

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: **032014-010** Project Number: 2013-12-033
 Facility Number: 095-2442
 Parent Company: US DOE National Nuclear Security Administration - National Security Campus KCP
 Parent Company Address: 14520 Botts Rd, Kansas City, MO 64147
 Installation Name: US DOE National Nuclear Security Administration - National Security Campus KCP
 Installation Address: 14520 Botts Rd, Kansas City, MO 64147
 Location Information: Jackson County, S27, T47N, R33W

Application for Authority to Construct was made for:
 Base, hydrographic, and clear surface coating operation (EP-26a liquid coating, EP-26b hydrographics) located in Building 4. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

MAR 27 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."

US DOE National Nuclear Security Administration - National Security Campus KCP (NNSA)
Jackson County, S27, T47N, R33W

1. **Superseding Condition**
The conditions of this permit supersede all special conditions found in permit 1227B issued by the Air Pollution Control Program.
2. **PM_{2.5} Emission Limitation**
 - A. NNSA shall emit less than 7.0 tons of PM_{2.5} in any consecutive 12-month period from all emission units at facility ID 095-2442.
 - B. NNSA shall develop and use forms to demonstrate compliance with Special Condition 2.A. The forms shall contain at a minimum the following information,
 - 1) Installation name
 - 2) Installation ID
 - 3) Permit number
 - 4) Current month
 - 5) Current 12-month date range
 - 6) Emission units
 - 7) Emission unit respective current monthly throughput
 - 8) Emission unit respective emission factors, and source
 - 9) Total PM_{2.5} emissions for the reporting date range
 - 10) 12-month rolling total PM_{2.5} emissions
 - 11) Indication of compliance status with Special Condition 2.A.
3. **NO_x Emission Limitation**
 - A. NNSA shall emit less than 1.0 tons of NO_x in any consecutive 12-month period from all emission units at facility ID 095-2442.

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SPECIAL CONDITIONS:

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

- B. NNSA shall develop and use forms to demonstrate compliance with Special Condition 3.A. The forms shall contain at a minimum the following information,
 - 1) Installation name
 - 2) Installation ID
 - 3) Permit number
 - 4) Current month
 - 5) Current 12-month date range
 - 6) Emission units
 - 7) Emission unit respective current monthly throughput
 - 8) Emission unit respective emission factors
 - 9) Total NO_x emissions for the reporting date range
 - 10) 12-month rolling total NO_x emissions
 - 11) Indication of compliance status with Special Condition 3.A.

- 4. VOC Emission Limitation
 - A. NNSA shall emit less than 39.0 tons of VOC in any consecutive 12-month period from all emission units at facility ID 095-2442.

 - B. NNSA shall develop and use forms to demonstrate compliance with Special Condition 4.A. The forms shall contain at a minimum the following information,
 - 1) Installation name
 - 2) Installation ID
 - 3) Permit number
 - 4) Current month
 - 5) Current 12-month date range
 - 6) Emission units
 - 7) Emission unit respective current monthly throughput
 - 8) Emission unit respective emission factors, and source. If the source is a MSDS, then use the maximum of the weight % range.
 - 9) Total VOC emissions for the reporting date range
 - 10) 12-month rolling VOC emissions
 - 11) Indication of compliance status with Special Condition 4.A.

- 5. HAP Emission Limitations
 - A. NNSA shall not exceed the respective SMAL for each individual HAP emissions in any consecutive 12-month period from the combined installation, facility IDs 095-2450 and 095-2442.

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SPECIAL CONDITIONS:

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

- B. NNSA shall emit less than 25.0 tons per year of combined HAPs in any consecutive 12-month period from the combined installation, facility IDs 095-2450 and ID 095-2442.

- C. The combined installation, facility IDs 095-2450 and ID 095-2442 include all emission units in at NNSA and Table 1 of permit 1228A.

- D. NNSA shall develop and use forms to demonstrate compliance with Special Conditions 5.A and 5.B. The forms shall contain at a minimum the following information,
 - 1) Installation name
 - 2) Installation ID
 - 3) Permit number
 - 4) Current month
 - 5) Current 12-month date range
 - 6) Emission units
 - 7) Emission unit respective current monthly throughput
 - 8) Emission unit respective emission factors and source. If the source is a MSDS, then use the maximum of the weight % range.
 - 9) Total HAP emissions for each individual HAP for the reporting date range, including those HAP emissions from facility ID 095-2450. Individual HAP potential to emit (Table 2) for facility ID 095-2450 may be used when actual emissions are not available.

Table 2: Facility ID 095-2450 HAP PTE (tons per month)

Acetaldehyde	1.11E-04
Acrolein	5.36E-05
Arsenic compounds	1.47E-04
Benzene	1.95E-04
Beryllium compounds	1.10E-04
1,3-Butadiene	1.48E-05
Cadmium compounds	1.14E-04
Carbon tetrachloride	3.11E-07
Chlorobenzene	2.26E-07
Chloroform	2.40E-07
Chromium compounds	1.16E-04
Cobalt compounds	3.68E-06
Dioxins/Furans	8.34E-10
1,2-Dibromoethane	3.74E-07
1,4-Dichlorobenzene(p)	5.25E-05
1,1-Dichloroethane	1.98E-07

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SPECIAL CONDITIONS:

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

1,2-Dichloroethane	1.98E-07
Dichloromethane	7.23E-07
1,2-Dichloropropane	2.28E-07
1,3-Dichloropropane	2.23E-07
Ethyl benzene	1.75E-05
Formaldehyde	1.72E-02
Hexane	7.88E-02
Lead compounds	3.29E-04
Manganese compounds	2.21E-04
Mercury compounds	1.11E-04
Methanol	5.37E-05
Nickel compounds	1.19E-04
¹ POM combined	1.24E-03
POM Anthracene	3.39E-07
POM Benz(a)anthracene	1.09E-06
POM Benzo(a)pyrene	5.25E-08
POM Benzo(b)fluoranthene	4.06E-07
POM Benzo(k)fluoranthene	3.98E-07
POM Chrysene	6.48E-07
POM Dibenz(a,h)anthracene	5.20E-07
POM Indeno(1,2,3CD)pyrene	5.84E-07
POM 2-Methylnaphthalene	1.05E-06
POM Naphthalene	3.15E-04
Selenium compounds	5.48E-04
Styrene	2.09E-07
1,1,2,2-Tetrachloroethane	4.44E-07
Toluene	1.73E-03
1,1,1-Trichloroethane	6.35E-05
1,1,2-Trichloroethane	2.69E-07
Vinyl chloride	1.26E-07
Xylenes (isomers and mixture)	2.65E-05
o-Xylenes	2.93E-05

¹ POM combined for comparison to major source threshold, not combined for comparison to individual POM SMAL. This permit's POM combined exceeds the sum of the individual POM due to some AP-42 PAH and POM emission factors being non-specified.

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SPECIAL CONDITIONS:

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

- 10) 12-month rolling total individual HAP emissions, including those HAP emissions from facility ID 095-2450
 - 11) Individual HAP SMAL obtained from the most recent Appendix A or *Air Pollution Control Program Table of Hazardous Air Pollutants, Screening Model Action Levels, and Risk Assessment Levels* available at <http://www.dnr.mo.gov/env/apcp/permits/constpmtguide.htm>
 - 12) Total HAP emissions for the reporting date range, including those HAP emissions from facility ID 095-2450
 - 13) 12-month rolling total HAP emissions, including those HAP emissions from facility ID 095-2450
 - 14) Indication of compliance status with Special Conditions 5.A and 5.B.
6. Capture Device Requirement - Booth
NNSA shall capture emissions from the base, hydrographic, and clear coat process EP-26a and EP-26b using a booth. All doors, curtains, and windows shall be closed.
7. Control Device Requirement - Panel Filters
- A. NNSA shall control emissions from the base, hydrographic, and clear coat process (EP-26a and EP-26b) using panel filters as specified in the permit application.
 - B. The filters shall be operated and maintained in accordance with the manufacturer's specifications. The filters 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' employees may easily observe them.
 - C. 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).
 - D. NNSA shall monitor and record the operating pressure drop across the filters at least once every 24 hours of operation. Periods of non-operation in excess of 24 hours shall be indicated. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.

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SPECIAL CONDITIONS:

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

- E. NNSA shall maintain a copy of the filter manufacturer's performance warranty on site.
 - F. NNSA shall maintain an operating and maintenance log for the filters 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.
8. Control Device Requirement - Carbon Filters
- A. NNSA shall control emissions from the base, hydrographic, and clear coat process (EP-26a and EP-26b) using carbon filters as specified in the permit application.
 - B. NNSA shall regenerate/replace the filters before breakthrough.
 - C. The filters shall be operated and maintained in accordance with the manufacturer's specifications. NNSA shall develop and implement a written filter regeneration/replacement plan, which shall be kept on site. The plan shall include a method to evaluate filter performance in order to determine when the filters shall be regenerated/replaced.
 - 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. NNSA shall maintain a copy of the filter manufacturer's performance warranty on site.
 - F. NNSA shall maintain an operating and maintenance log for the filters 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:

9. **Operational Requirement - Solvent/Coating Cloths**
NNSA shall keep the solvents, coatings, and cleaning solutions in sealed containers whenever the materials are not in use. NNSA shall provide and maintain suitable, easily read, permanent markings on all solvent, coating, and cleaning solution containers used with this equipment.
10. **Alternative Coating at EP-26a and EP-26b**
 - A. Before using an alternative coating in the spray gun or hydrographic process that differs from a material listed in the application for authority to construct, NNSA shall calculate the potential emissions of all individual HAPs and total VOC in the alternative coating.
 - B. NNSA shall seek approval from the Air Pollution Control Program New Source Review Unit before use of the alternative coating if the potential individual HAP emissions for the alternative coating are greater than the SMAL for any chemical listed in Appendix B, or <http://www.dnr.mo.gov/env/apcp/permits/constpmtguide.htm>, whichever is most recent, or if the total VOC emissions exceed 12.05 tpy.
 - C. Attachment A or equivalent forms, such as electronic forms, approved by the Air Pollution Control Program shall be used to show compliance with Special Conditions 10.A. and 10.B.
11. **Record Keeping and Reporting Requirements**
 - A. NNSA 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 MSDS for all materials used.
 - B. NNSA 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 shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2013-12-033

Facility ID Number: 095-2442

Permit Number:

Application Complete: December 24, 2013

US DOE National Nuclear Security Administration - National Security Campus KCP
14520 Botts Rd
Kansas City, MO 64147

Parent Company:

US DOE National Nuclear Security Administration - National Security Campus KCP
14520 Botts Rd
Kansas City, MO 64147

Jackson County, S27, T47N, R33W

REVIEW SUMMARY

- US DOE National Nuclear Security Administration - National Security Campus KCP has applied for authority to install a base, hydrographic, and clear surface coating operation (EP-26a and EP-26b) located in Building 4.
- HAP emissions are expected from the proposed surface coating.
- None of the NSPS under 40 CFR 60 apply to the surface coating operation.
- 40 CFR 63 Subpart HHHHHH, *National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources*, (MACT 6H) does not apply to the surface coating operation according to §63.11169(d). However, spray application of a target HAP occurs and the exhaust filter manufacturer claims the filter is MACT 6H compliant.
- Panel filters are being used to control the PM, PM₁₀, PM_{2.5}, and particulate matter HAP emissions. Carbon filters are being used to control the VOC and volatile HAP emissions.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are conditioned to de minimis levels and respective SMAL.
- This installation is located in Jackson County, a maintenance area for ozone and an attainment area for all other 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 since potential emissions of the installation are conditioned to de minimis levels and respective SMAL.
- Emissions testing is not required for the equipment.
- Submittal of an application to amend the basic operating permit is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

The installation consists of production emission units owned by the Department of Energy (DOE) National Nuclear Security Administration (NNSA), operated by Honeywell and support emission units constructed by the General Service Administration (GSA), transferred to CenterPoint Properties Trust. The installation relocated to Botts Road under permits 1227 and 1228. The production and support activities have separate facility IDs, 095-2442 and 095-2450, respectively. NNSA manufactures nonnuclear components of nuclear weapons. CenterPoint consists mainly of boilers and emergency generators. The facilities are one installation for permitting applicability. The combined installation is a NSR de minimis source and is a basic source for operating permit applicability. The following NSR permits have been issued to the combined installation.

Table 1: Permit History

Facility ID	Permit Number	Description
095-2442	1227	NNSA Botts Road construction permit
	1227A	NNSA amendment to address as-built versus permitted emission units
	1227B	NNSA emission limits
095-2450	1228	CenterPoint Botts Road construction permit
	1228A	CenterPoint amendment to address as-built versus permitted emission units, emission limits

PROJECT DESCRIPTION

NNSA proposes to install a base coat, hydrographic dip coat, and clear coat process. Spray applied coatings and dip coatings will be applied in separate mobile booths. Each booth is a Shop Pro Equipment make, Mobile Work Station model, equipped with exhaust panel filters and exhaust carbon filters. Air intake and exhaust is within the booth.

Spray applied surface coatings include those evaluated under previous permits for other emission units. Spray coating MHDR is based upon 32 fluid ounces of coating per paint cup being sprayed in 1 minute, with setup, drying and cleaning encompassing almost an entire hour. The spray coating MHDR is 0.25 gal/hr.

The hydrographic process consists of floating a polyvinyl alcohol and glycerol graphic in water, activating the graphic using a spray applied solvent, then dipping the substrate into the water to coat the substrate with the graphic. Solvent MHDR of 6 fluid ounces per hour was provided by the applicant based upon coating 3 parts per hour with each part requiring 2 ounces of solvent.

EMISSIONS/CONTROLS EVALUATION

Spray applied solids transfer efficiency of 65% was obtained from section 5-9 of the EPA document, *Sources and Control of Volatile Organic Air Pollutants, Student Manual, APTI 482*, 3rd edition, November 2002. Remaining solids were conservatively assumed PM_{2.5}. Booth capture efficiency of 95% was assumed using engineering judgment. The booth is comprised of 4-sided and roofed curtain enclosures, but without demonstration of negative pressure at all joints. Intake air is drawn within the enclosure, and exhaust air discharges into the enclosure. In effect, the booth operates as push-pull hood. The manufacturer has documentation showing minimum air velocity of 125 feet per minute at 5 feet from the intake filters. The booth dimensions are 10 feet wide x 8 feet tall x 8 feet deep. The air handling equipment is located inside the booth, with approximately 5 feet of booth depth available for working. Surface coating will occur at locations meeting or exceeding the reported minimum air velocity. 100% capture was not used since the booth isn't required to meet EPA Method 204 criteria for permanent or temporary total enclosure. The panel filters were assumed 98% PM control efficiency as the manufacturer claims compliance with MACT 6H. The carbon filters were assigned 95% VOC and volatile HAP control efficiency according to the EPA document, *Carbon Adsorption for Control of VOC Emissions: Theory and Full Scale System Performance*, June 1988.

All spray applied particulate matter were considered subject to the spray gun's transfer efficiency of 65% and booths' PM capture/control efficiency of 95% / 98%, for an overall removal efficiency of 97.59%. All available VOC were considered subject to the booths' VOC capture/control efficiency of 95% / 95% for an overall removal efficiency of 90.25%. These values are to be used in calculating actual emissions.

The following table provides an emissions summary for this project. Existing potential emissions were cited from amendment 1227B. Actual emissions were obtained from the previous location's (ID 095-0005) 2012 emissions inventory questionnaire (EIQ), but do not include the updated emission units. The NNSA conditioned potential emissions represent voluntary limits for the new emission units evaluated in this permit plus those emission units in a 50 page document submitted under amendment 1227B on September 10, 2013, where the first page is titled, *NNSA HAP Emission Sources Excluding Combustion Sources*. Unconditioned potential emissions of this project were calculated only to the extent that permit need was determined. Therefore, potential emissions of the project are higher than shown. However, the combined installation potential emissions of each pollutant are limited to the respective de minimis level or SMAL. The combined installation conditioned potential emissions represent voluntary limits in this permit and amendment 1228A. These limits are divided between NNSA and CenterPoint, hence the 7, 1, and 39 tpy NNSA limits.

Table 2: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	NNSA Existing Potential Emissions	NNSA Actual Emissions (2012 EIQ)	Unconditioned Potential Emissions of the Project	NNSA Conditioned Potential Emissions	Combined Installation Conditioned Potential
PM	25.0	N/A	N/D	N/D	N/A	12.07
PM ₁₀	15.0	N/A	1.50	N/D	N/A	11.50
PM _{2.5}	10.0	< 7.0	0.56	N/D	< 7.0	< 10.0
SO _x	40.0	N/A	0.14	N/A	N/A	0.76
NO _x	40.0	< 1.0	13.41	N/A	< 1.0	< 40.0
VOC	40.0	< 39.0	8.88	0.15	< 39.0	< 40.0
CO	100.0	N/A	0.80	N/A	N/A	25.78
GHG (CO ₂ e)	75,000/100,000	N/A	N/A	N/A	N/A	46,886.22
GHG (mass)	0.0/100.0/250.0	N/A	N/A	N/A	N/A	45,303.96
Combined HAPs	10.0/25.0	¹	1.65	0.29	¹	< 25.0
Individual HAP	10.0	¹	N/D	N/D	¹	< SMAL
Chromium 6 Metal	² 0.002	¹	N/D	0.004	¹	< SMAL

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

¹ GSA and NNSA shall share the installation-wide individual HAP SMAL limit and combined HAP 25.0 tpy limit

² SMAL

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are conditioned to de minimis levels.

APPLICABLE REQUIREMENTS

US DOE National Nuclear Security Administration - National Security Campus KCP 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

The installation is subject to several NSPS, NESHAP, and MACT regulations including but not limited to the following subparts. It is the installation's responsibility to demonstrate compliance with all applicable regulations.

- 40 CFR 60 Subpart VVV, *Standards of Performance for Polymeric Coating of Supporting Substrates Facilities*
- 40 CFR 61 Subpart H, *National Emission Standards for Emissions of Radionuclides Other Than Radon from Department of Energy Facilities*
- 40 CFR 63 Subpart T, *National Emission Standards for Halogenated Solvent Cleaning*
- 40 CFR 63 Subpart OOOOOO, *National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources*
- 40 CFR 63 Subpart WWWWWW, *National Emission Standards for Hazardous Air Pollutants: Area Source Standards for Plating and Polishing Operations*

The installation may be subject to regulations under 10 CSR Division 10, including the following. However, due to the ever-changing batch style operation of several emission units, applicability was not determined at the time of this permit's issuance. It is the installation's responsibility to demonstrate compliance with all applicable regulations. Applicability and compliance can be verified during inspections.

- 10 CSR 10-2.205 *Control of Emissions From Aerospace Manufacture and Rework Facilities* may apply. The installation claims current usage of primers, topcoats, specialty coatings, and chemical milling maskants is less than the 50/200 gallon threshold in 10 CSR 10-2.205(3)(J).
- 10 CSR 10-2.210 *Control of Emissions from Solvent Metal Cleaning*
- 10 CSR 10-2.215 *Control of Emissions from Solvent Cleanup Operations* does not apply if the cleaning solvent VOC emissions are less than 500 pounds per day.
- 10 CSR 10-2.230 *Control of Emissions From Industrial Surface Coating Operations*

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

David Little
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 December 19, 2013, received December 24, 2013, designating US DOE National Nuclear Security Administration - National Security Campus KCP as the owner and operator of the installation.

Attachment A – Alternative Coating EP-26a and EP-26b Compliance Worksheet

US DOE National Nuclear Security Administration - National Security Campus KCP
 Jackson County, S27, T47N, R33W
 Project Number: 2013-12-033
 Facility ID Number: 095-2442
 Permit Number: _____

Coating or material name _____ Date _____ Density (lb/gal) _____ Copy this sheet as needed.

A	B	C	D	E	F	G	H	I	J
Process and Emission Unit	Individual HAP Name and CAS No.	HAP is also Particulate Matter (yes / no)	Individual HAP Content (max weight %)	Maximum Hourly Application Rate (lbs coating per hour)	Overall PM Transfer and Control Efficiency (%)	Individual HAP PTE (tpy)	Individual HAP SMAL (tpy)	Coating VOC (weight %)	Coating VOC PTE (tpy)
<i>(Example) EP-26a basecoat</i>	<i>Cobalt 2-Ethylhexanoate 136-52-7</i>	<i>yes</i>	<i>0.5%</i>	<i>1.419</i>	<i>97.59%</i>	<i>7.49 E -04</i>	<i>0.1</i>	<i>26%</i>	<i>0.16</i>
<i>(Example) EP-26a clearcoat</i>	<i>Benzene 71-43-2</i>	<i>no</i>	<i>2.0%</i>	<i>0.347</i>	<i>N/A</i>	<i>2.96 E -03</i>	<i>2.0</i>	<i>89%</i>	<i>0.13</i>

- A. Record the process description and emission unit.
- B. Record the individual HAPs from this single coating/material MSDS.
- C. Compare the HAP to Appendix B for verification as particulate matter.
- D. Record the maximum weight percent of each HAP from the MSDS.
- E. Calculate the coating's maximum hourly application rate (lb/hr) by multiplying the coating density (lb/gal) by the respective basecoat MHDR of 0.25 gal/hr, or respective dipcoat MHDR of 0.047 gal/hr. Include mix ratio if applicable. Seek approval from the Air Pollution Control Program New Source Review Unit if the new MHDR will exceed 0.25 or 0.047 gal/hr, respectively.
- F. The overall PM transfer and control efficiency includes the spray gun transfer efficiency (65%), booth capture efficiency (95%), and exhaust filter PM control efficiency (98%): $65\% + (1 - 65\%) \times 95 \times 98\% = 97.59\%$. The transfer efficiency is 100% for dip coating.
- G. Calculate the particulate matter HAP potential to emit: $G = D \times E \times (1 - F) \times 8,760 / 2,000$. Otherwise calculate the volatile HAP potential to emit: $G = D \times E \times (1 - 90.25\%) \times 8,760 / 2,000$.
- H. Record the individual HAP SMAL from Appendix B. If the individual HAP potential to emit exceeds the respective SMAL seek approval from the Air Pollution Control Program New Source Review Unit before using this coating.
- I. Record or calculate the coating's VOC weight % from the MSDS.
- J. Calculate the VOC potential to emit: $J = E \times I \times (1 - 90.25\%) \times 8,760 / 2,000$. If the VOC potential to emit exceeds 12.05 tpy seek approval from the Air Pollution Control Program New Source Review Unit before using this coating.

Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels (May 3, 2012 Revision 10)

Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM
ACETALDEHYDE	75-07-0	9		Y	N	CARBARYL	63-25-2	10	V	Y	Y	DICHLOROPROPANE, [1,2-]	78-87-5	1		Y	N
ACETAMIDE	60-35-5	1		Y	N	CARBON DISULFIDE	75-15-0	1		Y	N	DICHLOROPROPENE, [1,3-]	542-75-6	1		Y	N
ACETONITRILE	75-05-8	4		Y	N	CARBON TETRACHLORIDE	56-23-5	1		Y	N	DICHLORVOS	62-73-7	0.2		Y	N
ACETOPHENONE	98-86-2	1		Y	N	CARBONYL SULFIDE	463-58-1	5		Y	N	DIETHANOLAMINE	111-42-2	5		Y	N
ACETYLAMINOFLUORINE, [2-]	53-96-3	0.005	V	Y	Y	CATECHOL	120-80-9	5		Y	N	DIETHYL SULFATE	64-67-5	1		Y	N
ACROLEIN	107-02-8	0.04		Y	N	CHLORAMBEN	133-90-4	1		Y	Y	DIETHYLENE GLYCOL MONOBUTYL ETHER	112-34-5	5	P	Y	N
ACRYLAMIDE	79-06-1	0.02		Y	N	CHLORDANE	57-74-9	0.01		Y	Y	DIMETHOXYBENZIDINE, [3,3-]	119-90-4	0.1	V	Y	Y
ACRYLIC ACID	79-10-7	0.6		Y	N	CHLORINE	7782-50-5	0.1	N	N	N	DIMETHYL BENZIDINE, [3,3-]	119-93-7	0.008	V	Y	Y
ACRYLONITRILE	107-13-1	0.3		Y	N	CHLOROACETIC ACID	79-11-8	0.1	Y	N	Y	DIMETHYL CARBAMOYL CHLORIDE	79-44-7	0.02		Y	N
ALLYL CHLORIDE	107-05-1	1		Y	N	CHLOROACETOPHENONE, [2-]	532-27-4	0.06		Y	N	DIMETHYL FORMAMIDE	68-12-2	1		Y	N
AMINOBIHENYL, [4-]	92-67-1	1	V	Y	N	CHLOROBENZENE	108-90-7	10		Y	N	DIMETHYL HYDRAZINE, [1,1-]	57-14-7	0.008		Y	N
ANILINE	62-53-3	1		Y	N	CHLOROBENZILATE	510-15-6	0.4	V	Y	Y	DIMETHYL PHTHALATE	131-11-3	10		Y	N
ANISIDINE, [ORTHO-]	90-04-0	1		Y	N	CHLOROFORM	67-66-3	0.9		Y	N	DIMETHYL SULFATE	77-78-1	0.1		Y	N
ANTHRACENE	120-12-7	0.01	V	Y	N	CHLOROMETHYL METHYL ETHER	107-30-2	0.1		Y	N	DIMETHYLAMINOAZOBENZENE, [4-]	60-11-7	1		Y	N
ANTIMONY COMPOUNDS		5	H	N	Y	CHLOROPRENE	126-99-8	1		Y	N	DIMETHYLANILINE, [N-N-]	121-69-7	1		Y	N
ANTIMONY PENTAFLUORIDE	7783-70-2	0.1	H	N	Y	CHROMIUM (VI) COMPOUNDS		0.002	L	N	Y	DINITRO-O-CRESOL, [4,6-] (Note 6)	534-52-1	0.1	E	Y	Y
ANTIMONY POTASSIUM TARTRATE	28300-74-5	1	H	N	Y	CHROMIUM COMPOUNDS		5	L	N	Y	DINITROPHENOL, [2,4-]	51-28-5	1		Y	N
ANTIMONY TRIOXIDE	1309-64-4	1	H	N	Y	CHRYSENE	218-01-9	0.01	V	Y	N	DINITROTOLUENE, [2,4-]	121-14-2	0.02		Y	N
ANTIMONY TRISULFIDE	1345-04-6	0.1	H	N	Y	COBALT COMPOUNDS		0.1	M	N	Y	DIOXANE, [1,4-]	123-91-1	6		Y	N
ARSENIC COMPOUNDS		0.005	I	N	Y	COKE OVEN EMISSIONS	8007-45-2	0.03	N	Y	N	DIPHENYLHYDRAZINE, [1,2-]	122-66-7	0.09	V	Y	Y
ASBESTOS	1332-21-4	0	A	N	Y	CRESOL, [META-]	108-39-4	1	B	Y	N	DIPHENYLMETHANE DIISOCYANATE, [4,4-]	101-68-8	0.1	V	Y	N
BENZ(A)ANTHRACENE	56-55-3	0.01	V	Y	N	CRESOL, [ORTHO-]	95-48-7	1	B	Y	N	EPICHLOROHYDRIN	106-89-8	2		Y	N
BENZENE	71-43-2	2		Y	N	CRESOL, [PARA-]	106-44-5	1	B	Y	N	ETHOXYETHANOL, [2-]	110-80-5	10	P	Y	N
BENZIDINE	92-87-5	0.0003	V	Y	N	CRESOLS (MIXED ISOMERS)	1319-77-3	1	B	Y	N	ETHOXYETHYL ACETATE, [2-]	111-15-9	5	P	Y	N
BENZO(A)PYRENE	50-32-8	0.01	V	Y	N	CUMENE	98-82-8	10		Y	N	ETHYL ACRYLATE	140-88-5	1		Y	N
BENZO(B)FLUORANTHENE	205-99-2	0.01	V	Y	N	CYANIDE COMPOUNDS		0.1	O	Y	N	ETHYL BENZENE	100-41-4	10		Y	N
BENZO(K)FLUORANTHENE	207-08-9	0.01	V	Y	N	DDE	72-55-9	0.01	V	Y	Y	ETHYL CHLORIDE	75-00-3	10		Y	N
BENZOTRICHLORIDE	98-07-7	0.006		Y	N	DI(2-ETHYLHEXYL) PHTHALATE, (DEHP)	117-81-7	5		Y	N	ETHYLENE GLYCOL	107-21-1	10		Y	N
BENZYL CHLORIDE	100-44-7	0.1		Y	N	DIAMNTOLUENE, [2,4-]	95-80-7	0.02		Y	N	ETHYLENE GLYCOL MONOBUTYL ETHER (Delisted)	111-76-2				
BERYLLIUM COMPOUNDS		0.008	J	N	Y	DIAZOMETHANE	334-88-3	1		Y	N	ETHYLENE GLYCOL MONOHEXYL ETHER	112-25-4	5	P	Y	N
BERYLLIUM SALTS		2E-05	J	N	Y	DIBENZ(A,H)ANTHRACENE	53-70-3	0.01	V	Y	N	ETHYLENE IMINE [AZIRIDINE]	151-56-4	0.003		Y	N
BIPHENYL, [1,1-]	92-52-4	10	V	Y	N	DIOXINS/FURANS		6E-07	D,V	Y	N	ETHYLENE OXIDE	75-21-8	0.1		Y	N
BIS(CHLOROETHYL)ETHER	111-44-4	0.06		Y	N	DIBENZOFURAN	132-64-9	5	V	Y	N	ETHYLENE THIOUREA	96-45-7	0.6		Y	Y
BIS(CHLOROMETHYL)ETHER	542-88-1	0.0003		Y	N	DIBROMO-3-CHLOROPROPANE, [1,2-]	96-12-8	0.01		Y	N	FORMALDEHYDE	50-00-0	2		Y	N
BROMOFORM	75-25-2	10		Y	N	DIBROMOETHANE, [1,2-]	106-93-4	0.1		Y	N	GLYCOL ETHER (ETHYLENE GLYCOL ETHERS)		5	P	Y	N
BROMOMETHANE	74-83-9	10		Y	N	DIBUTYL PHTHALATE	84-74-2	10		Y	Y	GLYCOL ETHER (DIETHYLENE GLYCOL ETHERS)		5	P	Y	N
BUTADIENE, [1,3-]	106-99-0	0.07		Y	N	DICHLOROBENZENE, [1,4-]	106-46-7	3		Y	N	HEPTACHLOR	76-44-8	0.02		Y	N
BUTOXYETHANOL ACETATE, [2-]	112-07-2	5	P	Y	N	DICHLOROBENZIDENE, [3,3-]	91-94-1	0.2	V	Y	Y	HEXACHLOROBENZENE	118-74-1	0.01		Y	N
BUTYLENE OXIDE, [1,2-]	106-88-7	1		Y	N	DICHLOROETHANE, [1,1-]	75-34-3	1		Y	N	HEXACHLOROBUTADIENE	87-68-3	0.9		Y	N
CADMIUM COMPOUNDS		0.01	K	N	Y	DICHLOROETHANE, [1,2-]	107-06-2	0.8		Y	N	HEXACHLOROCYCLOHEXANE, [ALPHA-]	319-84-6	0.01	F	Y	N
CALCIUM CYANAMIDE	156-62-7	10		Y	Y	DICHLOROETHYLENE, [1,1-]	75-35-4	0.4		Y	N	HEXACHLOROCYCLOHEXANE, [BETA-]	319-85-7	0.01	F	Y	N
CAPROLACTAM (Delisted)	105-60-2					DICHLOROMETHANE	75-09-2	10	N	N	N	HEXACHLOROCYCLOHEXANE, [DELTA-]	319-86-8	0.01	F	Y	N
CAPTAN	133-06-2	10		Y	Y	DICHLOROPHENOXY ACETIC ACID, [2,4-]	94-75-7	10	C	Y	Y	HEXACHLOROCYCLOHEXANE, [TECHNICAL]	608-73-1	0.01	F	Y	N

Appendix B: Table of Hazardous Air Pollutants and Screening Model Action Levels (May 3, 2012 Revision 10)

Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM	Chemical	CAS #	SMAL (tons/yr)	Group ID	VOC	PM
HEXACHLOROCYCLOPENTADIENE	77-47-4	0.1		Y	N	NITROSODIMETHYLAMINE, [N-]	62-75-9	0.001		Y	N	TRIMETHYLPENTANE, [2,2,4-]	540-84-1	5		Y	N
HEXACHLOROETHANE	67-72-1	5		Y	N	NITROSOMORPHOLINE, [N-]	59-89-2	1		Y	N	URETHANE [ETHYL CARBAMATE]	51-79-6	0.8		Y	N
HEXAMETHYLENE,-1,6-DIISOCYANATE	822-06-0	0.02		Y	N	NITROSO-N-METHYLUREA, [N-]	684-93-5	0.0002		Y	N	VINYL ACETATE	108-05-4	1		Y	N
HEXAMETHYLPHOSPHORAMIDE	680-31-9	0.01		Y	N	OCTACHLORONAPHTHALENE	2234-13-1	0.01	V	Y	N	VINYL BROMIDE	593-60-2	0.6		Y	N
HEXANE, [N-]	110-54-3	10		Y	N	PARATHION	56-38-2	0.1		Y	Y	VINYL CHLORIDE	75-01-4	0.2		Y	N
HYDRAZINE	302-01-2	0.004		N	N	PCB [POLYCHLORINATED BIPHENYLS]	1336-36-3	0.009	X	Y	Y	XYLENE, [META-]	108-38-3	10	G	Y	N
HYDROGEN CHLORIDE	7647-01-0	10		N	N	PENTACHLORONITROBENZENE	82-68-8	0.3		Y	N	XYLENE, [ORTHO-]	95-47-6	10	G	Y	N
HYDROGEN FLUORIDE	7664-39-3	0.1		N	N	PENTACHLOROPHENOL	87-86-5	0.7		Y	N	XYLENE, [PARA-]	106-42-3	10	G	Y	N
HYDROQUINONE	123-31-9	1		Y	N	PHENOL	108-95-2	0.1		Y	N	XYLENES (MIXED ISOMERS)	1330-20-7	10	G	Y	N
INDENO(1,2,3CD)PYRENE	193-39-5	0.01	V	Y	N	PHENYLENEDIAMINE, [PARA-]	106-50-3	10		Y	N						
ISOPHORONE	78-59-1	10		Y	N	PHOSGENE	75-44-5	0.1		Y	N						
LEAD COMPOUNDS		0.01	Q	N	Y	PHOSPHINE	7803-51-2	5		N	N						
LINDANE [GAMMA-HEXACHLOROCYCLOHEXANE]	58-89-9	0.01	F	Y	N	PHOSPHOROUS (YELLOW OR WHITE)	7723-14-0	0.1		N	N	Legend					
MALEIC ANHYDRIDE	108-31-6	1		Y	N	PTHALIC ANHYDRIDE	85-44-9	5		Y	N	Group ID	Aggregate Group Name				
MANGANESE COMPOUNDS		0.8	R	N	Y	POLYCYCLIC ORGANIC MATTER		0.01	V	Y	N	A	Asbestos				
MERCURY COMPOUNDS		0.01	S	N	N	PROPANE SULFONE, [1,3-]	1120-71-4	0.03		Y	Y	B	Cresols/Cresylic Acid (isomers and mixtures)				
METHANOL	67-56-1	10		Y	N	PROPIOLACTONE, [BETA-]	57-57-8	0.1		Y	N	C	2,4 - D, Salts and Esters				
METHOXYCHLOR	72-43-5	10	V	Y	Y	PROPIONALDEHYDE	123-38-6	5		Y	N	D	Dibenzofurans, Dibenzodioxins				
METHOXYETHANOL, [2-]	109-86-4	10	P	Y	N	PROPOXUR [BAYGON]	114-26-1	10		Y	Y	E	4, 6 Dinitro-o-cresol, and Salts				
METHYL CHLORIDE	74-87-3	10		Y	N	PROPYLENE OXIDE	75-56-9	5		Y	N	F	Lindane (all isomers)				
METHYL ETHYL KETONE (Delisted)	78-93-3					PROPYLENEIMINE, [1,2-]	75-55-8	0.003		Y	N	G	Xylenes (all isomers and mixtures)				
METHYL HYDRAZINE	60-34-4	0.06		Y	N	QUINOLINE	91-22-5	0.006		Y	N	H	Antimony Compounds				
METHYL IODIDE	74-88-4	1		Y	N	QUINONE	106-51-4	5		Y	N	I	Arsenic Compounds				
METHYL ISOBUTYL KETONE	108-10-1	10		Y	N	RADIONUCLIDES		Note 1	Y	N	Y	J	Beryllium Compounds				
METHYL ISOCYANATE	624-83-9	0.1		Y	N	SELENIUM COMPOUNDS		0.1	W	N	Y	K	Cadmium Compounds				
METHYL METHACRYLATE	80-62-6	10		Y	N	STYRENE	100-42-5	1		Y	N	L	Chromium Compounds				
METHYL TERT-BUTYL ETHER	1634-04-4	10		Y	N	STYRENE OXIDE	96-09-3	1		Y	N	M	Cobalt Compounds				
METHYL CYCLOPENTADIENYL MANGANESE	12108-13-3	0.1	R	N	Y	TETRACHLORODIBENZO-P-DIOXIN,[2,3,7,8]	1746-01-6	6E-07	D,V	Y	Y	N	Coke Oven Emissions				
METHYLENE BIS(2-CHLOROANILINE), [4,4-]	101-14-4	0.2	V	Y	Y	TETRACHLOROETHANE, [1,1,2,2-]	79-34-5	0.3		Y	N	O	Cyanide Compounds				
METHYLENEDIANILINE, [4,4-]	101-77-9	1	V	Y	N	TETRACHLOROETHYLENE	127-18-4	10		N	N	P	Glycol Ethers				
METHYLNAPHTHALENE, [2-]	91-57-6	0.01	V	Y	N	TITANIUM TETRACHLORIDE	7550-45-0	0.1		N	N	Q	Lead Compounds (except elemental Lead)				
MINERAL FIBERS		0	T	N	Y	TOLUENE	108-88-3	10		Y	N	R	Manganese Compounds				
NAPHTHALENE	91-20-3	10	V	Y	N	TOLUENE DIISOCYANATE, [2,4-]	584-84-9	0.1		Y	N	S	Mercury Compounds				
NAPHTHYLAMINE, [ALPHA-]	134-32-7	0.01	V	Y	N	TOLUIDINE, [ORTHO-]	95-53-4	4		Y	N	T	Fine Mineral Fibers				
NAPHTHYLAMINE, [BETA-]	91-59-8	0.01	V	Y	N	TOXAPHENE	8001-35-2	0.01		Y	N	U	Nickel Compounds				
NICKEL CARBONYL	13463-39-3	0.1	U	N	Y	TRICHLOROETHANE, [1,2,4-]	120-82-1	10		Y	N	V	Polycyclic Organic Matter				
NICKEL COMPOUNDS		1	U	N	Y	TRICHLOROETHANE, [1,1,1-]	71-55-6	10		N	N	W	Selenium Compounds				
NICKEL REFINERY DUST		0.08	U	N	Y	TRICHLOROETHANE, [1,1,2-]	79-00-5	1		Y	N	X	Polychlorinated Biphenyls (Aroclors)				
NICKEL SUBSULFIDE	12035-72-2	0.04	U	N	Y	TRICHLOROETHYLENE	79-01-6	10		Y	N	Y	Radionuclides				
NITROBENZENE	98-95-3	1		Y	N	TRICHLOROPHENOL, [2,4,5-]	95-95-4	1		Y	N						
NITROBIPHENYL, [4-]	92-93-3	1	V	Y	N	TRICHLOROPHENOL, [2,4,6-]	88-06-2	6		Y	N						
NITROPHENOL, [4-]	100-02-7	5		Y	N	TRIETHYLAMINE	121-44-8	10		Y	N	Note 1	The SMAL for radionuclides is defined as the effective dose equivalent to 0.3 millirems per year for 7 years exposure associated with a cancer risk of 1 in 1 million				
NITROPROPANE, [2-]	79-46-9	1		Y	N	TRIFLURALIN	1582-09-8	9		Y	Y						

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual 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
CO_{2e}	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	SIC	Standard Industrial Classification
GHG	Greenhouse Gas	SIP	State Implementation Plan
gpm	gallons per minute	SMAL	Screening Model Action Levels
gr	grains	SO_x	sulfur oxides
GWP	Global Warming Potential	SO₂	sulfur dioxide
HAP	Hazardous Air Pollutant	tph	tons per hour
hr	hour	tpy	tons per year
hp	horsepower	VMT	vehicle miles traveled
lb	pound	VOC	Volatile Organic Compound
lbs/hr	pounds per hour		
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

Mr. Dave Caughey
Environmental Manager
US DOE National Nuclear Security Administration - National Security Campus KCP
14520 Botts Rd
Kansas City, MO 64147

RE: New Source Review Permit - Project Number: 2013-12-033

Dear Mr. Caughey:

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 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 have any questions regarding this permit, please do not hesitate to contact David Little, 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:dpl

Enclosures

c: Kansas City Regional Office
PAMS File: 2013-12-033

Permit Number: