)

 Control Equipment:
 Dity Filters CE 5A

 Emission Point:
 EP 5A

 Equipment Location:
 2603 Dick Drake Way Muscatine, Jowa 52761

**Plant Number:** 

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
93-A-255	92-256	Original Permit	8/4/93	Yes
93-A-255-S1	94-168	Amend Operating Limits	5/25/94	Yes
93-A-255-S2	96-200	Addition of PM Limits	6/11/96	Yes
93-A-255-83	00-142	Revise Paint Usage Limit	3/26/00	No
93-A-255-84	02-339	Remove Hourly Operating Condition	11/6/02	No
93-A-255-S5	08-497	Correct Operating Conditions	10/23/08	No
93-A-255-S6	08-621	Amend Operating Limits	10/29/09	No
93-A-255-S7	12-409	Establish PM2.5 Limits	4/8/13	No

nust

Under the Direction of the Director of the Department of Natural Resources

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561--7.5.

# 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has heen undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

## 2. Transferability

As limited by 567 IAC 22.3(3)"f', this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

# Railcar Exterior Paint Room (EP 5A) 93-A-255-S7

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

# 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

# 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

Iowa Department of Natural Resources

7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau

#### Railcar Exterior Paint Room (EP 5A) Union Tank Car 93-A-255-S7 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
	Fax: (319) 653-2856

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

# 10. Emission Limits

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.50	NA	0.01 gr/dscf	23.4(13)
	0.254	NA	NA	NAAQS
PM <sub>10</sub>	0.085	NA	NA	NAAQS
PM <sub>2.5</sub>	NA	NA	40%3	23.3(2)"d"
Opacity		NA	NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	- NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )		2006	NA	NA
Volatile Organic Compounds			NA	NA
Carbon Monoxide (CO)	NA	NA		NA
Lead (Pb)	NA	NA		NA NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	TALX

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Emission limit used to minimize the PTE.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

# 11. Emission Point Characteristics

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value		
Stack Height, (ft, from the ground)	39		
Discharge Style	Vertical Unobstructed		
Stack Opening, (inches, dia.)	38		
Exhaust Temperature (°F)	97 °F		
Exhaust Flowrate (scfm)	9,188 scfm		

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance Test	One Time
PM <sub>2.5</sub>	Yes <sup>2</sup>	No	Performance Test	One Time
Opacity	No	No	NA	NA
SO <sub>2</sub> NO <sub>X</sub> VOC	No	No	'NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb ·	No	No	NA	NA
HAP	No	No	NA	NA

Testing was completed August 20, 2009.

<sup>2</sup> PM<sub>2.5</sub> Testing was successfully conducted March 26 thru 28, 2012.

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
- <u>-</u>	1	40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	I hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other	· · · · · · · · · · · · · · · · · · ·	

# Railcar Exterior Paint Room (EP 5A) 93-A-255-S7

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

# 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. Emission Unit 5 (EU-5) shall not exceed 20 hours of operation per day.
- C. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

# 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record of all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.

# 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

# 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
ĊFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOX	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

# <u>Permit Holder</u>

Firm: Union Tank Car Company – Muscatine Repair Shop

### **Contact:**

David Herrin Manager Environmental Compliance Responsible Party:

Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

 

 Permitted Equipment

 Emission Unit(s):
 Railcar Exterior Paint Room (EU 5)

 Control Equipment:
 Dry Filters CE 5B

 Emission Point:
 EP 5B

 Equipment Location:
 2603 Dick Drake Way Muscatines Lowa 52761

Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date .	Testing
96-A-629	93-256	Original Permit	6/11/96	Yes
96-A-629-S1	00-142	Revise Paint-Use Limitations	4/26/00	No
96-A-629-S2	08-621	Amend Operating Limits	10/29/09	No
96-A-629-S3	12-409	Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561---7.5.

## 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

# 2. Transferability

As limited by 567 IAC 22.3(3)"P', this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

## 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thuty-six (36) months after the permit issuance date; or

## 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- .(2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

# 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

# 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

# 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or uot, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899

Fax: (515) 242-5098

#### Railcar Exterior Paint Room (EP 5B) Union Tank Car 96-A-629-S3 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

# **10.** Emission Limits

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.50	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.254	ŇĂ	NA	NAAQS
PM <sub>2.5</sub>	0.085	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>X</sub> )	NA	ŃA	NA	NA <sup>*</sup>
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	- NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Emission limit used to minimize the PTE.

The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	39
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	38
Exhaust Temperature (°F)	97 °F
Exhaust Flowrate (scfm)	9,188 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No -	No	NA	NA
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance test	One Time
PM <sub>2.5</sub>	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NOX	No	No	NA	NA ·
VOC	No	No	NA	ŃA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

<sup>1</sup> Testing was completed August 20, 2009.

<u>If an initial compliance demonstration specified above is testing</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Рb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

# Railcar Exterior Paint Room (EP 5B) 96-A-629-S3

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

# 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

# 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. Emission Unit 5 (EU-5) shall not exceed 20 hours of operation per day.
- C. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record of all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.

The DELS manual the numbers of hour operated each day

# 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

# 17. Description of Terms and Acronyms

acfm Applicant	Actual cubic feet per minute The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NO <sub>X</sub>	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# **END OF PERMIT CONDITIONS**
# Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder Firm: Union Tank Car Company - Muscatine Repair Shop **Responsible Party:** Contact: Troy McKim David Herrin Plant Manager Manager Environmental Compliance (312) 431-3111 Ext. 3168 175 W. Jackson Blvd. Chicago, Illinois 60604 Permitted Equipment Railcar Exterior Paint Room (EU 5) Emission Unit(s): Dry Filters CE 5C **Control Equipment:** EP 5C Emission Point: 2603 Dick Drake Way Equipment Location: Muscatine, Iowa 52761 70-01-048 **Plant Number:**

Permit No.	Proj. No.	Description	Date	Testing
96-A-630	96-200	Original Permit	6/11/96	Yes
96-A-630-S1	00-142	Revise Paint-Use Limit	3/26/00	No
96-A-630-S2	02-339	Remove Hourly Operating Condition	11/6/02	No
96-A-630-S3	08-497	Correct Operating Conditions	10/23/08	No
<u>96-A-630-55</u> 96-A-630-S4	08-621	Amend Operating Limits	10/29/09	No
96-A-630-S5	12-409	Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"P, this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall he given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Conditiou 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipment modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original <u>Permits</u>

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
  - (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

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#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

#### Railcar Exterior Paint Room (EP 5C) 96-A-630-S5

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An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - .1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### Railcar Exterior Paint Room (EP 5C) Union Tank Car 96-A-630-S5 Muscatine, Iowa 8. Notification, Reporting, and Record keeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.50	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.254	NA	NA	NAAQS
PM <sub>2.5</sub>	0.085	NA	NA	NAAQS
Opacity	NA	NA	40%3	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	2006	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA.	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Emission limit used to minimize the PTE.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	32
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	38
Exhaust Temperature (°F)	97 °F
Exhaust Flowrate (scfm)	9,188 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance test	One Time
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NOX	No	No	NÁ	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

<sup>1</sup> Testing was completed August 20, 2009.

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	· 1 hour	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sup>1</sup> <sub>2.5</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

Union Tank Car

#### Railcar Exterior Paint Room (EP 5C) 96-A-630-S5

Muscatine, Iowa 96-A-650-55 The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. Emission Unit 5 (EU-5) shall not exceed 20 hours of operation per day.
- C. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record of all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.

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## 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

## **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

David Herrin Manager Environmental Compliance Troy McKim

**Responsible Party:** 

Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

Permitted EquipmentEmission Unit(s):Railcai Exterior Paint Room.(EU 5)Control Equipment:Dry Fillers CE 5DEmission Point:EP 5DEquipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
96-A-631	96-200	Original Permit	6/11/96	Yes
96-A-631-S1	00-142	Revise Paint-Use Limit	3/26/00	No
96-A-631-S2	08-621	Amend Operating Limits	10/29/09	No
96-A-631-S2	12-409	Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This pennit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nouattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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#### Railcar Exterior Paint Room (EP 5D) 96-A-631-S3

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

A. The owner shall furnish the DNR the following written notifications:

- 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
- 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
- 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
- 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
- 5. Transfer of equipment ownership, within 30 days of the occurrence;
- 6. Portable equipment relocation:
  - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
  - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### Railcar Exterior Paint Room (EP 5D) Union Tank Car 96-A-631-S3 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or · local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.50	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.254	NA	NA	NAAQS
PM <sub>2.5</sub>	0.085	NA	NA	NAAQS
Opacity	NA	NA	40%3	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NÁ
Volatile Organic Compounds	NA	2006	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Emission limit used to minimize the PTE.

The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; 5 Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

## 11. Emission Point Characteristics

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	32
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	38
Exhaust Temperature (°F)	97 °F
Exhaust Flowrate (scfin)	9,188 scfin

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	Yes <sup>1</sup>	No	Performance test	One Time
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub>	No	No	NA	· NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	ŇA	NA

Testing was completed August 20, 2009.

<u>If an initial compliance demonstration specified above is testing</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

Union Tank Car	Railcar Exterior Paint Room (EP 5D)	Page 7 of 8
	96-A-631-S3	
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Muscattile, lowa The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. Emission Unit 5 (EU-5) shall not exceed 20 hours of operation per day.
- C. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record of all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.

## 16. Continuous Emission Monitoring

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Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfin Applicant	Actual cubic feet per minute
CFR	The owner, company official or authorized agent
-	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NO <sub>X</sub>	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

**Responsible Party:** 

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David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blyd. Chicago, Illinois 60604

Emission Unit(s):Railcar Interior Coating Exhaust (EU 6A)Control Equipment:Mui-pleat FiltersEmission Point:EP 6AEquipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

**Plant Number:** 

70-01-048

Permit No.	Proj, No.	Description	Date	Testing
96-A-636	96-200	Original Permit	6/11/96	Yes
96-A-636-S1	00-142	Revise Paint-Use Limit	3/26/00	No
96-A-636-S2	08-621	Amend Operating Limits	10/29/09	No
96-A-636-S3	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

Railcar Interior Coating Exhaust (EP 6A) 96-A-636-S3

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## **PERMIT CONDITIONS**

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a. Original Permits**

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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#### Railcar Interior Coating Exhaust (EP 6A) 96-A-636-S3

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Interior Coating Exhaust (EP 6A)Muscatine, Iowa96-A-636-S38. Notification, Reporting, and Recordkeeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2... years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.2	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.6	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0214	ŇA	NA	NAAQS
Opacity	NA	· NA ·	. 40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NÅ	NA	NA ·
Nitrogen Oxides (NO <sub>x</sub> )	NA	ŅA	NA	NA
Volatile Organic Compounds	NA	200 <sup>5</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>6</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>7</sup>	40 CFR 63,3890(b)(1) & (2)

#### **10.** Emission Limits

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>5</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>6</sup> NESHAP requirement for general use coating.

<sup>7</sup>NESHAP requirement for high performance coating.

#### 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	20
Exhaust Temperature (°F)	87 °F
Exhaust Flowrate (scfin)	13,129 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>25</sub>	Yes <sup>1</sup>	No	Performance Test	One Time
Opacity	· No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC CO Pb	No	No	NA	NA
HAP	No	No	NA	NA

<sup>1</sup> Performance testing was successfully conducted March 29 thru April 2, 2012.

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	2 hours	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NOX	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other	······································	

Union Tank Car	Railcar Interior Coating Exhaust (EP 6A)	Page 7 of 8
Muscatine, Iowa	96-A-636-S3	

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. EU 6 shall not exceed 20 hours of operation per day.
- D. The filter (CE-6A) shall have a MERV rating of no less than 13.
- E. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- F. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- G. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### **15. Operating Condition Monitoring**

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B,

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- G. Each day record the number of hours operated for EU 6.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfin Applicaut CFR Department DNR gr/dscf	Actual cubic feet per minute The owner, company official or authorized agent Code of Federal Regulations Iowa Department of Natural Resources Iowa Department of Natural Resources Grains per dry standard cubic foot
HAP IAC	Hazardous Air Pollutant(s)
MMBtu	Iowa Administrative Code One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOX	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VQC	Volatile Organic Compound

## END OF PERMIT CONDITIONS

# Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Firm: Union Tank Car Company - Muscatine Repair Shop

**Contact:** 

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

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	<b>Permitted</b>	Equip	ment	. **
Emission Uni((\$):	• Heaters for Tank C	ars (13 @ 2	ll & Touchup Painting (EU 6) .5 MMBtu/hr each) (EU 12) 4 MMBtu/hr each) (EU 13)	
Control Equipment:	Mini-pleat Filters	and the second second		
Emission Point:	EP 6B	eseneration: 18.		
Equipment Location:	2603 Dick Drake V Muscatine, Iowa 5			

**Plant Number:** 

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
00-A-529	00-142	Original Permit	3/26/00	No
00-A-529-S1	08-621	Amend Operating Limits	10/29/09	No
00-A-529-S1	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
00 11 525 52				
				-
	·			

Under the Direction of the Director of the Department of Natural Resources

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## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Union Tank Car	Railcar Interior Painting (EP 6B)	t.	Page 5 OI 8
Muscatine, Iowa	00-A-529-S2		
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#### 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

(1) Any changes are made to the final plans and specifications submitted for the proposed project; or

(2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious mauner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

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#### Railcar Interior Painting (EP 6B) Union Tank Car 00-A-529-S2 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856	
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>i</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.20	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.604	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0215	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>X</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA :
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>7</sup> NESHAP requirement for general use coating.

The survey for high norformance coating

<sup>&</sup>lt;sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Limit based on dispersion modeling.

<sup>&</sup>lt;sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) July 14, 2011.

#### 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value	
Stack Height, (ft, from the ground)	29	
Discharge Style	Vertical Unobstructed	
Stack Opening, (inches, dia.)	36	
Exhaust Temperature (°F)	87 °F	
Exhaust Flowrate (scfin)	13,129 scfin	

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub> .	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC	No	No	NA	NA
CO Pb	No	No	NA	NA
	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	2 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
<u>20</u>	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other	·	

#### Railcar Interior Painting (EP 6B) 00-A-529-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. EU 6 shall not exceed 20 hour of operation per day.
- D. The filter (CE-6B) shall have a MERV rating of no less than 13.
- E. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- F. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- G. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### Railcar Interior Painting (EP 6B) 00-A-529-S2

#### 15. Operating Condition Monitoring

Union Tank Car

Muscatine, Iowa

All records as required by this permit shall be kept ou-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).
- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day. For the purposes 'of calculating emissions, all VOC may be considered emitted on the day the materials are delivered to the facility or to the production line.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F: The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- G. Each day record the number of hours of operation for EU 6.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOX	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

Contact:	Responsible Party:
David Herrin	Troy McKim
Manager Environmental Compliance	Plant Manager
(312) 431-3111 Ext. 3168	
175 W. Jackson Blod.	
Chicago, Illinois 60604	
Production Contraction	
Bermitt	ted Equipment
	r Painting/Stencil & Touchup Painting (EU 6)
Heaters for Ta	nk Cars (13 @ 2.5 MMBfu/hr each) (EU 12)
Heaters for Ho	pper Cars (4 @ 4 MMBtu/hr each) (EU 13)
	A Recent Anna A
Control Equipment: Mini-pleat Filt	(CIS
Emission Point: EP 6C	· •
Equipment Location: 2603 Dick Dra	ike Way
Muscatine, Iov	wa 52761

Testing Description Date Permit No. Proj. No. 3/26/00 No **Original** Permit 00-A-530 00-142 Amend Operating Limits 10/29/09 No 00-A-530-S1 08-621 Add Particulate Filter, Establish PM2.5 Limits 4/8/13 No 00-A-530-S2 12-409

Under the Direction of the Director of

Under the Difection of the Director of the Department of Natural Resources

1

#### PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561---7.5.

#### **1.** Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising ont of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal peualties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098
#### Railcar Interior Painting (EP 6C) Union Tank Car 00-A-530-S2 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliauce Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856		
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

## 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

## **10.** Emission Limits

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.2	NĄ	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.604	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0215	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>X</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	2006	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	ŃĂ
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC enuissious from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 uatural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>7</sup> NESHAP requirement for general use coating. the concrete titlets were been as

## 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29 ^
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	36
Exhaust Temperature (°F)	87 °F
Exhaust Flowrate (scfin)	13,129 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>10</sub> PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No .	NA .	NA
CO	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC CO Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	2 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other .		

### Railcar Interior Painting (EP 6C) 00-A-530-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

## 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. EU 6 shall not exceed 20 hour of operation per day.
- D. The filter (CE-6C) shall have a MERV rating of no less than 13.
- E. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- F. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- G. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

Union Tank Car	Railcar Interior Painting (EP 6C)
Muscatine, Iowa	00-A-530-S2
4	

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).
- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- G. Each day record the number of hour operated for EU 6.

## 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfm Applicant	Actual cubic feet per minute The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NO <sub>X</sub>	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

## Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

**Responsible Party:** 

1272-1253-1422-2383-143

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

Permitted EquipmentEmission Unit(s):Railcar Interior Painting/Stencil & Touchup Painting (EU 6)<br/>Heaters for Tank Cars (13 @ 2.5 MMBtu/hr each) (EU 12)<br/>Heaters for Hopper Cars (4 @ 4 MMBtu/hr each) (EU 13)Control Equipment:Mini-pleat FiltersEmission Point:EP 6DEquipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

Plant Number:

70-01-048

Proj. No.	Description	Date	Testing
00-142	Original Permit	3/26/00	No
08-621	Amend Operating Limits	10/29/09	No
12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
			· 
<u></u>		<u></u>	
	00-142 08-621	00-142Original Permit08-621Amend Operating Limits	Operating Limits     3/26/00       08-621     Amend Operating Limits     10/29/09

Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

## 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

## 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattaument areas and maintenance areas for the NAAQS can be obtained from the Department.

## 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Page 3 of 8

Union Tank Car Muscatine, Iowa

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

## **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

## 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissious except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

## Railcar Interior Painting (EP 6D) 00-A-531-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

## 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Staudards (NAAQS) or a maintenauce area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Interior Painting (EP 6D)Muscatine, Iowa00-A-531-S28. Notification, Reporting, and Record keeping (Continued)

#### E. The owner shall send reports and notifications to:

IDNR Field Office 6
1023 West Madison
Washington, Iowa 52353
Phone: (319) 653-2135
Fax: (319) 653-2856

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

## 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.2	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.604	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0215	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NÁ
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

## **10.** Emission Limits

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>7</sup> NESHAP requirement for general use coating.

SNECHAD requirement for high newformance conting

## **11. Emission Point Characteristics**

This emission point shall conform to the specifications listed below:

Parameter	Value	
Stack Height, (ft, from the ground)	29	
Discharge Style	Vertical Unobstructed	
Stack Opening, (inches, dia.)	36	
Exhaust Temperature (°F)	87 °F	
Exhaust Flowrate (scfm)	13,129 scfm	

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM (state)       PM <sub>10</sub> PM <sub>2.5</sub>	No	No	NA ·	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Opacity   SO2   NOX   VOC   CO   Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	2 hours	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other .		

## Railcar Interior Painting (EP 6D) 00-A-531-S2

Page 7 of 8

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. EU 6 shall not exceed 20 hour of operation per day.
- D. The filter (CE-6D) shall have a MERV rating of no less than 13.
- E. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- F. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- G. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6I, and 6K)

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- G. Each day record the number of hour operated for EU 6.

## 16. Continuous Emission Monitoring

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Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

CFRCode of Federal RegulationsDepartmentIowa Department of Natural ResourcesDNRIowa Department of Natural Resourcesgr/dscfGrains per dry standard cubic footHAPHazardous Air Pollutant(s)IACIowa Administrative CodeMMBtuOne million British thermal unitsNANot ApplicableNAAQSNational Ambient Air Quality StandardsNOxNitrogen OxidesOwnerThe owner or authorized representativePermitThis document including permit conditions and all submitted application	
MMBtu One million British thermal units	
NA Not Applicable	
Owner The owner or authorized representative	
Permit This document including permit conditions and all submitted application materials	
PM <sub>10</sub> Particulate Matter equal to or less than 10 microns in aerodynamic diameter	
scfm Standard cubic feet per minute	
SIP State Implementation Plan	
SO <sub>2</sub> Sulfur Dioxide	
VOC Volatile Organic Compound	

## **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Contact:	•	<b>Responsible Party:</b>	
David Herrin Manager Environmental Con	npliance	Troy McKim Plant Manager	
(312) 431-3111 Ext. 3168		and the second state of the sta	
175 W. Jackson Blvd.			
Chicago, Illinois 60604			
Emission Unit(\$):	Railcar Interior Heaters for Tan	ed Equipment Painting/Stencil & Touchup Painting (EU 6) ak Cars (13 @ 2.5 MMBtu/hr each) (EU 12) pper Cars (4 @ 4 MMBtu/hr each) (EU 3)	
Control Equipment:	wim-piear rine	212	
Emission Point:	EP 6E		
Equipment Location:	2603 Dick Drak Muscatine, Iow		
Plant Number:	70-01-048		

Permit No.	Proj. No.	Description	Date	Testing
00-A-532	00-142	Original Permit	3/26/00	No
00-A-532-S1	08-621	Amend Operating Limits	10/29/09	No
00-A-532-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

### 2. Transferability

As limited by 567 IAC 22.3(3)"P, this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in au area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A hist of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

## 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Railcar Interior Painting (EP 6E) 00-A-532-S2

Union Tank Car Muscatine, Iowa

> (3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

## 3.a. Original Permits

3. Construction (Continued)

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

## Railcar Interior Painting (EP 6E) 00-A-532-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

## 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Perinit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### Railcar Interior Painting (EP 6E) Union Tank Car 00-A-532-S2 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

## 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

## 10. Emission Limits

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.10 <sup>4</sup>	NA	0.01 gr/dscf	23.4(13) NAAQS
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0215	NA	NA 40% <sup>3</sup>	23.3(2)"d"
Opacity	NA NA	NA NA	NA NA	NA
Sulfur Dioxide (SO <sub>2</sub> )	NA NA	NA	NA	NA
Nitrogen Oxides (NO <sub>X</sub> )	NA NA	2006	NA	NA
Volatile Organic Compounds Carbon Monoxide (CO)	NA NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA 40 CFR 63.3890(b)(1) & (2)
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg.	40 CFR 65.5890(0)(1) & (2)
		· · · · · ·	Solids <sup>8</sup>	

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>7</sup> NESHAP requirement for general use coating.

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This emission point shall conform to the specifications listed below:

Parameter	Value .		
Stack Height, (ft, from the ground)	29		
Discharge Style	Vertical Unobstructed		
Stack Opening, (inches, dia.)	36		
Exhaust Temperature (°F)	87 °F		
Exhaust Flowrate (scfm)	13,129 scfm		

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity ·	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO Pb	No	No	NA	NA
	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	2 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM10	I hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other .		

## Railcar Interior Painting (EP 6E) 00-A-532-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

## 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. EU 6 shall not exceed 20 hour of operation per day.
- D. The filter (CE-6E) shall have a MERV rating of no less than 13.
- E. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- F. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- G. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B,

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- .G. Each day record the number of hour operated for EU 6.

## 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfm Applicant CFR Department DNR gr/dscf HAP IAC MMBtu NA NAAQS NO <sub>X</sub> Owner Permit PM <sub>10</sub> scfm SIP	Actual cubic feet per minute The owner, company official or authorized agent Code of Federal Regulations Iowa Department of Natural Resources Iowa Department of Natural Resources Grains per dry standard cubic foot Hazardous Air Pollutant(s) Iowa Administrative Code One million British thermal units Not Applicable National Ambient Air Quality Standards Nitrogen Oxides The owner or authorized representative This document including permit conditions and all submitted application materials Particulate Matter equal to or less than 10 microns in aerodynamic diameter Standard cubic feet per minute State Implementation Plan
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

Firm: Union Tank Car Company – Muscatine Repair Shop

Contact:

David Herrin Manager Environmental Compliance **Responsible Party:** 

Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604



**Plant Number:** 

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
00-A-533	00-142	Original Permit	3/26/00	No
00-A-533-S1	08-621	Amend Operating Limits	10/29/09	No
00-A-533-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561---7.5.

## **1. Departmental Review**

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

## 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Union Tank Car	Railcar Interior Painting (EP 6F)		Pa	ge 3 01 8	
Muscatine, Iowa	00-A-533-S2				
3. Construction (Continued)	: :	-		• •	

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

## 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

## 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

## Railcar Interior Painting (EP 6F) 00-A-533-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

## 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### Railcar Interior Painting (EP 6F) Union Tank Car 00;A-533-S2 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856	-	
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

## **10.** Emission Limits

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	1.20	NA	0.01 gr/dscf	23,4(13)
PM <sub>10</sub>	0.604	ŇĂ	NA	NAAQS
PM <sub>2.5</sub>	0.0215	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>X</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

<sup>&</sup>lt;sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>&</sup>lt;sup>2</sup> Standard is a 12-month rolling total.

<sup>&</sup>lt;sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>&</sup>lt;sup>4</sup> Limit based on dispersion modeling.

<sup>&</sup>lt;sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>&</sup>lt;sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>&</sup>lt;sup>7</sup> NESHAP requirement for general use coating.

11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	36
Exhaust Temperature (°F)	87 °F
Exhaust Flowrate (scfin)	13,129 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No ·	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No.	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA ·
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	2 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	6 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

## Railcar Interior Painting (EP 6F) 00-A-533-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating lunits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. EU 6 shall not exceed 20 hour of operation per day.
- D. The filter (CE-6F) shall have a MERV rating of no less than 13.
- E. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- F. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- G. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B,

Union Tank Car Railcar Interior Painting (EP 6F) Page 8 of 8 Muscatine, Iowa 00-A-533-S2 B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic

- compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.

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- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- The owner or operator shall maintain a record for all maintenance and replacement of the control F. equipment.
- G. Each day record the number of hour operated for EU 6.

## 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfin Applicant CFR	Actual cubic feet per minute The owner, company official or authorized agent
Department	Code of Federal Regulations Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOX	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

Firm: Union Tank Car Company – Muscatine Repair Shop

Contact:

David Herrin Manager Environmental Compliance Troy McKim

**Responsible Party:** 

Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

Emission Unit(s):Permitted EquipmentEmission Unit(s):Railcar Interior Painting/Stencil & Touchup Painting (EU 6)<br/>Heaters for Tank Cars (13 @ 2.5 MMBtu/hr each) (EU 12)<br/>Heaters for Hopper Cats (4 @ 4 MMBtu/hr each) (EU 13)Control Equipment:NoneEmission Point:EP 6GEquipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

Plant Number:

70-01-048

6/11/96 3/26/00	No No
	No
	· · ·
11/6/02	No
10/23/08	No
10/29/09	No
4/8/13	No
	10/29/09

Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561---7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

## 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

## Union Tank Car

Muscatine, Iowa 3. Construction (Continued)

17

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

## 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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## Railcar Interior Painting (EP 6G) 93-A-256-S6

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An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

## 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Record keeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### Railcar Interior Painting (EP 6G) Union Tank Car 93-A-256-S6 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington; Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856	
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

## 10. Emission Limits

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	NA	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.5</sub>	0.045	NA	NA	NAAQS
Opacity	NA	· NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	· NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
	NA	NA	NA	NA
(Single HAP)	NA NA	NA	2.6 lb organic	40 CFR 63.3890(b)(1) & (2)
(Total HAP)			HAP/gal ctg.	
	ļ		Solids <sup>7</sup>	
		1	27.5 lb organic	
	ł		HAP/gal ctg.	
		1	Solids <sup>8</sup>	

<sup>&</sup>lt;sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>7</sup> NESHAP requirement for general use coating.

<sup>&</sup>lt;sup>2</sup> Standard is a 12-month rolling total.

<sup>&</sup>lt;sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>&</sup>lt;sup>4</sup> Limit based on dispersion modeling.

<sup>&</sup>lt;sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>&</sup>lt;sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

## 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	16 x 19
Exhaust Temperature (°F)	88 °F
Exhaust Flowrate (scfin)	2,509 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Fonutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>10</sub> PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA .	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	· NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	8 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other .	•	

Railcar Interior Painting (EP 6G) 93-A-256-S6

Union Tank Car

## Muscatine, Iowa 93-A-256-S6 The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

## 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. EU 6 shall not exceed 20 hour of operation per day.
- C. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. Each day record the number of hour operated for EU 6.

## 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

## 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfin	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC .	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**
## Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

#### **Responsible Party:**

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

Emission Unit(s):Railcar Interior Painting/Stencil & Touchup Painting (EU 6)<br/>Heaters for Tank Cars (13 @ 2.5 MMBtu/hr each) (EU 12)<br/>Heaters for Hopper Cars (4 @ 4 MMBtu/hr each) (EU 13)Control Equipment:NoneEmission Point:EP 6HEquipment Location:2603 Dick Drake Way<br/>Muscatine, Iowa 52761

**Plant Number:** 

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
96-A-632	96-200	Original Permit	6/11/96	No
96-A-632-S1	00-142	Revise Paint Usage Limit	3/26/00	No
96-A-632-S2	02-339	Remove Hourly Operating Condition	11/6/02	No
96-A-632-S3	08-497	Correct Operating Conditions	10/23/08	No
96-A-632-S4	08-621	Amend Operating Limits	10/29/09	No
96-A-632-S5	12-409	Establish PM2.5 Limits	4/8/13	No

Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit sball be required prior to the initiation of construction of additional control equipment or equipment modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

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It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

#### 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-muute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Interior Painting (EP 6H)Muscatine, Iowa96-A-632-S58. Notification, Reporting, and Record Keeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional	Reference
			Limits	(567 IAC)
Particulate Matter (PM)	NA	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.5</sub>	0.045	NA	NA	NAAQS
Opacity	NÀ	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	, NA	NA '	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA .	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA ·	NA
(Total HAP)	NA	NA	2.6 lb organic	40 CFR 63.3890(b)(1) & (2)
			HAP/gal ctg.	
			Solids <sup>7</sup>	
			27.5 lb organic	
			HAP/gal ctg.	
			Solids <sup>8</sup>	

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>7</sup> NESHAP requirement for general use coating.

<sup>8</sup> NESHAP requirement for high performance coating.

<sup>&</sup>lt;sup>2</sup> Standard is a 12-month rolling total.

<sup>&</sup>lt;sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>&</sup>lt;sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

### 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	16 x 19
Exhaust Temperature (°F)	88 °F
Exhaust Flowrate (scfm)	2,509 scfin

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
$\frac{PM_{2.5}}{Opacity}$ $\frac{SO_2}{NO_X}$ VOC	No	No	NA	NA
Opacity	No	No	ŇA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	8 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO Pb	1 hour	40 CFR 60, Appendix A, Method 10
	1 hour	40 CFR 60, Appendix A, Method 12
Other	· ·	

#### Railcar Interior Painting (EP 6H) 96-A-632-S5

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The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each enuissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. EU 6 shall not exceed 20 hour of operation per day.
- C. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. Each day record the number of hour operated for EU 6.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA ,	Not Applicable
NAAQŚ	National Ambient Air Quality Standards
NO <sub>X</sub>	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfin	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

## Iowa Department of Natural Resources Air Quality Construction Permit

## Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

A Second S Second Second Se Second Second S Second Second Seco	
	Permitted Equipment
Emission Unit(s):	Railcar Interior Painting/Stencil & Touchup Painting (BU 6)
	Heaters for Tank Cars (13 @ 2.5 MMBtu/hr each) (EU12) Heaters for Hopper Cars (4 @ 4 MMBtu/hr each) (EU13)
Control Equipment:	None
Emission Point:	
Equipment Location:	2603 Dick Drake Way Muscatine, Iowa 52761

Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
96-A-633	96-200	Original Permit	6/11/96	No
96-A-633-S1	00-142	Revise Paint Usage Limit	3/26/00	Nó
96-A-633-S2	02-339	Remove Hourly Operating Condition	11/6/02	No
96-A-633-S3	08-497	Correct Operating Conditions	10/23/08	No
96-A-633-S4	08-621	Amend Operating Limits	10/29/09	No
96-A-633-S5	12-409	Establish PM2.5 Limits	4/8/13	No
				1

Under the Direction of the Director of the Department of Natural Resources

1

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

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3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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#### Railcar Interior Painting (EP 6I) 96-A-633-S5

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

A. The owner shall furnish the DNR the following written notifications:

- 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
- 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
- 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
- 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
- 5. Transfer of equipment ownership, within 30 days of the occurrence;
- 6. Portable equipment relocation:
  - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
  - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D: The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau

Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Interior Painting (EP 6I)Muscatine, Iowa96-A-633-S58. Notification, Reporting, and Record keeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6	
Air Quality Bureau	1023 West Madison	
Iowa Department of Natural Resources	Washington, Iowa 52353	1
7900 Hickman Road, Suite 1	Phone: (319) 653-2135	
Windsor Heights, IA 50324	Fax: (319) 653-2856	
. Telephone: (515) 281-8448		
Fax: (515) 242-5127		

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	NA	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQŚ
PM <sub>2.5</sub>	0.045	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	ŇA	NA	NA	NA
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>7</sup> NESHAP requirement for general use coating.

<sup>8</sup> NESHAP requirement for high performance coating.

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#### **11. Emission Point Characteristics**

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	16 x 19
Exhaust Temperature (°F)	88 °F
Exhaust Flowrate (scfin)	2,509 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Inițial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA *
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA.
CO	No	No	NA	NA
$\frac{PM_{2.5}}{Opacity}$ $\frac{SO_2}{NO_X}$ $\frac{VOC}{CO}$ $Pb$	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	8 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO :	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		•

#### Railcar Interior Painting (EP 6I) 96-A-633-S5

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. EU 6 shall not exceed 20 hour of operation per day.
- C. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).

Union Tank Car	•	Railcar Interior Painting (EP 6I)	•	Page 8 of 8
Muscatine, Iowa		96-A-633-85		U

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. Each day record the number of hour operated for EU 6.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

2-14-1 -

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## 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS ·	National Ambient Air Quality Standards
NOX	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfin	Standard cubic feet per minute
SÍP	State Implementation Plan
SÔ <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

## Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Firm: Union Tank Car Company – Muscatine Repair Shop

Contact:

#### **Responsible Party:**

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168

175 W. Jackson Blvd. Chicago, Illinois 60604

ALTER AND	LINEARING BARRING PRODUCTION CONTRACTOR
	Permitted Equipment
Emission Unit(s):	Railcar Interior Painting/Stencil & Touchup Painting (BU 6) Heaters for Tank Cars (13 @ 2.5 MMBtu/hr each) (EU 12)
	Heaters for Hopper Cars (4 @ 4 MMBtu/hr each) (EU/13)
Control Equipment:	None
Emission Point:	EP 6J
Equipment Location:	2603 Dick Drake Way Muscatine, Iowa 52761

**Plant Number:** 

70-01-048

Permit No.	Proj. No.	Description	Date <sup>,</sup>	<sup>•</sup> Testing
96-A-634	96-200	Original Permit	6/11/96	No <sub>.</sub>
96-A-634-S1	00-142	Revise Paint Usage Limit	3/26/00	No
96-A-634-S2	02-339	Remove Hourly Operating Condition	11/6/02	No
96-A-634-S3	08-497	Correct Operating Conditions	10/23/08	No
96-A-634-S4	08-621	Amend Operating Limits	10/29/09	No
96-A-634-S5	12-409	Establish PM2.5 Limits	4/8/13	No

Under the Direction of the Director of the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"P, this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

#### **3.** Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

#### Railcar Interior Painting (EP 6J) Union Tank Car 96-A-634-S5 Muscatine, Iowa 8. Notification, Reporting, and Recordkeeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, 10wa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856	
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

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Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	NA	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.5</sub>	0.045	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides ( $NO_X$ )	NA	NA	NA	NÁ
Volatile Organic Compounds	NA	2006	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

<sup>&</sup>lt;sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble

limit). <sup>7</sup> NESHAP requirement for general use coating.

SNESHAP requirement for high performance coating

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### 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	16 x 19
Exhaust Temperature (°F)	88 °F
Exhaust Flowrate (scfm)	2,509 scfin

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
$\frac{PM_{10}}{PM_{2.5}}$ $\frac{PM_{2.5}}{Opacity}$ $\frac{SO_2}{NO_X}$ $\frac{VOC}{CO}$	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA -	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	8 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub> NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NÓ <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other	•	· · · · · ·

#### Railcar Interior Painting (EP 6J) 96-A-634-S5

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The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. EU 6 shall not exceed 20 hour of operation per day.
- C. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. Each day record the number of hour operated for EU 6.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
$SO_2$	Sulfur Dioxide
VOC	Volatile Organic Compound

## **END OF PERMIT CONDITIONS**

## Iowa Department of Natural Resources Air Quality Construction Permit

	<u>Permit Holder</u>
Firm: Union Tank Car Compar	y – Muscatine Repair Shop
Contact:	<b>Responsible Party:</b>
David Herrin Manager Environmental Compli	ance Plant Manager
(312) 431-3111 Ext. 3168	
175 W. Jackson Blvd. Chicago, Illinois 60604	edesnest An minipulscar as maximus consider.
Emission Unit(s):	<b><u>Permitted Equipment</u></b> Railcai Interior Painting/Stencil & Touchup Painting (EU 6) Heaters for Tank Cars (13 @ 2.5 MMBtu/hr each) (EU 12) Heaters for Hopper Cars (4 @ 4 MMBtu/hr each) (EU 13)
Control Equipment:	None
Emission Point:	EP 6K
Equipment Location:	2603 Dick Drake Way Muscatine, Iowa 52761

Plant Number:

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70-01-048

Proi. No.	Description	Date	Testing
	Original Permit	6/11/96	No
		3/26/00	No
02-339		11/6/02	No
08-497		10/23/08	No
		10/29/09	No
12-409	Establish PM2.5 Limits	4/8/13	No
-	08-497 08-621	96-200Original Permit00-142Revise Paint Usage Limit02-339Remove Hourly Operating Condition08-497Correct Operating Conditions08-621Amend Operating Limits	Proj. 10.Description96-200Original Permit6/11/9600-142Revise Paint Usage Limit3/26/0002-339Remove Hourly Operating Condition11/6/0208-497Correct Operating Conditions10/23/0808-621Amend Operating Limits10/29/09

Under the Direction of the Director of the Department of Natural Resources

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## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Union Tank Car Muscatine, Iowa 3. Construction (Continued)

> (3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

## 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1. 

#### Railcar Interior Painting (EP 6K) 96-A-634-S5

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An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Record keeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRailcar Interior Painting (EP 6K)Muscatine, Iowa96-A-634-S58. Notification, Reporting, and Record keeping (Continued)

E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

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#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	NA	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.1</sub>	0.045	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	. NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA ,
(Single HAP)	NA	NA	NA	· NA ·
(Total HAP)	NA	NA	2.6 lb organic HAP/gal ctg. Solids <sup>7</sup> 27.5 lb organic HAP/gal ctg. Solids <sup>8</sup>	40 CFR 63.3890(b)(1) & (2)

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period. (Note: The VOC PTE of the 17 natural gas heaters is 0.89 tons per year and counts against the 200 ton/yr bubble limit).

<sup>7</sup> NESHAP requirement for general use coating.

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Union Tank Car	Railcar Interior Painting (EP 6K)	Page 6 of 8
Muscatine, Iowa	96-A-634-S5	U .

## 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	29
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	16 x 19
Exhaust Temperature (°F)	88 °F
Exhaust Flowrate (scfm)	2,509 scfin

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### 12. Compliance Demonstration(s) and Performance Testing

<u>Pollutant</u>	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
$\frac{PM_{10}}{PM_{2.5}}$ $\frac{PM_{2.5}}{Opacity}$ $\frac{SO_2}{NO_X}$ $\frac{VOC}{CO}$	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	Nó	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb.	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
DM		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	8 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other .	· · · · ·	

## Iowa Department of Natural Resources Air Quality Construction Permit

## <u>Permit Holder</u>

Firm: Union Tank Car Company - Muscatine Repair Shop **Responsible Party:** Contact: Troy McKim David Herrin Manager Environmental Compliance Plant Manager (312) 431-3111 Ext. 3168 中国法国新疆省南部中国小学 27月1日月日日 175 W. Jackson Blyd Chicago, Illinois 60604 Permitted Equipment Rubber Lining of Tank Cars (EU Emission Unit(s): Cell Fillers (CE 7A) **Control Equipment:** EP 7A Emission Point: 2603 Dick Drake Way **Equipment Location:** Muscatine, Iowa 52761 70-01-048 **Plant Number:** 

Permit No.	Proj. No.	Description	Date	Testing
00-A-1089	00-074	Original Permit	12/15/00	No
00-A-1089-S1	08-621	Amend Operating Limits	10/29/09	No
00-A-1089-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No

Under the Direction of the Director of

the Department of Natural Resources

## PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f', this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

Muscatine, Iowa

3. Construction (Continued) .

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

### Rubber Lining of Tank Car (EP 7A) 00-A-1089-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRubber Lining of Tank Car (EP 7A)Muscatine, Iowa00-A-1089-S28. Notification, Reporting, and Recordkeeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6		
Air Quality Bureau	1023 West Madison		
Iowa Department of Natural Resources	Washington, Iowa 52353		
7900 Hickman Road, Suite 1	Phone: (319) 653-2135		
Windsor Heights, IA 50324	Fax: (319) 653-2856		1
Telephone; (515) 281-8448		·	
Fax: (515) 242-5127			

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.104	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.5</sub>	0.025	NA	NA	NAAQS
Opacity	NA .	NA <sup>·</sup>	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	ŇA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	ŇA	NA	ŇĂ
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	37.7 lb organic HAP/gal ctg. solids	40 CFR 63.3890(b)(4)

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

<sup>&</sup>lt;sup>2</sup> Standard is a 12-month rolling total.

<sup>&</sup>lt;sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>&</sup>lt;sup>4</sup> Limit based on dispersion modeling.

### Muscatine, Iowa 11. Emission Point Characteristics

Union Tank Car

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	32
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	18
Exhaust Temperature (°F)	70 °F
Exhaust Flowrate (scfm)	5,400 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

## 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	· Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
НАР	No	No	NA	NA

<u>If an initial compliance demonstration specified above is testing</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant Test Run Time		Test Method	
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5	
PM (state)	1 hour	1 hour40 CFR 60, Appendix A, Method 540 CFR 51 Appendix M Method 202	
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202	
PM <sub>2.5</sub>	2 hours	40 CFR 51, Appendix M, 201A with 202	
Opacity	1 hour	40 CFR 60, Appendix A, Method 9	
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C	
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E	
VOC	1 hour	40 CFR 60, Appendix A, Method 25A	
CO	1 hour	40 CFR 60, Appendix A, Method 10	
РЬ	1 hour	40 CFR 60, Appendix A, Method 12	
Other			

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#### Rubber Lining of Tank Car (EP 7A) 00-A-1089-S2

Page 7 of 8

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Suhpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-7A) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- D. For all coating operations (EU 5. 6. 7. 12. and 13) calculate the total VOC emissions per 365-day rolling

# 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

# 17. Description of Terms and Acronyms

acfm Applicant CFR Department DNR gr/dscf HAP IAC MMBtu NA NAAQS NO <sub>X</sub> Owner Permit PM <sub>10</sub> scfm	Actual cubic feet per minute The owner, company official or authorized agent Code of Federal Regulations Iowa Department of Natural Resources Iowa Department of Natural Resources Grains per dry standard cubic foot Hazardous Air Pollutant(s) Iowa Administrative Code One million British thermal units Not Applicable National Ambient Air Quality Standards Nitrogen Oxides The owner or authorized representative This document including permit conditions and all submitted application materials Particulate Matter equal to or less than 10 microns in aerodynamic diameter Standard cubic feet per minute
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

# Permit Holder Firm: Union Tank Car Company - Muscatine Repair Shop **Responsible Party: Contact:** Troy McKim David Herrin Manager Environmental Compliance Plant Manager (312) 431-3111 Ext. 3168 制有特殊性的。 175 W. Jackson Blud. Chicago, Illinois 60604 Permitted Equipment Rubber Lining of Tank Cars (EU 7) **Emission Unif(s):** Cell Filters (CE,7B). **Control Equipment** EP 7B **Emission Point** 2603 Dick Drake Way Equipment Location: Muscatine, Iowa 52761 70-01-048 **Plant Number:**

Permit No.	Proj. No.	Description	Date	Testing
00-A-1090	00-074	Original Permit	12/15/00	No
00-A-1090-S1	08-621	Amend Operating Limits	10/29/09	No
00-A-1090-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

CPFP | 7001048 | 04082013 | 12409 | 00A1090S2

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit hecomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

## Rubber Lining of Tank Car (EP 7B) 00-A-1090-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

## 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.

C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarRubber Lining of Tank Car (EP 7B)Muscatine, Iowa00-A-1090-S28. Notification, Reporting, and Recordkeeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	· · · · · · · · · · · · · · · · · · ·
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.104	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM2.5	0.025	NA	ŇA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA ·	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	37.7 lb organic HAP/gal ctg. solids	40 CFR 63.3890(b)(4)

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>&</sup>lt;sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>&</sup>lt;sup>4</sup> Limit based on dispersion modeling.

<sup>&</sup>lt;sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

## **11. Emission Point Characteristics**

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	31
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	46
Exhaust Temperature (°F)	70 °F
Exhaust Flowrate (scfm)	25,000 scfm

The temperature and flow rate are intended to be representative aud characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM10	No	No	NA	NA
$\frac{PM_{2.5}}{Opacity}$ $SO_2$ $NO_X$ $VOC$	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NÁ
NO <sub>X</sub>	No	No	NA	NA
VOC	No	Ňo	NA	NĂ
<u>CO</u>	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	4 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	2 hours	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	11 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

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#### Rubber Lining of Tank Car (EP 7B) 00-A-1090-S2

Page 7 of 8

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-7B) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### 15. Operating Condition Monitoring

All records as required by this permit shall he kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- in the total VOC emissions per 365-day rolling

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# 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

# 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Adininistrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NOX	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM10	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
ŞO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

# <u>Permit Holder</u>

Firm: Union Tank Car Company – Muscatine Repair Shop

Contact:

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168 175 W. Jackson Blvd. Chicago, Illinois 60604



**Plant Number:** 

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
00-A-1091	00-074	Original Permit	12/15/00	No
00-A-1091-S1	08-621	Amend Operating Limits	10/29/09	No
00-A-1091-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

CPFP | 7001048 | 04082013 | 12409 | 00A1091S2

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

## 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a. Original Permits**

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

#### Rubber Lining of Tank Car (EP 7C) 00-A-1091-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

# 8. Notification, Reporting, and Record keeping

A. The owner shall furnish the DNR the following written notifications:

- 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
- 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
- 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
- 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each
- compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
- 5. Transfer of equipment ownership, within 30 days of the occurrence;
- 6. Portable equipment relocation:
  - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Rubber Lining of Tank Car (EP 7C) 00-A-1091-S2

#### 8. Notification, Reporting, and Record keeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.10 <sup>4</sup>	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2,5</sub>	0.025	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	ŇA
Lead (Pb)	NA	NA	NA	NÁ
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	37.7 lb organic HAP/gal ctg. solids	40 CFR 63.3890(b)(4)

#### **10. Emission Limits**

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

#### **11.** Emission Point Characteristics

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Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	31
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	46
Exhaust Temperature (°F)	70 °F
Exhaust Flowrate (scfm)	25,000 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

#### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub> NO <sub>X</sub>	No	No	NA ·	NA
NO <sub>X</sub>	No	Nö	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
CO Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	4 hours	40 CFR 60, Appendix A, Method 5
PM <sub>10</sub>	2 hours	40 CFR 51 Appendix M Method 202 40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	11 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO many m	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

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#### Rubber Lining of Tank Car (EP 7C) 00-A-1091-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-7C) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

#### **15.** Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.

The standard provides out to 6 7 12 and 12) calculate the total VOC emissions per 365-day rolling

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# 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

# 17. Description of Terms and Acronyms

acfm Applicant CFR Department DNR gr/dscf HAP IAC MMBtu NA NAAQS NO <sub>X</sub> Owner Permit PM <sub>10</sub> scfm SIP	Actual cubic feet per minute The owner, company official or authorized agent Code of Federal Regulations Iowa Department of Natural Resources Iowa Department of Natural Resources Grains per dry standard cubic foot Hazardous Air Pollutant(s) Iowa Administrative Code One million British thermal units Not Applicable National Ambient Air Quality Standards Nitrogen Oxides The owner or authorized representative This document including permit conditions and all submitted application materials Particulate Matter equal to or less than 10 microns in aerodynamic diameter State Implementation Plan
	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

	<u>Permit </u> ]	<u>Holder</u>	<b>v</b>	
Firm: Union Tank Car Compa	any – Muscatine Repair	Shop		
Contact:		<b>Responsible Party:</b>		
David Herrin Manager Environmental Comp	liance	Troy McKim Plant Manager		
(312) 431-3111 Ext. 3168				
175 W. Jackson Blyd. Chicago, Illinois 60604	ณีเป็นสายหว่าง	Salasada asaasa hasaada.		
Emission Unit(s): Control Equipment: Emission Point:	Permitted F Rubber Lining Buildin Cell Filters (CE 7D) EP 7D			
Equipment Location:	2603 Dick Drake Way Muscatine, Jowa 5276	124	. :	
Plant Number:	70-01-048	anderan un maneriente (197	•	

Permit No.	Proj. No.	Description	Date	Testing
10-A-043	10-26	Original Permit	3/12/10	No
10-A-043-S1	10-255	Amend HAP Coating Limit	6/16/10	No
10-A-043-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits, and Change Exhaust To Vertical Unobstructed	4/8/13	No

Under the Direction of the Director of the Department of Natural Resources

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# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### **3.a. Original Permits**

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

## 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissious, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

### Rubber Lining of Tank Car (EP 7D) 10-A-043-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

# 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

## E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856	
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.104	NA	0.01 gr/dscf	23.4(13)
PM <sub>10</sub>	0.104	NA	NA	NAAQS
PM <sub>2.5</sub>	0.025	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	' NA	NA _	` <u>NA</u>
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	200 <sup>6</sup>	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	37.7 lb organic HAP/gal ctg. solids	40 CFR 63.3890(b)(4)

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

<sup>6</sup> Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365-day rolling period.

#### Union Tank Car Rubber Lining of Tank Car (EP 7D) Muscatine, Iowa 10-A-043-S2

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## **11. Emission Point Characteristics**

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	23
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	16
Exhaust Temperature (°F)	70 °F
Exhaust Flowrate (scfm)	4000 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM <sub>10</sub>	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
Opacity SO <sub>2</sub> NO <sub>X</sub> VOC	No	No	NA	NA
NOX	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	·NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM10	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	2 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub> NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

### Rubber Lining of Tank Car (EP 7D) 10-A-043-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

## 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-7D) shall have a MERV rating of no less than 13.
- B. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- C. The control equipment must be installed and operational by July 14, 2013.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

## 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- B. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- D For all coating operations (FIT 5 6 7 12 and 13) calculate the total VOC emissions per 365-day rolling

# Rubber Lining of Tank Car (EP 7D) 10-A-043-S2

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# 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

# 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NÖx	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document including permit conditions and all submitted application materials
PM <sub>10</sub>	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
sefin	Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

# **END OF PERMIT CONDITIONS**

# Iowa Department of Natural Resources Air Quality Construction Permit

	<u>Permit Holder</u>
Firm: Union Tank Car Company	ny – Muscatine Repair Shop
Contact:	Responsible Party:
David Herrin Manager Environmental Compl	Troy McKim iance Plant Manager
(312) 431-3111 Ext. 3168	
175 W. Jackson Blvd. Chicago, Illinois 60604	
	Permitted Equipment Inline Tank Car Qualification Process Welding and Plasma Cutting (EU 9) Mini Pleat Filter (CE 9A) EP 9A 2603 Dick Drake Way Muscatine, Iowa 52761
Plaut Number:	70-01-048

Permit No.	Proj. No.	Description	Date	Testing
09-A-009	08-621	Original Permit	10/29/09	No
09-A-009-S1	10-340	Remove Operating Hour Limitation	9/2/10	No
09-A-009-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Director of the Director of the Department of Natural Resources

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561—7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

#### 3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

#### 3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

#### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void,

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

#### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissious

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

### Inline Tank Car Qualification (EP 9A) 09-A-009-S2

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

#### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

#### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarInline Tank Car Qualification (EP 9A)Muscatine, Iowa09-A-009-S28. Notification, Reporting, and Recordkeeping (Continued)

#### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor	IDNR Field Office 6
Air Quality Bureau	1023 West Madison
Iowa Department of Natural Resources	Washington, Iowa 52353
7900 Hickman Road, Suite 1	Phone: (319) 653-2135
Windsor Heights, IA 50324	Fax: (319) 653-2856
Telephone: (515) 281-8448	
Fax: (515) 242-5127	

F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

#### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

#### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	2.50	NA	0.1 gr/dscf	23.3(2)"a"
PM <sub>10</sub>	0.654	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0275	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

# Inline Tank Car Qualification (EP 9A) 09-A-009-S2

# 11. Emission Point Characteristics

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	28
Discharge Style	Vertical Unobstructed
Stack Opening, (inches, dia.)	36
Exhaust Temperature (°F)	70 °F
Exhaust Flowrate (scfin)	13,500 scfm

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

# 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA ·
PM <sub>10</sub>	-No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
CO	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

<u>If an initial compliance demonstration specified above is testing</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission lunitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hours	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	7 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
РЪ	1 hour	40 CFR 60, Appendix A, Method 12
Other		

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### Inline Tank Car Qualification (EP 9A) 09-A-009-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall cousist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

#### 13. NSPS and NESHAP Applicability

A. This emission unit is not subject to any applicable NSPS NESHAP requirements as there are no applicable subparts at this time.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-9A) shall have a MERV rating of no less than 13.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.

#### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.

#### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

#### 17. Description of Terms and Acronyms

	acfm	Actual cubic feet per minute
•	Applicant	The owner, company official or authorized agent

Union Tank Car	Inline Tank Car Qualification (EP 9A)	Page 8 of 8
Muscatine, Iowa	09-A-009-S2	0
Department	Iowa Department of Natural Resources	
DNR	Iowa Department of Natural Resources	
gr/dscf	Grains per dry standard cubic foot	
HAP	Hazardous Air Pollutant(s)	
IAC	lowa Administrative Code	
MMBtu	One million British thermal units	
NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
NOX	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application m	aterials
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diamete	r
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
. SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	

# END OF PERMIT CONDITIONS

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# Iowa Department of Natural Resources Air Quality Construction Permit

# Permit Holder Firm: Union Tank Car Company - Muscatine Repair Shop **Responsible Party:** Contact: Troy McKim David Herrin Plant Manager Manager Environmental Compliance (312) 431-3111 Ext. 3168 的法常是在在原始的关键使用的原始是是是有关的原则 175 W. Jackson Blvd. Chicago, Illinois 60604 **Permitted Equipment** Inline Tank Car Qualification Process **Emission Unit(s):** Welding and Plasma Cutting (EU9) Mini Pleat Filter (CE **Control Equipment:** 的研究的 **Emission Point:** EP 9B -2603 Dick Drake Way Equipment Location: Muscatine, Iowa 52761 70-01-048 **Plant Number:**

Permit No.	Proj. No.	Description	Date	Testing
09-A-010	08-621	Original Permit	10/29/09	No
09-A-010-S1	10-340	Remove Operating Hour Limitation	9/2/10	No
09-A-010-S2	12-409	Add Particulate Filter, Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

# PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

#### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no hability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

#### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modifications needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

#### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (1) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2). The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

# Union Tank CarInline Tank Car Qualification (EP 9B)Muscatine, Iowa09-A-010-S28. Notification, Reporting, and Recordkeeping (Continued)

### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856	
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	2.50	NA	0.1 gr/dscf	23.3(2)"a"
PM <sub>10</sub>	0.654	NA	NA	NAAQS
PM <sub>2.5</sub>	0.0275	NA	NA	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA ·	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA ·	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	NA	NA
(Single HAP)	NA	NÁ	NA	NA
(Total HAP)	NA	NA	NA	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on dispersion modeling.

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

### Inline Tank Car Qualification (EP 9B) 09-A-010-S2

### **11. Emission Point Characteristics**

Union Tank Car

Muscatine, Iowa

This emission point shall conform to the specifications listed below:

Parameter	Value	
Stack Height, (ft, from the ground)	28	
Discharge Style	Vertical Unobstructed	
Stack Opening, (inches, dia.)	36	
Exhaust Temperature (°F)	70 °F	
Exhaust Flowrate (scfm)	25,000 scfm	

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### 12. Compliance Demonstration(s) and Performance Testing

Pollutant Initial		Subsequent	Methodology	Frequency	
PM (federal)	No	No	NA	NA	
PM (state)	No	No	NA	NA	
PM <sub>10</sub>	No	No	NA	NA	
PM <sub>2.5</sub>	Yes <sup>1</sup>	No	Performance Testing	One Time	
Opacity	No	No	NA	NA	
SO <sub>2</sub> NO <sub>X</sub>	No	No	NA	NA	
	No	No	NA	NA	
VOC	No	No	NA	NA	
CO	No	No	NA	NA	
Pb	No	No	NA	NÁ	
HAP	Ņo	No	NA	NA	

<sup>1</sup> Performance Testing successfully completed April 3 thru 4, 2012.

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

<u>If subsequent testing is specified above</u>, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5
		40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	7 hours	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
SO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NO <sub>X</sub>	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

### Inline Tank Car Qualification (EP 9B) 09-A-010-S2

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

### 13. NSPS and NESHAP Applicability

A. This emission unit is not subject to any applicable NSPS NESHAP requirements as there are no applicable subparts at this time.

### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The filter (CE-9B) shall have a MERV rating of no less than 13.
- B. The control equipment must be installed and operational by July 14, 2013.
- C. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall maintain a record for all maintenance and replacement of the control equipment.
- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.

### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

### 17. Description of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent

Union Tank Car	Inline Tank Car Qualification (EP 9B)	Page 8 of
Muscatine, Iowa	09-A-010-S2	1 460 0 01
Department	Iowa Department of Natural Resources	
DNR	Iowa Department of Natural Resources	
gr/dscf	Grains per dry standard cubic foot	
HAP	Hazardous Air Pollutant(s)	
IAC	Iowa Administrative Code	-
MMBtu	One million British thermal units	
NA	Not Applicable	
NAAQS	National Ambient Air Quality Standards	
$NO_X$	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application n	naterials
$PM_{10}$	Particulate Matter equal to or less than 10 microns in aerodynamic diameter	er
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	

### **END OF PERMIT CONDITIONS**

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### Railcar Interior Painting (EP 6K) 96-A-634-S5

Page 7 of 8

The unit(s) being sampled should be operated in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

### 13. NSPS and NESHAP Applicability

- A. This emission unit is not subject to any applicable NSPS requirements as there are no applicable subparts at this time.
- B. This emission unit is subject to 40 CFR 63 Subpart MMMM National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.

#### 14. Operating Limits

Operating limits for this emission unit shall be:

- A. The control equipment shall be maintained and replaced per manufacturer's instructions and specifications.
- B. EU 6 shall not exceed 20 hour of operation per day.
- C. The volatile organic content of any paint utilized shall not exceed 5.2 pounds per gallon.
- D. Total VOC emissions from coating operations (EU 5, 6, 7, 12, and 13) shall not exceed 200 tons per 365day rolling period. (Note: coating operations include Railcar Exterior Painting (EU-5), Railcar Interior Painting/Touchup Painting (EU 6, 12, and 13), and Rubber Lining of Tank Cars (EU-7)

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. The owner or operator shall maintain records on the premises to show the twelve-month- period total gallons, rolled monthly, of paint used in the railcar interior coating operations identified as (EU 6A, 6B, 6C, 6D, 6E, 6F, 6G, 6H, 6I, 6J, and 6K).

Union Tank Car	Railcar Interior Painting (EP 6K)	Page 8 of 8
Muscatine, Iowa	96-A-634-S5	- 8 - 4

- B. The owner or operator shall maintain record for the interior coating operations to show the volatile organic compound content, measured in pounds per gallon, of materials sprayed.
- C. For all coating operations (EU 5, 6, 7, 12, and 13) record the amount of coating or solvent used (in gallons) and the VOC content of all coatings or solvents used (in lbs/gallon) each day.
- D. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions each day.
- E. For all coating operations (EU 5, 6, 7, 12, and 13) calculate the total VOC emissions per 365-day rolling period.
- F. Each day record the number of hour operated for EU 6.

### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

### 17. Description of Terms and Acronyms

acfm Applicant CFR Department DNR gr/dscf HAP IAC MMBtu NA NAAQS NO <sub>X</sub> Owner Permit PM <sub>10</sub>	Actual cubic feet per minute The owner, company official or authorized agent Code of Federal Regulations Iowa Department of Natural Resources Iowa Department of Natural Resources Grains per dry standard cubic foot Hazardous Air Pollutant(s) Iowa Administrative Code One million British thermal units Not Applicable National Ambient Air Quality Standards Nitrogen Oxides The owner or authorized representative This document including permit conditions and all submitted application materials Particulate Matter equal to or less than 10 microns in aerodynamic diameter
Owner	The owner or authorized representative
PM <sub>10</sub> scfm	Particulate Matter equal to or less than 10 microns in aerodynamic diameter Standard cubic feet per minute
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
VOC	Volatile Organic Compound

### **END OF PERMIT CONDITIONS**

## Iowa Department of Natural Resources Air Quality Construction Permit

### Permit Holder

Firm: Union Tank Car Company - Muscatine Repair Shop

Contact:

**Responsible Party:** 

David Herrin Manager Environmental Compliance Troy McKim Plant Manager

(312) 431-3111 Ext. 3168 175 W. Jackson Blyd. Chicago, Illinois 60604



Plant Number:

70-01-048

Permit No.	Proj. No.	Description	Date	Testing
94-A-434	94-153	Original Permit	8/9/94	No
94-A-434-S1	08-621	As-Built, Removed Control Equipment, Vented Inside	10/29/09	No
94-A-434-S2	12-409	Establish PM2.5 Limits	4/8/13	No
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Under the Direction of the Director of the Department of Natural Resources

### PERMIT CONDITIONS

The permit holder, owner and operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the conditions of this permit and all other applicable requirements. This permit and its provisions are subject to the appeal rights set forth in Iowa Administrative Code (IAC), rule 561-7.5.

### 1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 34; and 40 CFR Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The DNR assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

### 2. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing at least fourteen (14) days prior to transferring to the uew location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given thirty (30) days prior to the relocation of equipment<sup>1</sup> (See Permit Condition 8.A.6). The owner will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the (NAAQS). In such case, a supplements permit shall be required prior to the initiation of construction of additional control equipment or equipments modificatious needed to meet the standards.

The permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for compliance with the provisions of this permit. No person shall construct, install, reconstruct or alter this emissions unit, control equipment or emission point without the required revisions to this permit.

<sup>1</sup> A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department,

### 3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

- (I) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or

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3. Construction (Continued)

(3) the construction or modification of the proposed project, as it affects the emission point(s) permitted herein, is not completed within a time period specified elsewhere in this permit.

### **3.a.** Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

### 3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein.

However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

### 4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

#### 5. Owner Responsibility

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

#### 6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

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An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See section 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

### 7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

### 8. Notification, Reporting, and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
  - 1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
  - 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
  - 3. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date;
  - 4. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date;
  - 5. Transfer of equipment ownership, within 30 days of the occurrence;
  - 6. Portable equipment relocation:
    - a. at least thirty (30)days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
    - b. at least fourteen (14) days before equipment relocation.
- B. The owner shall furnish the DNR with the following reports:
  - 1. Oral excess emissions reports, in accordance with 567 IAC 24.1;
  - 2. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
  - 3. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
- C. The owner shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8189 Fax: (515) 242-5094

D. The owner shall send correspondence concerning stack testing to: Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-4899 Fax: (515) 242-5098

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### E. The owner shall send reports and notifications to:

Compliance Unit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 281-8448 Fax: (515) 242-5127	IDNR Field Office 6 1023 West Madison Washington, Iowa 52353 Phone: (319) 653-2135 Fax: (319) 653-2856
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F. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording.

### 9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

### **10. Emission Limits**

Pollutant	lb/hr <sup>1</sup>	tons/yr <sup>2</sup>	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	0.174	NA	0.1 gr/dscf	23.3(2)"a"
	0.174	NA	NA	NAAQS
PM <sub>10</sub> PM <sub>2.5</sub>	0.0375	NA	NA .	NAAQS
Opacity	NA	NA	40% <sup>3</sup>	23.3(2)"d"
Sulfur Dioxide (SO <sub>2</sub> )	NA	NA	NA	NA
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NĄ	NA
Lead (Pb)	NA	NA ·	NA	NA
(Single HAP)	NA	NA	NA	NA
(Total HAP)	NA	NA	NA	NA

<sup>1</sup> Standard is expressed as the average of three (3) runs.

<sup>2</sup> Standard is a 12-month rolling total.

<sup>3</sup> An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

<sup>4</sup> Limit based on 0.1 gr/dscf..

<sup>5</sup> The limit for PM2.5 emissions is established to address the "Finding of Substantial Inadequacy of Implementation Plan; Call for Iowa SIP Revision" for PM2.5 published in the Federal Register (76 FR 41424) on July 14, 2011.

### 11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value	
Stack Height, (ft, from the ground)	NA - Vents Inside	
Discharge Style	NA - Vents Inside	
Stack Opening, (inches, dia.)	NA	
Exhaust Temperature (°F)	Ambient	
Exhaust Flowrate (scfm)	NA	

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

### 12. Compliance Demonstration(s) and Performance Testing

Pollutant	Initial	Subsequent	Methodology	Frequency
PM (federal)	No	No	NA	NA
PM (state)	No	No	NA	NA
PM10	No	No	NA	NA
PM <sub>2.5</sub>	No	No	NA	NA
Opacity	No	No	NA	NA
SO <sub>2</sub>	No	No	NA	NA
NO <sub>X</sub>	No	No	NA	NA
VOC	No	No	NA	NA
СО	No	No	NA	NA
Pb	No	No	NA	NA
HAP	No	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.

If subsequent testing is specified above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency noted above.

If testing is required, the owner shall use the test method and run time listed in the table below unless another testing methodology is approved by the Department prior to testing.

Pollutant	Test Run Time	Test Method
PM (federal)	1 hour	40 CFR 60, Appendix A, Method 5
PM (state)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM <sub>10</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
PM <sub>2.5</sub>	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	1 hour	40 CFR 60, Appendix A, Method 9
ŚO <sub>2</sub>	1 hour	40 CFR 60, Appendix A, Method 6C
NOX	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	1 hour	40 CFR 60, Appendix A, Method 25A
CO	1 hour	40 CFR 60, Appendix A, Method 10
Pb	1 hour	40 CFR 60, Appendix A, Method 12
Other		

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	01 A-131-S2	us output as rated by the
	should be operated in a normal manner at its maximum continuous or the rate specified by the owner as the maximum production r	
will be operated. In cases	where compliance is to be demonstrated at less that the maximum	m continuous output as

will be operated. In cases where compliance is to be demonstrated at ress man use manifest the owner may submit rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the Department that this unit(s) has been physically altered so that capacity caunot be exceeded, or the Department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the Department to determine whether this unit(s) is in compliance.

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each test shall consist of three (3) separate runs. The arithmetic mean of three (3) acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting. The owner shall be responsible for the installation and maintenance of test ports. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

### 13. NSPS and NESHAP Applicability

A. This emission unit is not subject to any applicable NSPS NESHAP requirements as there are no applicable subparts at this time.

### 14. Operating Limits

Operating limits for this emission unit shall be:

A. Operating limits are not required at this time.

### 15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner. These records shall show the following:

A. Operating condition monitoring is not required at this time.

### 16. Continuous Emission Monitoring

Continuous emission monitoring is not required by this permit at this time.

### 17. Description of Terms and Acronyms

acfm Applicant	Actual cubic feet per minute The owner, company official or authorized agent
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
MMBtu	One million British thermal units
	Not Applicable

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NOX	Nitrogen Oxides	
Owner	The owner or authorized representative	
Permit	This document including permit conditions and all submitted application materials	
PM10	Particulate Matter equal to or less than 10 microns in aerodynamic diar	neter
scfm	Standard cubic feet per minute	
SIP	State Implementation Plan	
SO <sub>2</sub>	Sulfur Dioxide	
VOC	Volatile Organic Compound	

### END OF PERMIT CONDITIONS

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