

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: 052017-004

Project Number: 2017-03-020
Installation Number: 093-0009

Parent Company: The Doe Run Resources Corporation

Parent Company Address: 1801 Park 270 Drive, St. Louis, MO 63146

Installation Name: The Buick Resource Recycling Facility, LLC

Installation Address: 18594 Hwy KK, Boss, MO 65440

Location Information: Iron County, S14, T34N, R2W

Application for Authority to Construct was made for:
Replacement and relocation of the Drum Shredder (31B and 31C). This review was conducted in accordance with Section (5) of 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.



Prepared by
Alana Hess
New Source Review Unit



Director or Designee
Department of Natural Resources

MAY 15 2017

Effective Date

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 Enforcement and Compliance Section of 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 Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's Southeast Regional Office within 15 days after the actual start up of this air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's 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 source(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 using the contact information below.

Contact Information:

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

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(12)(A)10. "Conditions required by permitting authority."

The Buick Resource Recycling Facility, LLC
Iron County, S14, T34N, R2W

1. **PM₁₀ Emission Limitations**

- A. The Buick Resource Recycling Facility, LLC shall not emit PM₁₀ in excess of the following rates:

Emission Source	Description	PM₁₀ Emission Rate Limit
31B	Drum Shredder Hygiene Baghouse	0.09 lb/hr
31C	Drum Shredder Process Baghouse	0.0223 lb/hr

- B. The Buick Resource Recycling Facility, LLC shall demonstrate compliance with the PM₁₀ emission rate limits in Special Condition 1.A by conducting performance testing in accordance with Special Condition 4.

2. **Control Device Requirement - Baghouse**

- A. The Buick Resource Recycling Facility, LLC shall control lead and particulate emissions from the Drum Shredder (31B and 31C) using baghouses as specified in the permit application.
- B. The baghouses shall be operated and maintained in accordance with the manufacturer's specifications. The baghouses 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 Department of Natural Resources' employees may easily observe them.
- C. Replacement filters for the baghouses shall be kept on hand at all times. The bags shall be made of fibers appropriate for operating conditions expected to occur (i.e. temperature limits, acidic and alkali resistance, and abrasion resistance).
- D. The Buick Resource Recycling Facility, LLC shall monitor and record the operating pressure drop across the baghouses at least once every 24 hours. The operating pressure drop shall be maintained within the range specified by the manufacturer.
- E. The Buick Resource Recycling Facility, LLC shall maintain a copy onsite of documentation from the baghouse manufacturer indicating the normal operating pressure drop range.

SPECIAL CONDITIONS:

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

- F. The Buick Resource Recycling Facility, LLC shall maintain an operating and maintenance log for the baghouses 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. Record Keeping and Reporting Requirements
The Buick Resource Recycling Facility, 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.
4. Performance Testing
- A. In order to demonstrate initial compliance with the PM₁₀ emission rate limits in Special Condition 1.A, The Buick Resources Recycling Facility, LLC shall conduct an initial stack test on each emission source within 60 days after achieving the maximum production rate of the Drum Shredder, but no later than 180 days after the initial start-up of the Drum Shredder.
- B. In order to demonstrate ongoing compliance with the PM₁₀ emission rate limits in Special Condition 1.A, The Buick Resources Recycling Facility, LLC shall conduct subsequent testing:
- 1) No later than two years after the most recent test if the results of the most recent test are greater than 75% of the emission rate limit.
 - 2) No later than five years after the most recent test if the results of the most recent test are less than or equal to 75% of the emission rate limit.
- C. Performance testing shall be conducted at a shredding rate of greater than or equal to 22.5 tph. If performance testing is conducted at a shredding rate below 22.5 tph, the maximum shredding rate shall be limited to 110% of the average shredding rate during the performance testing event.
- D. A completed Proposed Test Plan Form (enclosed) shall 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.
- E. One electronic copy of a written report of the performance test results shall be submitted to the Director within 30 days of completion of any required testing. The report shall include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample

SPECIAL CONDITIONS:

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

calculations from the required U.S. EPA Method for at least one sample run.

- F. 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, specifically:
- 1) The shredding rate (tons) during each performance test run
 - 2) The pressure drop across each baghouse during each performance test run
 - 3) The MERV rating or fractional efficiency of each baghouse
 - 4) The type of material being shredded during each performance test run (i.e. manufacturing plant scrap, post-consumer lead bearing materials, batteries without free liquid, remediation materials, etc.)

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

Project Number: 2017-03-020
Installation ID Number: 093-0009
Permit Number: 052017-004

Installation Address:

The Buick Resource Recycling Facility, LLC
18594 Hwy KK
Boss, MO 65440

Parent Company:

The Doe Run Resources Corporation
1801 Park 270 Drive
St. Louis, MO 63146

Iron County, S14, T34N, R2W

REVIEW SUMMARY

- The Buick Resource Recycling Facility, LLC has applied for authority to replace and relocate the Drum Shredder (31B and 31C).
- The application was deemed complete on March 23, 2017.
- HAP emissions are expected from the proposed equipment. Lead is emitted by the Drum Shredder from the shredding of lead bearing material.
- 40 CFR Part 60, Subpart L – *Standards of Performance for Secondary Lead Smelters* does not apply to the Drum Shredder. This regulation applies to pot furnaces, blast furnaces, and reverberatory furnaces. The Drum Shredder is not a furnace.
- 40 CFR Part 63, Subpart X – *National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting* is applicable to the Drum Shredder (31B and 31C). The Drum Shredder Hygiene Baghouse provides ventilation to the old Drum Shredder Room (31B) which is not being constructed or reconstructed as defined at §63.2. The Drum Shredder Hygiene Baghouse (31B) is an existing emission source under MACT X subject to a lead emission standard of 0.00043 gr/dscf. The Drum Shredder Process Baghouse (31C) will be a new emission source under MACT X subject to a lead emission standard of 0.000087 gr/dscf.
- High efficiency baghouses are being used to control the lead and particulate emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of PM₁₀ are conditioned below de minimis levels by the PM₁₀ emission rate limits in Special Condition 1.A.

- This installation is located in Iron County, a nonattainment area for the 2008 lead standard and an attainment area for all other criteria pollutants.
- This installation is on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2 Item #19 – *Secondary metal production plants*. The installation's major source level is 100 tons per year and fugitive emissions are counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below the de minimis levels.
- PM₁₀ emissions testing is required for the equipment as a part of this permit. Lead emission testing is required for the equipment under MACT X. Testing may also be required as part of other state or federal applicable rules.
- The provisions of this construction permit will be included in the installation's initial Part 70 operating permit, Project 093-0009-027, which is currently under technical review.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

The Buick Resource Recycling Facility, LLC is a secondary lead recycling plant owned and operated by The Doe Run Resources Corporation.

The installation has never received a Part 70 operating permit and operates under their initial Part 70 operating permit application, Project 093-0009-027.

Approximately, 75 percent or more of the lead recycled at Buick Resource Recycling Facility, LLC comes from automotive and industrial batteries.

Batteries arrive at the installation by truck. They are unloaded and placed onto a conveyor belt or into a battery storage area. Approximately one-third of all batteries that are received still have an electrical charge on them, so the batteries are placed into a stainless steel battery shredder.

The whole battery is broken in the battery shredder, and the battery acid (weak sulfuric acid) is drained and collected in storage tanks. The shredded batteries are then placed in a vibrating feeder that feeds a conveyor belt into the hammer mill. The hammer mill pounds the battery into smaller pieces.

Each lead acid battery contains a set of metal grids, lead posts, plastic components, separators, and lead sulfate paste. The lead sulfate paste is removed by washing through sets of screens for further processing. After going through the hammer mill, the battery pieces enter a hydro separator where water separates the heavier elements. All

of the lead and metal components sink to the bottom and the floating items are skimmed off and sent to the recycling facilities.

The metallic portions of the batteries including grids, posts, and other metallic constituents are fed to either the reverberatory furnace or the blast furnace. Lead from the furnaces is sent to the refinery building.

In the refinery building softening, alloying, and oxidation of the lead occurs to achieve the desired degree of purity or alloy type. After the lead has been refined to meet customer specifications it is cast.

The following New Source Review permits have been issued to The Buick Resource Recycling Facility, LLC from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
0179-018	Minor source permit
0989-003	Major source permit
0792-016	Minor source permit
0493-006	Minor source permit
1093-010	Minor source permit
0693-013	Minor source permit
1093-003	Minor source permit
0989-003	Minor source permit
0989-003A	Amendment
1095-009	Minor source permit
1296-012	Minor source permit
0297-015	Minor source permit
0997-006	Minor source permit
102000-007	Minor source permit
012005-008 ¹	PSD – increase production
092006-007	Minor NSR – new multi-hearth rotary furnace
012005-008A	PSD amendment
012010-006	Minor NSR – 34.87 MMBtu/hr propane boiler
012005-008B	No permit required
062011-004	Minor NSR – install afterburner on reverberatory furnace
102011-005	Minor NSR – install 22.5 tph wood processing pallet grinder
012005-008C	PSD amendment
092014-006	Minor NSR – install ERP Kettles
062011-004A	Amendment to re-evaluate NOx emissions from afterburner
072015-013	Minor NSR – convert propane combustion sources to natural gas
072015-017	Minor NSR – install air curtain incinerator
092014-006A	Extension

¹ The installation did receive permits prior to PSD Permit 012005-008; however, all provisions of those permits have since been superseded.

PROJECT DESCRIPTION

The Buick Resource Recycling Facility, LLC is proposing to replace and relocate the Drum Shredder. The existing Drum Shredder is a Saturn Model No. 62-40HT with a 200 HP motor and a 20" cutter diameter. The existing Drum Shredder was permitted under Construction Permit 0792-016. The existing Drum Shredder is located in the Drum Shredder Room. Emissions from the existing Drum Shredder route to 31A Drum Shredder Discharge Baghouse, 31B Drum Shredder Hygiene Baghouse, and 31C Drum Shredder Process Baghouse. The existing Drum Shredder will be permanently removed from the installation as part of this project.

The new Drum Shredder is a Saturn Model No. 60-44HT with two 300 HP motors and a 22.25" cutter diameter. The new Drum Shredder has a maximum hourly design rate of 25 tph. The new Drum Shredder will be located in a three-sided bunker within the Paste Storage Room. A door will separate the three-sided bunker from the Drum Shredder Room. The door will be opened to feed material to the Drum Shredder, but will remain closed at all other times. Emissions from the new Drum Shredder will route to 31B Drum Shredder Hygiene Baghouse and 31C Drum Shredder Process Baghouse.

The drum shredder is used to shred drums containing lead bearing material such as manufacturing plant scrap, post-consumer lead bearing materials, batteries without free liquid, and remediation materials. Iron from the drums is magnetically separated from the lead bearing material and stored for later use in the blast furnace. The lead is stored for later processing in the blast or reverberatory furnace.

The Drum Shredder Discharge Baghouse (31A) will be removed as part of this project. Emissions previously routing to this baghouse will instead route to the Drum Shredder Process Baghouse (31C). The Drum Shredder Hygiene Baghouse (31B) will control emissions from the Drum Shredder Room. The Drum Shredder Process Baghouse (31C) will control emissions from the three-sided Drum Shredder bunker. Emissions from the Paste Storage Room are controlled by EP-103 BSN Baghouse and are unaffected by this project. The Paste Storage Room, the three-sided Drum Shredder bunker, and the Drum Shredder Room are all located within the larger BSN building which meets the definition of total enclosure under §63.542, meets the requirements of §63.544(c)(1) and (2), and is monitored pursuant to §63.548(k).

EMISSIONS/CONTROLS EVALUATION

Emissions from this project were determined on a baseline actual-to-potential basis and are provided in Tables 2 through 5.

Table 2: Project Lead Emissions (tons per year)

Emission Source	Description	Baseline Actual Emissions	Potential Emissions	Project Emissions
31A	Drum Shredder Discharge Baghouse	0.02	0	-0.02
31B	Drum Shredder Hygiene Baghouse	0.45	0.65	0.20
31C	Drum Shredder Process Baghouse	0.45	0.05	-0.40
Project		0.92	0.69	-0.23

Baseline actual lead emissions from the Drum Shredder Discharge Baghouse (31A), the Drum Shredder Hygiene Baghouse (31B), and the Drum Shredder Process Baghouse (31C) were determined based on the MACT X lead testing results of 0.000198 gr/dscf (December 2014), 0.000299 gr/dscf (October 2013), and 0.000802 gr/dscf (December 2014), respectively, and the maximum air flow design capacity for each of the baghouses of 2,900 dscfm, 40,000 dscfm, and 15,000 dscfm, respectively.

Potential emissions from the Drum Shredder Discharge Baghouse (31A) are zero as the baghouse is being removed as part of this project.

Potential lead emissions from the Drum Shredder Hygiene Baghouse (31B) and the Drum Shredder Process Baghouse (31C) were determined based on the MACT X lead emission limits of 0.00043 gr/dscf and 0.000087 gr/dscf, respectively, and the maximum air flow design capacity for each of the baghouses of 40,000 dscfm and 15,000 dscfm, respectively.

Table 3: Project PM₁₀ Emissions (tons per year)

Emission Source	Description	Baseline Actual Emissions	Potential Emissions	Project Emissions
31A	Drum Shredder Discharge Baghouse	0.02	0	-0.02
31B	Drum Shredder Hygiene Baghouse	0.386	0.394	0.009
31C	Drum Shredder Process Baghouse	0.096	0.098	0.002
Project		0.497	0.492	-0.005

Baseline actual PM₁₀ emissions from the Drum Shredder Discharge Baghouse (31A), the Drum Shredder Hygiene Baghouse (31B), and the Drum Shredder Process Baghouse (31C) were determined based on the results of stack testing conducted in August 2005 of 0.0038 lb/hr, 0.09 lb/hr, and 0.0223 lb/hr, respectively and 8,568 hours of annual operation.

Potential emissions from the Drum Shredder Discharge Baghouse (31A) are zero as the baghouse is being removed as part of this project.

Potential PM₁₀ emissions from the Drum Shredder Hygiene Baghouse (31B) and the Drum Shredder Process Baghouse (31C) are limited to 0.09 lb/hr and 0.0223 lb/hr, respectively, by Special Condition 1.A. These values were obtained from the installation's most recent PM₁₀ modeling analysis. Any increase to these emission rates will require a re-evaluation of the potential emissions of this project and may require a new PM₁₀ modeling analysis.

Table 4: Project PM Emissions (tons per year)

Emission Source	Description	Baseline Actual Emissions	Potential Emissions	Project Emissions
31A	Drum Shredder Discharge Baghouse	0.02	0	-0.02
31B	Drum Shredder Hygiene Baghouse	0.39	15.02	14.63
31C	Drum Shredder Process Baghouse	0.10	5.63	5.54
Project		0.50	20.65	20.15

No PM stack test data was available; therefore, baseline actual emissions of PM were conservatively determined to be equal to baseline actual emissions of PM₁₀.

Potential emissions from the Drum Shredder Discharge Baghouse (31A) are zero as the baghouse is being removed as part of this project.

Potential PM emissions from the Drum Shredder Hygiene Baghouse (31B) and the Drum Shredder Process Baghouse (31C) were determined based on the maximum grain outlet concentration for baghouses from EPA's fact sheets of 0.01 gr/dscf and the maximum air flow design capacity for each of the baghouses of 40,000 dscfm and 15,000 dscfm, respectively.

Table 5: Project PM_{2.5} Emissions (tons per year)

Emission Source	Description	Baseline Actual Emissions	Potential Emissions	Project Emissions
31A	Drum Shredder Discharge Baghouse	0	0	0
31B	Drum Shredder Hygiene Baghouse	0	0.35	0.35
31C	Drum Shredder Process Baghouse	0	0.09	0.09
Project		0	0.44	0.44

No PM_{2.5} stack test data was available; therefore, baseline actual emissions of PM_{2.5} were conservatively determined to be zero.

Potential PM_{2.5} emissions were determined to be 89.134% of potential PM₁₀ emissions based on fractional efficiency data supplied by the baghouse manufacturer.

The following table provides an emissions summary for this project. Existing potential emissions were not available for the installation; however, the installation is known to be an existing major source based on actual emissions. Existing actual emissions were taken from the installation's 2015 EIQ. Potential emissions of the project represent the project emissions increase.

Table 6: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions (2015 EIQ)	Potential Emissions of the Project
PM	25.0	N/D	N/D	20.15
PM ₁₀	15.0	N/D	26.38	-0.005
PM _{2.5}	10.0	N/D	25.29	0.44
SO _x	40.0	Major	2,638.47	N/A
NO _x	40.0	Major	42.90	N/A
VOC	40.0	N/D	10.13	N/A
CO	100.0	Major	12,569.44	N/A
HAPs	25.0	Major	10.04	-0.23
Lead	0.6	Major	1.18	-0.23
Benzene	10.0	N/D	7.43	N/A
Naphthalene	10.0	N/D	0.77	N/A
1,3-Butadiene	10.0	N/D	0.30	N/A
Hydrogen Chloride	10.0	N/D	0.20	N/A
Arsenic	10.0	N/D	0.08	N/A
Cadmium	10.0	N/D	0.04	N/A
Manganese	10.0	N/D	0.02	N/A
Mercury	10.0	N/D	0.01	N/A
Nickel	10.0	N/D	0.01	N/A

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

Missouri's lead SMAL does not apply to the Drum Shredder as the Drum Shredder is subject to MACT X which has undergone a Risk and Technology Review.

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 PM₁₀ are conditioned below de minimis levels by the PM₁₀ emission rate limits in Special Condition 1.A.

APPLICABLE REQUIREMENTS

The Buick Resource Recycling Facility, 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.

- 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions*
- 10 CSR 10-6.065 *Operating Permits*
- 10 CSR 10-6.075 *Maximum Achievable Control Technology Regulations*

- 40 CFR Part 63, Subpart X – *National Emission Standards for Hazardous Air Pollution From Secondary Lead Smelters*
- 10 CSR 10-6.110 *Submission of Emission Data, Emission Fees and Process Information*
- 10 CSR 10-6.120 *Restriction of Emissions of Lead From Specific Lead Smelter-Refinery Installations*
- 10 CSR 10-6.165 *Restriction of Emission of Odors*
- 10 CSR 10-6.170 *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*
- 10 CSR 10-6.220 *Restriction of Emission of Visible Air Contaminants*

STAFF RECOMMENDATION

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

PERMIT DOCUMENTS

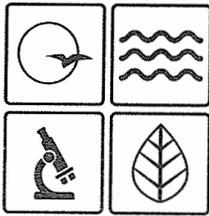
The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated February 24, 2017, received March 3, 2017, designating The Doe Run Resources Corporation as the owner and operator of the installation.

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
EIQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		



Missouri Department of dnr.mo.gov

NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

MAY 15 2017

Ms. Maggie Crocker
Environmental Compliance Supervisor
The Buick Resource Recycling Facility, LLC
18594 Hwy KK
Boss, MO 65440

RE: New Source Review Permit - Project Number: 2017-03-020

Dear Ms. Crocker:

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 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.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to §§621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission 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 administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.



Recycled paper

Ms. Maggie Crocker
Page Two

If you have any questions regarding this permit, please do not hesitate to contact Alana Hess, 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:ahj

Enclosures

c: Southeast Regional Office
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