



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 022015-003

Project Number: 2014-10-059
Installation Number: 011-0042

Parent Company: Redneck Manufacturing

Parent Company Address: 1101 East 12th Street, Lamar, MO 64759

Installation Name: Redneck Manufacturing

Installation Address: 1101 East 12th Street, Lamar, MO 64759

Location Information: Barton County, S35, T32N, R31W

Application for Authority to Construct was made for:

The addition of a manufacturing line at an existing fiberglass deer blind installation. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

-
- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

FEB 04 2015

EFFECTIVE DATE



DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Department's Air Pollution Control Program of the anticipated date of start up of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources' regional office responsible for the area within which you are located within 15 days after the actual start up of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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Project No.	2014-10-059

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Redneck Manufacturing
Barton County, S35, T32N, R31W

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in the previously issued construction permit no. 022014-001 issued by the Air Pollution Control Program.
2. **Production Limitations**
 - A. Redneck Manufacturing shall not produce more than 24 deer blinds per day combined from the entire installation. The entire installation consists of equipment at all three (3) Redneck Manufacturing locations in Lamar, MO, including 153 SE 1st Lane, 1705 Gulf Street, and 1101 East 12th Street.
 - B. Attachment A, or equivalent forms, such as electronic forms, shall be used to demonstrate compliance with Special Condition 2.A.
3. **Control Measures**
 - A. During spraying operations, Redneck Manufacturing shall use the controlled spray procedure as outlined in the Composites Fabricators Association's (CFA's) "Controlled Spray Handbook."
 - B. Redneck Manufacturing shall ensure that the mold containment flanges are in place during spraying operations in accordance with the CFA's "Controlled Spray Handbook."
 - C. Redneck Manufacturing shall keep records that verify the following, in accordance with the CFA's "Controlled Spray Handbook."
 - 1) The spray gun pressure has been calibrated, at a minimum, once every 3 months.
 - 2) The operators have been trained in the techniques of controlled spraying.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

4. **Operating Time Restrictions**
Redneck Manufacturing shall only operate daily between the hours of 7 a.m. to midnight (12.a.m). This includes equipment at all three locations in Lamar, MO, including 153 SE 1st Lane, 1705 Gulf Street, and 1101 East 12th Street.
5. **Facility Design Requirements**
Before making significant alterations to the facility design, Redneck Manufacturing shall submit, to the Air Pollution Control Program, an updated Ambient Air Quality Impact Analysis (AAQIA) that shows continued compliance with the styrene RAL. If the facility cannot show continued compliance with the styrene RAL using the new design, it shall contact the Air Pollution Control Program for further instructions.
6. **Operational Requirement**
 - A. Redneck Manufacturing shall keep all chemicals, including the gel coats, resins, catalysts, coatings, and bonding putties, in sealed containers whenever the materials are not in use. Redneck Manufacturing shall provide and maintain suitable, easily read, permanent marking on the containers.
 - B. Redneck Manufacturing shall not operate the closed molding process and the open molding process at the same time at its 12th Street Location.
7. **Use of Alternative Material and Coatings or Production of Different Deer Blinds**
 - A. When considering using an alternative gel coat, resin, bonding putty, or manufacturing a different type of deer blind than listed in the Application for Authority to Construct, Redneck Manufacturing shall calculate the potential emissions of styrene to show that the styrene emissions are less than the following:

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Project No.	2014-10-059

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

Table 1: Styrene Emission Limits for Alternative Material

153 SE 1 st Lane Location		
Emission Units	Emission Process	Emission Limit (lb/day)
EU1	Gel Coat Application	65.83
EU2	Resin (Chop Gun) Application	83.86
1101 East 12 th Street Location		
Emission Units	Emission Process	Emission Limit (lb/day)
EU1	Gel Coat Application	65.83
EU2	Total Resins (Including Hand Lay-up, Closed Molding, Open Molding)	91.36
Gulf Street Location		
Emission Units	Emission Process	Emission Limit (lb/day)
EU3	Open Seaming	20.42
EU5	Open Flooring	5.91
EU6	Bonding Putty	15.84

- B. If the potential emissions of styrene exceed the values in Special Condition 7.A., Redneck Manufacturing shall seek approval from the Air Pollution Control Program before the use of the alternative material or the production of the new deer blinds.
- C. Redneck Manufacturing shall also calculate the emissions of VOC and other individual HAP (i.e. methyl methacrylate (MMA), toluene, etc.) from the use of the alternative material and the production of the new deer blinds. If the potential emissions of the VOC are equal to or greater than 250.0 tons per year and individual HAP are greater than their respective SMAL, Redneck Manufacturing shall seek approval from the Air Pollution Control Program before implementing their use. A list of the SMAL can be found on the website <http://dnr.mo.gov/env/apcp/docs/cp-hapraltbl6.pdf>.
- D. Attachment B and C or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to show compliance with Special Conditions 7.A., 7.B., and 7.C.

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SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

8. Record Keeping and Reporting Requirements
 - A. Redneck Manufacturing shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.
 - B. Redneck Manufacturing shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2014-10-059
Installation ID Number: 011-0042
Permit Number:

Redneck Manufacturing
1101 East 12th Street
Lamar, MO 64759

Complete: December 15, 2014

Parent Company:
Redneck Manufacturing
1101 East 12th Street
Lamar, MO 64759

Barton County, S35, T32N, R31W

REVIEW SUMMARY

- Redneck Manufacturing has applied for authority to construct a new fiberglass deer blind manufacturing line at its existing installation.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are styrene and methyl methacrylate (MMA).
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the NESHAPs apply to this installation.
- 40 CFR 63, Subpart WWWW, "National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production," of the Maximum Achievable Control Technology (MACT) regulations applies to the installation.
- 40 CFR 63, Subpart HHHHHH, "National Emissions Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources," of the MACT regulations does not apply to the installation because it does not use paint containing target HAPs listed in this subpart and it is not an area source for HAP.
- No air pollution control equipment is being used in association with the new equipment. However, the facility will be using the controlled spray procedure, as outlined in the Composites Fabricators Association's "Controlled Spray Handbook," to limit the styrene emissions.
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- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of HAPs are greater than the de minimis/major source level. However, Section (9) permit is not required because the facility is subject to MACT, Subpart WWWW. Emissions of VOC from this project are greater than its de minimis level. Therefore, this permit is issued under Section (6). Emissions of all other criteria pollutants are less than their de minimis levels.
- This installation is located in Barton County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was performed to determine the ambient impact of styrene. Ambient air quality modeling was not performed on VOC because no model is currently available which can accurately predict ambient ozone concentrations caused by the VOC emissions.
- Emissions testing is not required for the equipment.
- A modification to the facility's Part 70 Operating Permit application is required within one (1) year after equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Redneck Manufacturing owns and operates a deer blind production facility in Lamar, MO. Gel coats are applied to a number of open molds. After a short curing period, fiberglass reinforced resins are applied using a chopper gun system before additional hand-lay resin application and curing. The parts are then sanded and prepped before being assembled into units. Screws and rivets will be used to temporarily hold the pieces together before the seams are bonded together with chopped strand mat. After curing, the blinds are rolled to the next station where the shelves are installed with screws and filled with a seam sealer. The blinds will then be painted with a water-based paint. Catalysts will be used with the resins.

The facility currently operates at two (2) separate locations in Lamar, MO: 153 SE 1st Lane and 1705 Gulf Street. The gel coat application (EU1), the resin (chop gun) application (EU2) and the sanding operation (EU8) occur at the Lane Street Location while the open seaming (EU3), open flooring (EU5), the paint application (EU4), and the bonding putty application (EU6) occur at the Gulf Street location. A third location is being added with this permit. The three locations are considered part of the same installation for permitting purposes and are identified by a single plant ID, 011-0042.

This facility is considered a major source of HAP and minor source for criteria pollutants. The facility submitted a Part 70 Operating Permit application (Project 2014-10-058) in October, 2014.

The following New Source Review permits have been issued to Redneck Manufacturing from the Air Pollution Control Program.

Table 2: Permit History

Permit Number	Description
032011-004	New deer blinds production facility
062011-012	Relocating deer blind production facility to new location
062011-012A	Eliminating weekly production limit
052012-011	Increase deer blind production limit
022014-001	Elimination of HAP limits

PROJECT DESCRIPTION

Redneck Manufacturing plans to install a new fiberglass deer blind manufacturing line at a location on 1101 East 12th Street. The plant was originally located at this site until it was moved to 153 SE 1st Lane with Permit No. 062011-012. The equipment and activities to be added includes two gel coating guns (EU1), a closed molding injection process (EU9), a hand-lay application process (open seaming (EU3) and open flooring (EU5)), and sanding tables (EU8). The closed mold injection process (EU9) is new while the other equipment are being relocated from the Lane and Gulf Street Locations. The parts produced at the 12th St. location will then be sent to the Gulf St. location to be painted. The facility will primarily use the hand-lay application process to construct parts for the deer blinds. The closed molding injection process, where resins are pulled into the closed mold using a vacuum pump and cured, will only be used for the doors.

All three locations, including 1101 East 12th Street, 153 SE 1st Lane, and 1705 Gulf Street, will be considered the same installation for permitting purposes. In the previous permit issued to the installation (No. 022014-001), the facility was limited to the production of 24 deer blinds per day and also required to operate only between the hours of 7 a.m. to midnight (12 a.m.). These limits still apply to the installation because the new styrene ambient air quality impact analysis (AAQIA) is still based on these conditions. If the installation decides to use different material (i.e. coatings, gel coats, resins, etc.) or produce a different type of deer blind than the ones listed in the application, it shall calculate the new VOC and individual HAP emissions to ensure that these emissions are less than the emissions from the current material. If the new VOC and individual HAP emissions are greater than the emissions from the current material and blinds, Redneck Manufacturing shall contact the Air Pollution Control Program for further instructions.

EMISSIONS/CONTROLS EVALUATION

Emissions of the project include emissions from all of the equipment being installed at the 12th Street site. The main pollutants expected from the operation are styrene and MMA, which are considered both VOC and HAPs. Styrene and MMA emissions from the open molding process were calculated using emission factors from the “Unified Emission Factors for Open Molding of Composites” developed by the National Marine Manufacturer’s Association (NMMA) and Composite Fabricators Association (CFA) and published in 1999 in the paper “Technical Discussion of the Unified Emission for Open Molding of Composites.” The controlled emission factors were used because the facility will use the controlled spray procedure as outlined in the “CFA Controlled Spray Handbook.” Styrene emissions for the closed molding process were calculated assuming that 3% of the styrene contained in the resins are emitted, which is the highest value given in EPA document AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Fifth Edition, Chapter 4.4, *Polyester Resin Plastic Products Fabrication*, (2/2007). Total VOC emissions were calculated using the information from the safety data sheets (SDS) and mass balances.

The facility produces five (5) types of deer blinds and emissions were calculated assuming that only the blinds with the highest emissions are being produced, which is the 6 x 6 C/O blind.

No emission factor is currently available for sanding of fiberglass. However, comparison with other sanding operations suggests that the emissions are very small. For example, the emission factor for sanding of retread tires is 9.0×10^{-7} pounds of PM per pound processed, according to EPA document AP-42, Chapter 4.12, *Manufacture of Rubber Products*, (11/08). Therefore, emissions from fiberglass were considered negligible and not calculated for this project.

The following table provides an emissions summary for this project. Existing potential emissions were taken from the previous permit issued to the installation (Permit No. 022014-001). Potential emissions of the application include only emissions from equipment being installed at the 12th Street site. The facility is limited to producing 24 deer blinds per day for the entire facility. However, it can juggle production between the 12th Street site and the Lane St. site to meet this limit. The potential emissions of the application are based on producing 24 deer blinds at the 12th Street Site to give worst case estimation. The previous permits issued to the installation evaluated the painting operation, located at the Gulf Street location, using a maximum production of 24 deer blinds. Since this production limit still applies to the installation, the maximum paint usage and potential emissions from the painting operation will not change as a result of this permit. Therefore, the emissions from the painting operation are not included as part of this project. Existing actual emissions were taken from the installation’s 2014 EIQ.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2014 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	3.94	N/D	N/D	N/A
PM ₁₀	15.0	2.68	0.81	N/D	N/A
PM _{2.5}	10.0	2.45	0.74	N/D	N/A
SOx	40.0	1.58 x 10 ⁻⁵	N/D	N/A	N/A
NOx	40.0	0.25	N/D	N/A	N/A
VOC	40.0	43.91	12.77	150.24	N/A
CO	100.0	0.14	N/D	N/A	N/A
GHG (CO ₂ e)	100,000	244.15	N/D	N/A	N/A
GHG (Mass)	0250.0	238.77	N/D	N/A	N/A
Styrene	1.0/10.0	34.68	N/D	40.50	N/A
MMA	10.0	4.58	N/D	4.56	N/A
Dimethyl phthalate	10.0	13.63	N/D	10.00	N/A
HAPs	10.0/25.0	42.88	N/D	52.68	N/A

N/A = Not Applicable; N/D = Not Determined

Note 1: The safety data sheets supplied to the Air Pollution Control Program in previous permit projects show that dimethyl phthalate was a constituent in the catalyst. New SDS supplied for this project shows that the catalysts no longer contain dimethyl phthalate.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of HAPs and VOC are above de minimis levels.

APPLICABLE REQUIREMENTS

Redneck Manufacturing shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *MACT Regulations*, 10 CSR 10-6.075
 - *National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production*, 40 CFR Part 63, Subpart WWWW

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was performed to determine the ambient impact of styrene. Two separate scenarios were modeled. One scenario assumes that only the closed molding process occurs at the 12th Street location while one scenario assumes that only the open molding process occurs. Results show that the facility will be in compliance with the RAL for styrene in either scenario. Table 4 below gives the highest ambient impact taking into account both scenarios. More information regarding the modeling analysis can be found in the memo “Ambient Air Quality Impact Analysis (AAQIA) for Redneck Manufacturing, LLC – 2014-10-059” from the Modeling Unit.

Table 4: Styrene Ambient Air Quality Modeling Results

Pollutant	Modeled Impact	NAAQS/AAL	Time Period
Styrene	1,817.0	2,240	24-Hours
Styrene	293.0	333	Annual

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Chia-Wei Young
New Source Review Unit

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated October 23, 2014, received October 27, 2014, designating Redneck Manufacturing as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.

Attachment A – Production Limit Compliance Worksheet

Redneck Manufacturing
 Barton County, (S30, T32N, R30W)
 Project Number: 2014-10-059
 Installation ID Number: 011-0042
 Permit Number: _____

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

Date							
Days of the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
¹Production							
Date							
Days of the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
¹Production							
Date							
Days of the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
¹Production							
Date							
Days of the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
¹Production							
Date							
Days of the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
¹Production							

Note 1: A daily production of no more than **24** deer blinds from the entire installation, which includes all three production locations in Lamar, MO, is necessary for compliance.

Attachment B – Alternative Material Styrene and MMA Calculations

Redneck Manufacturing
 Barton County (S30, T32N, R30W)
 Project Number: 2014-10-059
 Installation ID Number: 011-0042
 Permit Number: _____

Pollutant: _____

Copy this sheet as needed.

Column 1	Column 2	Column 3	Column 4
Type of Process	Maximum Usage per Blind (lb/Blind)	(a) Emission Factors (lb/ton or % Content)	(b) Emissions (lb/day)
153 SE 1 st Lane Location			
Gel Coat Application			
Resin (Chop Gun) Application			
1101 East 12 th Street Location			
Gel Coat Application			
Hand Lay-Up Resins			
Closed Molding Resins			
1705 Gulf Street Location			
Hand Lay-Up Resins			
Bonding Putty			

- (a) Emission factors, in lb/ton, for the Gel Coat Gun, Resin (Chop Gun) Application, and Hand lay-up Resins should be taken from the Table “Unified Emission Factors for Open Molding of Composites.” Emission factors (% Content) for the Closed Molding Resins and the Bonding Putty shall be taken from the Safety Data Sheets (SDS) of the resins. If a range is given, the highest number shall be used.
- (b) Emissions (lb/day) for the Gel Coat Gun, Resin (Chop Gun) Application, and Hand lay-up Resins calculated from $[\text{Column 2} \div 2,000 \text{ lb/ton}] \times \text{Column 3} \times 24 \text{ blinds/day}$. Emissions from closed molding calculated by using $\text{Column 2} \times \text{Column 3} \times 0.03 \times 24 \text{ blinds/day}$, where 0.03 is based on 3% styrene loss rate given in AP-42, Chapter 4.4, “Polyester Resin Plastic Products Fabrication.” Emissions from Bonding Putty (lb/day) calculated by using $\text{Column 2} \times \text{Column 3} \times 24 \text{ blinds/day}$.

- For styrene, Redneck Manufacturing LLC may use the alternative material if emissions are less than the rates in Table 1 of Special Condition 7.
- For MMA, Redneck Manufacturing LLC may use the alternative material if emissions do not exceed its SMAL, which is 10 tpy. Column 4 gives emission rates in lb/day. Tons per year can be calculated using $(\text{lb/day}) \times 365 \text{ days/yr} \div 2,000 \text{ lb/ton}$

Attachment C – Individual HAP and VOC Emissions Calculations from Alternative Material (Other than Styrene and MMA)

Redneck Manufacturing
 Barton County (S30, T32N, R30W)
 Project Number: 2014-10-059
 Installation ID Number: 011-0042
 Permit Number: _____

Individual HAP

Column 1 Material	Column 2 MHDR (gal/hr)	Column 3 Density (lb/gal)	Column 4 HAP Name, CAS #	Column 5 Individual HAP Content (Wt. %)	Column 6 (a) Individual HAP PTE (tpy)	Column 7 (b) SMAL (tpy)
<i>Example</i>	<i>1.67</i>	<i>8.75</i>	<i>Toluene</i>	<i>3.0%</i>	<i>1.92</i>	<i>10.0</i>

(a) Individual HAP PTE (tpy) calculated using (Column 2) x (Column 3) x [(Column 5) ÷ 100] x 8760 hours/yr ÷ 2,000 lb/ton

(b) SMAL can be found on-line at <http://dnr.mo.gov/env/apcp/docs/cp-hapraltbl6.pdf>

VOC

Column 1 Material	Column 2 MHDR (gal/hr)	Column 3 Density (lb/gal)	Column 4 VOC (Wt. %)	(a) Column 5 VOC PTE (tpy)
<i>Example</i>	<i>1.67</i>	<i>8.75</i>	<i>30</i>	<i>19.20</i>

(a) VOC (tpy) calculated using (Column 2) x (Column 3) x [(Column 4) ÷ 100] x 8760 hours/yr ÷ 2,000 lb/ton. If the material contains styrene or MMA, the styrene and MMA emissions should be calculated using Attachment B and added to the VOC emissions (tpy) from Attachment C.

Redneck Manufacturing LLC may use the new alternative material if the individual HAP emissions do not exceed their respective SMAL and VOC emissions from the new material are less than 250 tons per year. A copy of the SMAL values can be found on-line at <http://dnr.mo.gov/env/apcp/docs/cp-hapraltbl6.pdf>

APPENDIX A

Abbreviations and Acronyms

%percent	m/s meters per second
°Fdegrees Fahrenheit	Mgal 1,000 gallons
acfmactual cubic feet per minute	MW megawatt
BACT Best Available Control Technology	MHDR maximum hourly design rate
BMPs Best Management Practices	MMBtu Million British thermal units
Btu British thermal unit	MMCF million cubic feet
CAM Compliance Assurance Monitoring	MSDS Material Safety Data Sheet
CAS Chemical Abstracts Service	NAAQS ... National Ambient Air Quality Standards
CEMS Continuous Emission Monitor System	NESHAPs National Emissions Standards for Hazardous Air Pollutants
CFR Code of Federal Regulations	NO_x nitrogen oxides
CO carbon monoxide	NSPS New Source Performance Standards
CO₂ carbon dioxide	NSR New Source Review
CO₂e carbon dioxide equivalent	PM particulate matter
COMS Continuous Opacity Monitoring System	PM_{2.5} particulate matter less than 2.5 microns in aerodynamic diameter
CSR Code of State Regulations	PM₁₀ particulate matter less than 10 microns in aerodynamic diameter
dscf dry standard cubic feet	ppm parts per million
EQ Emission Inventory Questionnaire	PSD Prevention of Significant Deterioration
EP Emission Point	PTE potential to emit
EPA Environmental Protection Agency	RACT Reasonable Available Control Technology
EU Emission Unit	RAL Risk Assessment Level
fps feet per second	SCC Source Classification Code
ft feet	scfm standard cubic feet per minute
GACT Generally Available Control Technology	SDS Safety Data Sheet
GHG Greenhouse Gas	SIC Standard Industrial Classification
gpm gallons per minute	SIP State Implementation Plan
gr grains	SMAL Screening Model Action Levels
GWP Global Warming Potential	SO_x sulfur oxides
HAP Hazardous Air Pollutant	SO₂ sulfur dioxide
hr hour	tph tons per hour
hp horsepower	tpy tons per year
lb pound	VMT vehicle miles traveled
lbs/hr pounds per hour	VOC Volatile Organic Compound
MACT Maximum Achievable Control Technology	
µg/m³micrograms per cubic meter	

Mr. Russ Hurt
Director of Manufacturing
Redneck Manufacturing
1705 Gulf Street
Lamar, MO 64759

RE: New Source Review Permit - Project Number: 2014-10-059

Dear Mr. Hurt:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, Truman State Office Building, P.O. Box 1557, Jefferson City, MO 65102, www.oa.mo.gov/ahc.

If you have any questions regarding this permit, please contact Chia-Wei Young, Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, (573) 751-4817.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:cyl

Enclosures

c: Southwest Regional Office
PAMS File: 2014-10-059
Permit Number: