



## 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: 072011-014 Project Number: 2011-03-024

Installation Number: 021-0038

Parent Company: National Beef Packing Company, LLC

Parent Company Address: 12200 N. Ambassador Drive, #500, Kansas City, MO 64163

Installation Name: National Beef Leathers, LLC

Installation Address: 205 Florence Road, St. Joseph, MO 64504

Location Information: Buchanan County, S20, T57N, R35W

Application for Authority to Construct was made for:  
Increased production through the addition of 20 liming drums, 20 leather tanning drums and a 12 million British thermal unit per hour heat input, natural gas fired water heater.  
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.

JUL 27 2011

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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."*

National Beef Leathers, LLC  
Buchanan County, S20, T57N, R35W

1. Control Device Requirement - Scrubbers
  - A. National Beef Leathers, LLC shall control emissions from the liming and tanning drums using two vertical packed bed scrubbers equipped with mist elimination as specified in the permit application. The scrubbers shall be operated and maintained in accordance with the manufacturer's specifications and recommendations and within the operational range limits established in Special Condition 5.E.
  - B. The scrubbers shall be equipped with a flow meter that indicates the scrubbing air and fluid flow. The scrubbers shall be equipped with a pH monitor and control system. The scrubbers shall be equipped with a pressure drop gauge. These meters shall be located in such a way they may be easily observed by Department of Natural Resources' employees.
  - C. National Beef Leathers, LLC shall monitor and record the scrubbing air and fluid flow rates, pH, and pressure drop through the scrubbers at least once every 24 hours of operation. The flow rates, pH, and pressure drop shall be maintained within the operating limits specified by Special Condition 5.
  - D. National Beef Leathers, LLC shall maintain an operating and maintenance log for the scrubbers 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.
2. Control Device Requirement - Baghouse
  - A. National Beef Leathers, LLC shall control emissions from the lime silo (EP-38) using a baghouse as specified in the permit application.
  - B. The baghouse shall be operated and maintained in accordance with the manufacturer's specifications or another method approved by the Air

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### SPECIAL CONDITIONS:

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

Pollution Control Program. The baghouse 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 for the baghouse 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. National Beef Leathers, LLC shall monitor and record the operating pressure drop across the baghouse at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
  - E. National Beef Leathers, LLC shall maintain an operating and maintenance log for the baghouse 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.
3. Operational Requirement  
National Beef Leathers, LLC shall keep the liming, tanning, and other chemicals in sealed containers whenever the materials are not in use. National Beef Leathers, LLC shall provide and maintain suitable, easily read markings on all liming, tanning, and other chemical containers used with this equipment.
4. Record Keeping and Reporting Requirements
- A. National Beef Leathers, LLC 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 Material Safety Data Sheets (MSDS) for all materials used.
  - B. National Beef Leathers, LLC shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten 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.

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#### SPECIAL CONDITIONS:

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

##### 5. Performance Testing

- A. National Beef Leathers, LLC shall conduct performance testing on the liming and tanning drum exhaust immediately prior to one of the scrubbers (SB-1 or SB-2) and in the scrubber's exhaust stack for the presence of total chromium, hexavalent chromium, hydrogen sulfide, and sulfuric acid mist. Total chromium shall be measured using EPA Method 29 or 0060 or another method approved by the Air Pollution Control Program. Hexavalent chromium shall be measured using EPA Method 0061 or another method approved by the Air Pollution Control Program. Testing shall be conducted at the maximum production rate possible (after completion of Phase II construction). All of the drums at the installation shall be in use. Emissions from the drums shall be routed exclusively to the single tested scrubber.
- B. These tests shall be performed within 60 days after achieving the maximum production rate of the installation (after completion of Phase II construction), but not later than 365 days after initial start-up for commercial operation (after commercial start-up of any drums installed under Phase I construction) and shall be conducted in accordance with the performance testing procedures outlined in Special Condition 5.A.
- C. A completed Proposed Test Plan Form (enclosed) must be submitted to the Air Pollution Control Program 30 days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing.
- D. Two copies of a written report of the performance test results shall be submitted to the Director within 60 days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one sample run.
- E. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations. The test report shall note liming, deliming, bating, pickling, and tanning batch times (hours and minutes), weights (tons of fresh hides and wet blue leather), and process chemical amounts (tons). The test report shall establish operational range

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**SPECIAL CONDITIONS:**

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

limits for scrubber air and fluid flow rates (standard cubic feet per minute and gallons per minute respectively), scrubber fluid pH, and scrubber pressure drop.

- F. No later than 30 days after the performance test results are submitted, National Beef Leathers, LLC shall provide the Director with a report that establishes the total chromium, hexavalent chromium, hydrogen sulfide, and sulfuric acid mist uncontrolled and controlled emission factors for SB-1 and SB-2. The report shall establish the emission factors in units of pounds per ton of fresh hides in scientific notation to the hundredths decimal place.
- G. If the results of the performance testing show that the controlled emission factors are greater than those used in the emissions analysis herein (Table 1), National Beef Leathers, LLC shall evaluate what effects these differences would have had on the permit applicability of this project. National Beef Leathers, LLC shall submit the results of any such evaluation, in an amendment application, within 30 days of submitting the report required in Special Condition 5.F. of this permit.

Table 1: Emission Factors (pounds per ton of fresh hides)

Emission Point	Total Chromium	Hexavalent Chromium	Hydrogen Sulfide	Sulfuric Acid Mist
SB-1 or SB-2	4.53E-04	Minimum detection level	7.14E-03	4.53E-04

- 6. **Operating Permit Determination**  
National Beef Leathers, LLC shall submit installation wide potential to emit (PTE) calculations for all pollutants as supporting documentation with their next operating permit application. However, the PTE calculations shall be based upon the emission factors developed from performance testing in Special Condition 5, and because of the performance testing timeframe, may be submitted as an amendment to the operating permit.

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

Project Number: 2011-03-024  
Installation ID Number: 021-0038  
Permit Number:

National Beef Leathers, LLC  
205 Florence Road  
St. Joseph, MO 64504

Complete: March 9, 2011

Parent Company:  
National Beef Packing Company, LLC  
12200 N. Ambassador Drive, #500  
Kansas City, MO 64163

Buchanan County, S20, T57N, R35W

REVIEW SUMMARY

- National Beef Leathers, LLC has applied for authority to install 20 liming drums, 20 leather tanning drums, and a 12 million British thermal unit per hour heat input, natural gas fired water heater.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. The HAP of concern is chromium III from chromium sulfate tanning chemicals (Waynetan 175).
- 40 CFR 60 Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* applies to the natural gas fired water heater #4 (EP-72).
- 40 CFR 63 Subpart JJJJJJ, *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers* applies to the natural gas fired water heater #4. The installation is not subject to 40 CFR 63 Subpart TTTT, *National Emission Standards for Hazardous Air Pollutants for Leather Finishing Operations* because it does not apply coatings comprised of dye, pigments, film-forming materials, or performance modifiers to leather surfaces. The installation is not subject to 40 CFR Subpart 63 Subpart NNNNNN, *National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources: Chromium Compounds* because it does not use chromite ore as the basic feedstock to manufacture chromium compounds.
- Two parallel, vertical packed bed scrubbers each equipped with single stage mist elimination (SB-1 and SB-2) are being used to control the hydrogen sulfide (H<sub>2</sub>S) emissions from the liming and tanning drums. A baghouse is being used to control particulate matter emissions from the lime silo (EP-38).

- 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 below de minimis levels.
- This installation is located in Buchanan 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 since potential emissions of the application are below de minimis levels.
- Emissions testing are required for the proposed equipment.
- A basic operating permit application is required for this installation within 30 days of equipment start-up (start-up of any drum installed in Phase I construction). Alternatively, due to the installation wide PTE submittal, an intermediate operating permit application may be required within 90 days of equipment startup (start-up of any drum installed in Phase I construction).
- Approval of this permit is recommended with special conditions.

#### INSTALLATION DESCRIPTION

As a division of National Beef Packing Company, LLC, National Beef Leathers, LLC operates a beef leather tanning installation in St. Joseph, Missouri (herein NBL). NBL was formed in 2009 from the purchase of the Prime Tanning Corp. installation. NBL receives fresh beef hides and produces wet blue leather through dehairing, liming, bating, pickling, chrome tanning, and splitting. They do not fatliquor, dye, buff, or otherwise finish leather. NBL is a minor source under construction permits and holds a basic operating permit. The installation has received numerous Notices of Violation (NOV) for odor while under Prime Tanning. The following permits have been issued to National Beef Leathers, LLC from the Air Pollution Control Program.

Table 2: Permit History

Permit Number	Description
112000-003	Two tanning drums
OP	Basic operating permit issued in 2001
0899-002	Kiln dust silo
052000-002	Ammonium sulfate batching
022001-016	One tanning drum
112000-013A	Suspend special condition
OP	Basic operating permit issued in 2002
OP	Basic operating permit amendment issued in 2003
112000-013B	Tanning drum additives
OP	Basic operating permit issued in 2007



## PROJECT DESCRIPTION

NBL proposes to install 20 new liming drums, 20 new tanning drums, and a 12 million British thermal unit per hour input, natural gas fired water heater. All existing 31 liming and 17 tanning drums will be removed. The new drums will increase leather production and liming and tanning chemical usage. Construction associated with the project has commenced. Construction will be completed in two phases. Under Phase I, approximately half of the existing drums will be removed and 20 new drums will be installed. During this phase, the 20 new drums will lime and tan. The new drums will be connected to a vertical pack bed scrubber. Under Phase II, the remaining existing drums will be removed and 20 new drums will be installed. The second phase drums will also be connected to a vertical packed bed scrubber. Once both phases are complete, 20 drums will be dedicated to liming and 20 drums will be dedicated to tanning. Each scrubber will have the ability to control all 40 drums. The design rate of the new drums was determined by multiplying the existing drums' design rate by the ratio of the new to existing drums' capacity. Existing drums are each 4.2 meters in diameter and length. Proposed drums are each 4.5 meters in diameter and length. An existing drum can batch 15.5 tons of hides, according to page 7 of permit 112000-013. That permit calculated the existing drums' design rate equal to 0.77 tons of hides per hour-drum by dividing the batch weight of 15.5 tons of hides by the batch time of 21.83 hours. The calculation was revised for this permit as 15.5 divided by 21.83 is 0.71 tons of hides per hour-drum. A proposed drum can batch 19.1 tons of hides. Total batch time is approximately 22.5 hours, but only one batch is run per drum per day. The proposed drums design rate will be verified by performance testing.

At NBL, the leather making process will begin by receiving fresh, refrigerated hides by truck. Hides will be loaded into a hopper using a forklift. From the hopper, the hides will be conveyed to the dedicated liming drums. Liming chemicals (calcium hydroxide, sodium sulfide flake, sodium hydrosulfide flake, enzymes) will be added to remove hair, fat, protein, and open the hide fiber structure. Lime will be added to the drums in aqueous solution, but received at the installation into a silo in dry form. The lime silo is controlled by a baghouse. Limed hides will be conveyed to dedicated tanning drums for deliming, bating, pickling, and chrome tanning. Hides may be rinsed between stages to minimize chemical usage and acid-base reactions. Liming is a basic process; deliming is an acidic process. Ammonia gas is created from residual lime in the hides reacting with ammonium salts in the deliming process. Ammonia is not a criteria air pollutant or hazardous air pollutant but is reported for emissions inventory purposes. Carbon dioxide is also added to the deliming process. After deliming, the hides will be degreased then bated. Bating is a process where hides are subjected to ammonium chloride and enzymes to further remove proteins from collagen fibers. Bating shrinks and relaxes swollen hides and prepares them for tanning. Before being tanned, the bated hides will be pickled in sulfuric acid and sodium chloride. Pickling readies the hides to absorb chrome tanning chemicals. Pickling may create sulfuric acid mist emissions. Chrome tanning is accomplished with basic chromium sulfate. Virgin chromium sulfate solution (Waynetan 175) will be mixed with recovered, precipitated chrome solution from previous tanning batches. NBL will not receive hexavalent chromium, but some trivalent chromium may oxidize to hexavalent chromium in the presence of oxygen, high pH, high temperature, or other conditions. Hydrogen sulfide will be created when chromium solutions contact residual sulfide or hydrosulfide in the hides. Also, carbon monoxide will be created in the tanning drums.

Wastewater will be created at each stage in the process. Waste streams will be processed

to remove solids while the remaining liquids are sent to aeration/primary clarification treatment. Existing boilers, existing water heaters, and the new water heater will create hot water for the processes. Wet blue leather will be classified and split according to customer specification, then stacked on pallets for shipment. Solid waste is shipped to landfills for disposal. Treated liquid waste enters the municipal wastewater process.

Once the second phase of the project is complete, existing emission units will be removed including all existing liming and tanning drums and associated exhaust stacks, kiln dust silo, and chrome conversion. Sludge land application has not occurred since 2009.

## EMISSIONS/CONTROLS EVALUATION

The emission factors used in this analysis for most drum processes were obtained from previous testing at Prime Tanning and mass balance. The emission factors have been used in previous permits and emission inventories for the installation. The Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 9.15 *Leather Tanning*, July 1997 does not contain emission factors.

Potential emissions for lime receiving were calculated using AP-42, Section 11.12 *Concrete Batching*, June 2006 for controlled pneumatic cement unloading to elevated storage silos.

H<sub>2</sub>S will be created in the tanning drums. Existing tanning drums were tested by NBL in December, 2009 to determine H<sub>2</sub>S production rate, approximately 0.0376 pounds of H<sub>2</sub>S per ton of hides. This performance test was not verified by the Air Pollution Control Program. This uncontrolled emission factor was used to calculate potential H<sub>2</sub>S emissions from the proposed drums, and will be verified through performance testing. H<sub>2</sub>S emissions will be controlled by two vertical packed bed scrubbers. The scrubbers will be connected to the drums in parallel. According to NBL each scrubber will be able to control H<sub>2</sub>S emissions from all drums. Each scrubber is rated at 20,000 cubic feet per minute air flow. The manufacturer guarantees a removal efficiency of 99.0% assuming an inlet concentration of 10,000 ppm H<sub>2</sub>S. This efficiency is indirectly proportional to ambient temperature. Conservatively, H<sub>2</sub>S capture and control efficiency of 90.0% each was selected by NBL for this review.

Sulfuric acid mist (SAM) emissions have traditionally not been considered for the leather tanning process. However, sulfuric acid used in the pickling stage may form SAM emissions. SAM potential emissions were estimated equal to total chromium emissions. The H<sub>2</sub>S scrubbers were assumed to capture and remove SAM at efficiencies equal to H<sub>2</sub>S. SAM emissions will be verified through performance testing.

Chromium air emissions have traditionally not been considered for the leather tanning process, excluding finishing. However, conservatively, chrome tanning potential emissions were calculated using the AP-42 Section 12.20 *Electroplating*, July 1996 emission factor for hard chromium electroplating with packed bed scrubber control,  $2.1 \times 10^{-5}$  grains per dry standard cubic feet of air flow. Total scrubber airflow is 40,000 cfm. According to the scrubbers' manufacturer, chromium cannot be efficiently removed in a conventional packed bed scrubber designed for H<sub>2</sub>S removal. Efficient chromium removal requires a modified scrubber with multiple specialized mesh filter pads. Scrubbers supplied to NBL contain a single stage mist elimination section. Performance testing for chromium III and possible chromium VI emissions is required for this review. The total mass of the chromium III compounds was used towards comparison of the potential emissions to the HAP major

source threshold. The chromium III metal portion of the compound was used towards modeling applicability.

Volatile organic compound (VOC) potential emissions from wastewater were calculated using an emissions inventory emission factor, 0.012 pounds of VOC per 1,000 gallons of wastewater. Potential wastewater throughput was calculated assuming the same wastewater generation rate per ton of hides from the existing to proposed process. Performance testing for VOC emissions is not required for this review. The potential to emit is approximately nine times less than the de minimis level, and even if the de minimis level were exceeded, modeling of VOC emissions is not possible.

Potential emissions from haul roads were calculated using AP-42, Section 13.2.1 *Paved Roads*, January 2011 and AP-42 Section 13.2.2 *Unpaved Roads*, November 2006. Potential emissions from water heater #4 were calculated using AP-42, Section 1.4 *Natural Gas Combustion*, July 1998.

Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8,760 hours per year). Existing potential emissions are cited from permit 022001-016 which cited emissions inventories. For this review, the new installation potential emissions are not the sum of the existing potential emissions and the potential emissions of the application. NBL will submit new installation potential emissions with the next operating permit application. The following table provides an emissions summary for this project.

Table 3: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2010 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM <sub>2.5</sub>	10.0	N/D	2.55	1.86	N/D
PM <sub>10</sub>	15.0	33.93	2.55	6.47	N/D
PM	25.0	N/D	N/D	7.81	N/D
SO <sub>x</sub>	40.0	8.65	0.03	0.03	N/D
NO <sub>x</sub>	40.0	81.41	4.89	5.15	N/D
VOC	40.0	2.35	2.36	4.55	N/D
CO	100.0	25.51	6.32	8.85	N/D
Combined HAPs	25.0	N/D	N/D	0.03	N/D
Sulfuric Acid Mist	7.0	93.9	N/D	0.03	N/D
Hydrogen Sulfide	10.0	N/D	N/D	0.50	N/D
Chromium III compounds	10.0	N/D	N/D	0.03	N/D
Chromium III metal	<sup>1</sup> 5.0	N/D	N/D	0.02	N/D

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

<sup>1</sup> Screening Model Action Level (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 below de minimis levels.

## APPLICABLE REQUIREMENTS

National Beef Leathers, LLC 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. The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of a hardcopy Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions. Alternatively, submission of an electronic copy via MoEIS is required May 1.
- *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 Particulate Matter From Industrial Processes*, 10 CSR 10-6.400 applies to the ammonium sulfate batching equipment
- *New Source Performance Standards (NSPS) Regulations*, 10 CSR 10-6.070, *New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc.
- *Maximum Achievable Control Technology (MACT) Regulations*, 10 CSR 10-6.075, *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers*, 40 CFR Part 63, Subpart JJJJJJ.
- *Restriction of Emission of Sulfur Compounds*, 10 CSR 10-6.260

## 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.

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David Little  
Environmental Engineer

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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 March 8, 2011, received March 9, 2011, designating National Beef Packing Company, LLC as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- U.S. EPA document, *Air Emissions and Control Technology for Leather Tanning and Finishing Operations*, EPA-453/R-93-025, June 1993.
- Kansas City Regional Office Site Survey, dated March 15, 2011.

Mr. William Ludwig  
Corporate Environmental Director  
National Beef Packing Company, LLC  
12200 N. Ambassador Drive, #500  
Kansas City, MO 64163

RE: New Source Review Permit - Project Number: 2011-03-024

Dear Mr. Ludwig:

Enclosed with this letter is your permit to construct. Please study it carefully. 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 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's 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

Kendall B. Hale  
New Source Review Unit Chief

KBH:dll

Enclosures

c: Kansas City Regional Office  
PAMS File: 2011-03-024

Permit Number: