

## STATE OF MISSOURI



## 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: **022014-005**

Project Number: 2013-10-023  
Installation Number: 047-0196

Parent Company: Northland Coating Solutions

Parent Company Address: 15016 Nation Road, Kearney, MO 64060

Installation Name: Northland Coating Solutions

Installation Address: 15016 Nation Road, Kearney, MO 64060

Location Information: Clay County


Application for Authority to Construct was made for:

The installation of two burn-off ovens (EP01 and EP02), a powder coating station (EP03), a media blasting cabinet (EP05), and a blasting pod (EP06). 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 11 2014**

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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### 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."*

#### Northland Coating Solutions Clay County

1. Control Device Requirement – Coatings Booth and Filter
  - A. Northland Coating Solutions shall control emissions from the powder coating gun (EP03) using a three-sided booth with a roof and paint arrestor filters as specified in the permit application.
  - B. Northland Coating Solutions shall inspect the paint arrestor filters once a week for any signs of tearing and structural damage. If there is any visible sign of tearing or structural damage, then Northland Coating Solutions shall replace the paint arrestor filters. The results of the inspections shall be noted in the log required in Special Condition 1.F.
  - C. Northland Coating Solutions shall monitor daily the visible emissions inside the booth whenever the powder coating gun (EP03) is in operation to ensure that the visible particulates are being drawn through the filter. If there is any visible signs that the particulates not being drawn through the filters, then Northland Coating Solutions shall replace the paint arrestor filters. At the end of the operating day, Northland Coating Solutions shall note in the log required in Special Condition 1.F. whether the filter is operating as designed (i.e. visible observation that the particulate emissions are still being drawn through the filters).
  - D. The time period between filter replacements shall not exceed two (2) months, even if there are no visible signs of malfunction as described in Special Conditions 1.B. and 1.C.
  - E. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).

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**SPECIAL CONDITIONS:**

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

- F. Northland Coating Solutions shall maintain an operating and maintenance log for the filter media which shall include the following:
  - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and filter replacement schedule, etc.
  
- 2. Control Device – Filters
  - A. Northland Coating Solutions shall control particulate emissions from the media blasting cabinet (EP05) using filters as specified in the permit application.
  
  - B. The filter shall be operated and maintained in accordance with the manufacturer's specifications, a copy of which shall be kept on site.
  
  - C. The filter shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the Department of Natural Resources' personnel may easily observe them.
  
  - D. Replacement filters shall be kept on hand at all times. The filters shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
  
  - E. Northland Coating Solutions shall monitor and record the operating pressure drop across the filter at least once every 24 hours when the blasting cabinet is in operation. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  
  - F. Northland Coating Solutions shall maintain an operating and maintenance log for the filter media which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

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### SPECIAL CONDITIONS:

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

3. Operational Requirements – Burn-Off Ovens (EP01 and EP02)
  - A. Northland Coating Solutions shall only remove non-chlorinated, non-hazardous coatings from metal parts with the burn-off ovens.
  - B. Northland Coating Solutions shall only combust natural gas as fuel in the ovens.
  - C. Northland Coating Solutions shall use a direct flame afterburner to control emissions from the burn-off oven. The afterburner shall be operated at a minimum of 1,400 degrees Fahrenheit with more than a one-half (1/2) second residence time to assure a minimum combustion efficiency of 99.9%.
  - D. The burn-off ovens shall be equipped with an electronic controlled, with digital readout, which is able to monitor and display the temperature in the second combustion chamber to an accuracy of plus or minus two percent (2%).
4. PM<sub>10</sub> Emission Limitation
  - A. Northland Coating Solutions shall emit less than 15.0 tons of PM<sub>10</sub> in any consecutive 12-month period from the entire installation, which includes two burn-off ovens (EP01 and EP02), a powder coating station (EP03), a media blasting cabinet (EP05) and a blasting pod (EP06).
  - B. Attachment A or equivalent forms, such as electronic forms, shall be used to demonstrate compliance with Special Conditions 4.A. If equivalent forms are to be used, the forms shall contain the same information as Attachment A. The forms shall also use the same emission factors and calculation methods as Attachment A. If the facility decides to change the emission factors used for the calculations (i.e. due to new stack testing information, updates to AP-42, etc.), it shall submit the information to the Air Pollution Control Program for approval.
5. Record Keeping and Reporting Requirements
  - A. Northland Coating Solutions shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' personnel upon request. These records shall include MSDS for all materials used

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**SPECIAL CONDITIONS:**

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

- B. Northland Coating Solutions 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: 2013-10-023  
Installation ID Number: 047-0186  
Permit Number:

Northland Coating Solutions  
15016 Nation Road  
Kearney, MO 4060

Complete: October 9, 2013

Parent Company:  
Northland Coating Solutions  
15016 Nation Road  
Kearney, MO 64060

Clay County

REVIEW SUMMARY

- Northland Coating Solutions has applied for authority to install two burn-off ovens (EP01 and EP02), a powder coating station (EP03), a media blasting cabinet (EP05) and a blasting pod (EP06).
- HAP emissions are expected from natural-gas combustion but only in amounts less than their respective SMAL.
- None of the NSPS apply to this installation. 40 CFR 60, Subpart E, *Standards of Performance for Incinerators*, does not apply to the burn-off ovens because the ovens do not burn solid wastes as defined in this subpart. 40 CFR 60, Subpart CCCC, *Emission Guidelines and Compliance Times for Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999*, does not apply to the burn-off ovens because burn-off ovens are not considered incinerators under this subpart. 40 CFR 60, Subpart MM, *Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations*, does not apply to this installation because it is not an automobile or truck assembly plant.
- None of the NESHAPs apply to this installation.
- None of the MACT apply to this installation. 40 CFR Part 63, Subpart IIII, *National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks*, 40 CFR Part 63, Subpart MMMM, *National Emissions Standard for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products*, and 40 CFR Part 63, Subpart PPPP, *National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products*, of the MACT do not apply to the installation because it is not a major source of HAP. 40 CFR Part 63, Subpart HHHHHH, *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*, does not apply to this installation because powder coating spray is not a spray-

applied coating operation as defined in this subpart.

- A three-sided booth and filter is being used to control the particulate emissions from the powder coating operation (EP03). A filter is being used to control emissions from the media blasting cabinet (EP05).
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Conditioned potential emissions of PM are greater than the de minimis level but below the major source level.
- This installation is located in Clay 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 not performed for this review. PM does not have modeling standards.
- Emissions testing is not required for the equipment.
- No operating permit is required for this installation. Conditioned potential emissions of PM are greater than the de minimis level, but PM emissions do not trigger operating permit requirements.
- Approval of this permit is recommended with special conditions.

#### INSTALLATION/PROJECT DESCRIPTION

Northland Coating Solutions is a new installation. It proposes to install two burn-off ovens (EP01 and EP02), a powder coating station (EP03), a media blasting cabinet (EP05), and a blasting pod (EP06). The burn-off ovens are rated at 650,000 MMBtu/hr and 950,000 MMBtu/hr and combusts natural gas as fuel. The gun used at the powder coating station is an electrostatic gun and will be located in a booth controlled by paint filters. The powder gun has an MHDR of 20 lbs/hr. The media blasting cabinet is an enclosed cabinet with a filter to control particulate emissions. No control device is used to control particulate emissions from the blasting pod. The blasting gun used in the cabinet has an MHDR of 150 lbs/hr while the blasting gun used in the pod has an MHDR of 260 lbs/hr.

The facility will remove cured paint from metal parts and recoat them with powder coatings. The facility is considered a minor source for construction permits. No operating permit is required for this installation.



## EMISSIONS/CONTROLS EVALUATION

The following methods were used to calculate emissions from each emissions unit.

- The burn-off ovens (EP01 and EP02): There will be emissions from both natural gas combustion and the combustion of the removed coatings. However, the emissions from the coatings are insignificant compared to those from natural gas combustion. Therefore, only the emissions from natural gas combustion were calculated for the burn-off ovens. PM<sub>2.5</sub>, PM<sub>10</sub>, PM, SO<sub>x</sub>, NO<sub>x</sub>, CO, CO<sub>2e</sub> and GHG mass emissions were calculated using emission factors from EPA document AP-42, *Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources*, Chapter 1.4, *Natural Gas Combustion (7/98)*. 40 CFR 98 also contains emission factors that can be used to calculate CO<sub>2e</sub> and GHG mass emissions. However, emissions calculated using the emission factors in 40 CFR 98 were lower than those calculated using AP-42. The higher of the calculated emissions were used for this permit.
- The powder coating station (EP03): PM emissions from the powder coating spray were calculated through mass balances using 20 pounds of powder sprayed per hour, a transfer efficiency of 93%, a capture efficiency of 70%, and a filter control efficiency of 90%. The 20 lb/hr MHDR is based on the design of the spray gun. The 93% transfer efficiency is taken from AP-42. The capture efficiency of 70% is based on the design of the spray booth. The spray booth is enclosed on three sides and the 70% capture efficiency should give a conservative estimate of emissions. The filter control efficiency of 90% is taken from the EPA fact sheet, *Spray Booth Filters: The Key to Quality Jobs and Clean Emissions*, (5/08). The fact sheet states that spray booth exhaust filters are typically capable of removing between 90% to more than 99% of the particulates. 90% was used for a conservative estimate. PM<sub>2.5</sub> and PM<sub>10</sub> emissions were calculated by multiplying the PM emissions by 5% and 10%, respectively. This particle size distribution was estimated from industry data. Particle sizes of powder coatings generally have to be between 10-50 µm to produce an acceptable coat. Therefore, PM<sub>2.5</sub> and PM<sub>10</sub> emissions from overspray would be limited. A graph of particle size distribution for powdered epoxy coatings, taken from industry websites, shows that PM<sub>2.5</sub> and PM<sub>10</sub> would be less than 5% and 10% of total particles, respectively.
- The media blasting cabinet (EP05) and blasting pod (EP06): Particulate emissions from the blasting cabinet were calculated using emission factors from AP-42, Chapter 13.2.6, *Abrasive Blasting*, (10/97). The controlled emission factors from AP-42, Chapter 13.2.6 were used for the media blasting cabinet because the emissions are controlled using a filter. The cabinet is also completely enclosed and is expected to have 100% capture. No control device is used for the blasting pod. The uncontrolled emission factor from AP-42, Chapter 13.2.6, was used to calculate emissions from the pod.

The following table provides an emissions summary for this project. Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year). The facility accepted a limit of 15.0 tpy of PM<sub>10</sub> to avoid modeling requirements. The conditioned potential emissions of PM<sub>2.5</sub> and PM are based on the PM<sub>10</sub> limit. The conditioned potential emissions for other pollutants were not reduced because not all equipment emits these pollutants. The facility may be able to operate equipment that emit these pollutants at maximum

capacity without exceeding the PM<sub>10</sub> limit.

**Table 1: Emissions Summary (tons per year)**

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM	25.0	N/A	N/A	33.52	32.86
PM <sub>10</sub>	15.0	N/A	N/A	15.30	<15.0
PM <sub>2.5</sub>	10.0	N/A	N/A	1.67	1.64
SO <sub>x</sub>	40.0	N/A	N/A	0.004	N/A
NO <sub>x</sub>	40.0	N/A	N/A	0.69	N/A
VOC	40.0	N/A	N/A	0.04	N/A
CO	100.0	N/A	N/A	0.58	N/A
GHG (CO <sub>2</sub> e)	75,000 / 100,000	N/A	N/A	829.49	N/A
GHG (mass)	0.0 / 100.0 / 250.0	N/A	N/A	824.50	N/A
HAPs	10.0/25.0	N/A	N/A	0.001	N/A

N/A = Not Applicable

#### 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 PM are greater than the de minimis level but below the major source level. Potential emissions of all other pollutants are conditioned below their respective de minimis levels.

#### APPLICABLE REQUIREMENTS

Northland Coating Solutions 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 Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170

- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

#### SPECIFIC REQUIREMENTS

- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260
  - Equipment is exempt if it only uses pipeline grade natural gas as defined in 40 CFR 72.2.

#### 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.

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Chia-Wei Young  
New Source Review Unit

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Date

#### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form dated October 8, 2013, received October 9, 2013, designating Northland Coating Solutions as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- APTI Course 482 Student Manual, *Sources and Control of Volatile Organic Air Pollutants*, Third Edition.
- U.S. EPA fact sheet, *Spray Booth Filters: The Key to Quality Jobs and Clean Emissions*, (5/08).

## Attachment A – PM<sub>10</sub> Compliance Worksheet

Northland Coating Solutions  
 Clay County  
 Project Number: 2013-10-023  
 Installation ID: 047-0196  
 Permit Number: \_\_\_\_\_

This sheet covers the month of \_\_\_\_\_ in the year \_\_\_\_\_

For Burn-Off Ovens								
EP	A Description	B Monthly Usage (mmscf)	C Emission Factor (lb/mmscf)	D <sup>1</sup> Monthly Emissions (lb)			E <sup>2</sup> Monthly Emissions (tons)	
01	Small Burn-Off Oven		7.6					
02	Large Burn-Off Oven		7.6					
For Powder Coating Gun								
EP	A Description	B Monthly Coating Usage (lb)	C Transfer %	D Capture %	E Control %	F <sup>3</sup> Monthly Fugitive Emissions (tons)	G <sup>4</sup> Monthly Non- Fugitive Emissions (tons)	H <sup>5</sup> Monthly Total Emissions (tons)
03	Powder Coating		93%	70%	90%			
Media Blasting Equipment (EP05)								
EP	A Description	B Monthly Usage (lb)	C EF (lb/1,000 lb)	D <sup>6</sup> Monthly Emissions (lb)			E <sup>7</sup> Monthly Emissions (tons)	
05	Blasting Cabinet		0.33					
06	Blasting Pod		13					
				<sup>8</sup> Total Monthly Emissions (tons) =				
				<sup>9</sup> Total Monthly Emissions from the Previous 11 Months (tons) =				
				<sup>10</sup> Total Emissions from the current 12-Month Period (tons) =				

- Note 1: Monthly Emission (lb) for Burn-Off Ovens calculated using [Column D] = [Column C] x [Column B]  
 Note 2: Monthly Emission (tons) for Burn-Off Ovens calculated using [Column E] = [Column D] ÷ 2,000  
 Note 3: Monthly Fugitive Emission (tons) for Powder Coating Gun calculated using [Column F] = {[Column B] x (1-[Column C]) x (1-[Column D])} ÷ 2,000  
 Note 4: Monthly Non-Fugitive Emissions (tons) for Powder Coating Gun calculated using [Column G] = {[Column B] x (1-[Column C]) x [Column D] x (1-[Column E])} ÷ 2,000  
 Note 5: Monthly Total Emissions (tons) for Powder Coating Gun Calculated from [Column H] = [Column F] + [Column G]  
 Note 6: Monthly Emissions (lb) from the blasting equipment calculated from [Column D] = ([Column B] ÷ 1,000) x [Column C]  
 Note 7: Monthly Emissions (tons) from the blasting equipment calculated from [Column E] = [Column D] ÷ 2,000  
 Note 8: Total Monthly emissions (tons) calculated by summing the Total Monthly Emissions (tons) of each equipment.  
 Note 9: Total Monthly Emissions from the Previous 11 Months (ton) calculated by summing the Total Monthly Emissions (tons) in Attachment A of the previous 11 months.  
 Note 10: Total Emissions from the current 12-Month Period calculated by Summing the Total Monthly Emissions (tons) of the current month and the Total Monthly Emissions from the Previous 11 Months (tons). A total less than **15.0 tons** indicates compliance.

## APPENDIX A

### Abbreviations and Acronyms

<b>%</b> .....	percent	<b>m/s</b> .....	meters per second
<b>°F</b> .....	degrees Fahrenheit	<b>Mgal</b> .....	1,000 gallons
<b>acfm</b> .....	actual cubic feet per minute	<b>MW</b> .....	megawatt
<b>BACT</b> .....	Best Available Control Technology	<b>MHDR</b> .....	maximum hourly design rate
<b>BMPs</b> .....	Best Management Practices	<b>MMBtu</b> ....	Million British thermal units
<b>Btu</b> .....	British thermal unit	<b>MMCF</b> .....	million cubic feet
<b>CAM</b> .....	Compliance Assurance Monitoring	<b>MSDS</b> .....	Material Safety Data Sheet
<b>CAS</b> .....	Chemical Abstracts Service	<b>NAAQS</b> ...	National Ambient Air Quality Standards
<b>CEMS</b> .....	Continuous Emission Monitor System	<b>NESHAPs</b>	..... National Emissions Standards for Hazardous Air Pollutants
<b>CFR</b> .....	Code of Federal Regulations	<b>NO<sub>x</sub></b> .....	nitrogen oxides
<b>CO</b> .....	carbon monoxide	<b>NSPS</b> .....	New Source Performance Standards
<b>CO<sub>2</sub></b> .....	carbon dioxide	<b>NSR</b> .....	New Source Review
<b>CO<sub>2e</sub></b> .....	carbon dioxide equivalent	<b>PM</b> .....	particulate matter
<b>COMS</b> .....	Continuous Opacity Monitoring System	<b>PM<sub>2.5</sub></b> .....	particulate matter less than 2.5 microns in aerodynamic diameter
<b>CSR</b> .....	Code of State Regulations	<b>PM<sub>10</sub></b> .....	particulate matter less than 10 microns in aerodynamic diameter
<b>dscf</b> .....	dry standard cubic feet	<b>ppm</b> .....	parts per million
<b>EQ</b> .....	Emission Inventory Questionnaire	<b>PSD</b> .....	Prevention of Significant Deterioration
<b>EP</b> .....	Emission Point	<b>PTE</b> .....	potential to emit
<b>EPA</b> .....	Environmental Protection Agency	<b>RACT</b> .....	Reasonable Available Control Technology
<b>EU</b> .....	Emission Unit	<b>RAL</b> .....	Risk Assessment Level
<b>fps</b> .....	feet per second	<b>SCC</b> .....	Source Classification Code
<b>ft</b> .....	feet	<b>scfm</b> .....	standard cubic feet per minute
<b>GACT</b> .....	Generally Available Control Technology	<b>SIC</b> .....	Standard Industrial Classification
<b>GHG</b> .....	Greenhouse Gas	<b>SIP</b> .....	State Implementation Plan
<b>gpm</b> .....	gallons per minute	<b>SMAL</b> .....	Screening Model Action Levels
<b>gr</b> .....	grains	<b>SO<sub>x</sub></b> .....	sulfur oxides
<b>GWP</b> .....	Global Warming Potential	<b>SO<sub>2</sub></b> .....	sulfur dioxide
<b>HAP</b> .....	Hazardous Air Pollutant	<b>tph</b> .....	tons per hour
<b>hr</b> .....	hour	<b>tpy</b> .....	tons per year
<b>hp</b> .....	horsepower	<b>VMT</b> .....	vehicle miles traveled
<b>lb</b> .....	pound	<b>VOC</b> .....	Volatile Organic Compound
<b>lbs/hr</b> .....	pounds per hour		
<b>MACT</b> .....	Maximum Achievable Control Technology		
<b>µg/m<sup>3</sup></b> .....	micrograms per cubic meter		

Mr. Jon Melham  
Co-Owner  
Northland Coating Solutions  
15016 Nation Road  
Kearney MO 64060

RE: New Source Review Permit - Project Number: 2013-10-023

Dear Mr. Melham:

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 and your new source review 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 have any questions regarding this permit, please do not hesitate to contact Chia-Wei Young, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp  
New Source Review Unit Chief

SH:cyl

Enclosures

c: Kansas City Regional Office  
PAMS File: 2013-10-023

Permit Number: