



## PART 70 PERMIT TO OPERATE

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

**Operating Permit Number:** OP2013-055  
**Expiration Date:** AUG 12 2018  
**Installation ID:** 163-0031  
**Project Number:** 2003-08-093

**Installation Name and Address**

Dyno Nobel Inc.  
P.O. Box 450  
Louisiana, MO 63353  
Pike County

**Parent Company's Name and Address**

Dyno Nobel Inc.  
2795 East Cottonwood Parkway Suite 500  
Salt Lake City, UT 84121

**Installation Description:**

The Dyno Nobel Inc. - LOMO Plant, built in the 1960s, produces five products: weak nitric acid, blended nitric acid, concentrated nitric acid, ammonium nitrate solution, and ammonium nitrate prill. The potential to emit of this facility exceeds the Part 70 Installation thresholds for oxides of nitrogen ( $\text{NO}_x$ ), particulate matter 10 micron ( $\text{PM}_{10}$ ) and particulate matter 2.5 micron ( $\text{PM}_{2.5}$ ).

AUG 13 2013

Effective Date

  
Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

The Dyno Nobel Inc. - LOMO Plant is located in the town of Louisiana, Missouri, in Pike County. The current plant, which was built in the 1960s, produces five products: weak nitric acid, blended nitric acid, concentrated nitric acid, ammonium nitrate solution, and ammonium nitrate prill.

The manufacture of nitric acid is the first step in the operation. Most of the nitric acid produced at the LOMO Plant is neutralized with ammonia to form an 83% solution of nitrate of ammonia liquor (NAL) which can be further processed into other products or used for direct sales. Some of the nitric acid is sold at strengths of 56%, 67%, 83%, and 98%.

The raw materials used in the ammonia oxidation (nitric acid) process are anhydrous ammonia, air, and water. An air-ammonia mixture is reacted in a catalytic converter to form nitric oxide (NO) and water. The NO formed is oxidized to NO<sub>2</sub> by combining with excess oxygen present in the gas stream. The reaction products are cooled as air is added later in the process. The cooled NO<sub>2</sub> then flows countercurrently with water in an absorber to form nitric acid. The desired strength acid is removed from the bottom of the absorber and makeup water is added to the top. Additional air is added at the absorber bottom to "bleach" the product acid and to supply oxygen for converting any remaining NO to NO<sub>2</sub>. The spent gas leaving the absorber is saturated with weak acid droplets which are removed in an acid mist separator. The gas then proceeds to the reheater, superheater, power recovery turbine, economizer, and exhaust stack. Production operators routinely sample the stack for unreacted NO<sub>x</sub>. This measurement is used to calculate NO<sub>x</sub> emissions from the exhaust stack.

The nitric acid produced in the ammonia oxidation process can be further concentrated. Ninety-eight percent (98%) nitric acid is made in the nitric acid concentrator. Fifty-six percent (56%) acid is distilled in the presence of magnesium nitrate salt solution. Concentrated acid vapors leaving the top of the column are condensed in the dehydration column condenser as cool- water entering the bottom of the condenser on the shell side flows upward to cool the vapors. 98% acid from the condenser is collected in a reflux tank. Vacuum is maintained on the column through the use of one or two steam ejectors depending on operating and weather conditions.

Various acid strengths can be produced by mixing 98% and 56% nitric acid. Existing storage tanks limit the ability to produce one or two specific blends at any one time.

Ammonium nitrate is made by neutralizing 56% nitric acid with anhydrous ammonia to produce a liquid solution that is approximately eighty-three percent (83%) ammonium nitrate and seventeen percent (17%) water. This reaction takes place within the neutralizer. Nitric acid is fed to the neutralizer to maintain a slightly acidic ammonium nitrate liquor which overflows to the adjusting tub. The adjusting tub pH is continuously monitored and ammonia is added as needed to complete the neutralization of acid to NAL. Water is evaporated from the neutralizer by the heat of reaction of nitric acid and ammonia.

Ammonium nitrate solution can then either be sent to the prill tower evaporator or else be stored, further concentrated and shipped as liquid product.

NAL is converted to a dry product by a process called "prilling". NAL is first concentrated in the prill tower (falling film-type) evaporator where the product flows down the inside surfaces of the tubes. The tubes are enclosed in a steam chest. This evaporator is located at the top of the prill tower. Steam pressure is controlled as necessary to evaporate the water and thus reduce the water content of the NAL. A flow of hot air is directed through the tubes countercurrent to the film of NAL flowing downward

from the top. The heat on the outside surface of the tubes boils water out of the NAL. The forced air stream carries the steam upward and exhausts through a stack.

The prills are formed by spraying the concentrated NAL from spray nozzles located at the top of a tall column called the “prill tower”. The NAL, melt flows out of each of the holes, creating a shower of droplets. These droplets cool while falling and form prills. There are six fans surrounding the louvered section at the bottom of the tower. One or more of these fans are utilized in warm weather to force outside air through the louvers and up the inside of the tower to cool the prills as they fall. At the bottom of the tower, the prills enter a series of concentric louvers that funnel the prills to a conveyor on the ground floor. The prills are then conveyed to the predryers. Emission from the prill tower is mostly particulate matter that escapes the tower with the countercurrent air.

The drying system consists of two processing lines. Each line includes three large drums (a predryer, dryer and cooler). An air stream is drawn through each drum. The air flows countercurrent to the prills as they move through each rotating drum. The air from the drying drum contains a considerable amount of entrained nitrate dust. This air is directed through hydroclean separators at each drum. The hydrocleans use a dilute water solution of nitrate to remove the dust.

The prills are then screened, coated and conveyed to bulk storage.

The stacked material in bulk storage is transferred via a conveyor to the final loadout system. Fines are conveyed off and stacked separately through a different system for later sales.

Ancillary equipment at the plant includes a wastewater treatment system, cooling towers, and a number of raw material and product storage tanks.

<b>Reported Air Pollutant Emissions (tons per year, rounded to tenths)</b>					
Pollutants	2012	2011	2010	2009	2008
Particulate Matter ≤ Ten Microns (PM <sub>10</sub> )	116.5	110.4	134.7	141.7	101.1
Particulate Matter ≤ 2.5 Microns (PM <sub>2.5</sub> )	64.1	53.0	64.8	82.4	57.2
Sulfur Oxides (SO <sub>x</sub> )	0.0	0.0	-- <sup>1</sup>	--	--
Nitrogen Oxides (NO <sub>x</sub> )	681.0	462.4	767.7	647.9	928.7
Volatile Organic Compounds(VOC)	0.2	0.2	--	--	--
Carbon Monoxide (CO)	2.0	1.5	--	--	--
Lead (Pb)	--	--	--	--	--
Hazardous Air Pollutants (HAPs) <sup>2</sup>	0.1	0.1	--	--	--

<sup>1</sup> “--” indicates that nothing was reported for this pollutant.

<sup>2</sup> HAPs may also be reported as particulate matter or VOCs.

<b>Reported Air Pollutant Emissions (tons per year, rounded to tenths)</b>					
Pollutants	2012	2011	2010	2009	2008
Ammonia (NH <sub>3</sub> )	11.8	20.6	28.9	21.0	25.2

**EMISSION UNITS WITH LIMITATIONS**

The following list provides a description of the equipment at this installation that emits air pollutants and that are identified as having unit-specific emission limitations.

<b>Emission Unit</b>	<b>Description</b>
E01	AMMONIA OXIDATION PROCESS
E02	NITRIC ACID STORAGE/BLEND
E03	AMMONIUM NITRATE NEUT.
E04	PRILL EVAPORATOR
E05	PRILLING TOWER
E06	#1 PRILL PREDRYER
E07	#1 PRILL DRYER
E08	#1 PRILL COOLER
E09	#2 PRILL PREDRYER
E10	#2 PRILL DRYER
E11	#2 PRILL COOLER
E12	PRILL REMELT EVAPORATOR
E13	PRILL BULK LOADOUT
E14	NITRIC ACID CONCENTRATOR
E15	98.991 MMBTU boiler.
E16	68% Nitric Acid Concentrator
	Various internal combustion engines

**EMISSION UNITS WITHOUT LIMITATIONS**

The following list provides a description of the equipment that does not have unit specific limitations at the time of permit issuance.

<b>Emission Unit</b>	<b>Description</b>
	Diesel Fuel and Gasoline Storage Tanks
	Parts Cleaning and Degreasing
	Laboratory Fume Hoods
	Ammonium Nitrate Solution Storage Tanks
	Screening and Coating Operations
	AN Prill Bulk Storage Building
	Fertilizer Solution Recovery Tank
	EDR Evaporator

**DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

- Construction permit number 102012-007, construction of a 68% nitric acid concentrator unit. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, Construction Permits Required.

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## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

The following requirements apply to *all conditions* in this permit, unless otherwise noted.

### **Monitoring:**

The permittee shall calibrate, maintain and operate all instruments and control equipment according to the manufacturer's recommendations or according to good engineering practices.

### **Recordkeeping:**

The permittee shall record all required recordkeeping (i.e. inspections and corrective actions) in an appropriate format. The permittee may keep their records electronically using a database or workbook system, as long as all required information is readily available for compliance determinations. The permittee's written inspection procedures will be made available to department personnel upon request.

### **Reporting<sup>3</sup>:**

- 1) The permittee shall report any exceedance of any of the terms imposed by this permit, or any malfunction which could cause an exceedance of any of the terms imposed by this permit, no later than ten (10) days after the exceedance or event causing the exceedance (unless otherwise specified in the specific condition), to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102
- 2) The permittee shall submit an annual certification<sup>4</sup> that they are in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. All deviations must be included in the compliance certifications. These certifications shall be submitted annually by **April 1<sup>st</sup>**, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to Environmental Protection Agency, Region VII, 11201 Renner Boulevard, Lenexa, KS 66219, and the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102.

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<sup>3</sup> Refer to 10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements, page 23, for additional details, including semi-annual reporting of monitoring data.

<sup>4</sup> Refer to 10 CSR 10-6.065(6)(C)3 Compliance Requirements, page 25, for more details.

### III. Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that the department issues this permit.

Visible Emission Sources		
Emission Unit	Stack ID	Description
E01	S01	AMMONIA OXIDATION PROCESS
E02	S02	NITRIC ACID STORAGE/BLEND
E03	S03	AMMONIUM NITRATE NEUT.
E04	S04	PRILL EVAPORATOR
E05	S05	PRILLING TOWER
E06	S06	#1 PRILL PREDRYER
E07	S07	#1 PRILL DRYER
E08	S08	#1 PRILL COOLER
E09	S09	#2 PRILL PREDRYER
E10	S10	#2 PRILL DRYER
E11	S11	#2 PRILL COOLER
E12	S12	PRILL REMELT EVAPORATOR
E14	S14	NITRIC ACID CONCENTRATOR
E15	S15	Natural gas fired boiler.
E16	S16	68% Nitric Acid Concentrator
<i>All Other Stacks</i>		All stacks of visible emissions, other than those listed above

#### Permit Condition 1

S15, S16 & All Other Stacks  
 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants<sup>5</sup>

#### **Emission Limitations:**

The permittee shall not discharge into the ambient air from any source, not exempted under 10 CSR 10-6.220, any air contaminant of opacity greater than twenty (20%) percent. A source with a 20% opacity limit may emit air contaminants with opacity over 20%, but not greater than 40% for an aggregate length of time not to exceed six (6) minutes in any 60 minutes. Where the presence of uncombined water is the only reason for failure of an emission to meet the opacity requirements, the opacity requirements shall not apply.

#### **Monitoring / Recordkeeping:**

The permittee will follow the monitoring and recordkeeping requirements listed in the *Core Permit Requirements* for 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants, starting on page 18.

<sup>5</sup> *New source*: any equipment, machine, device, article, contrivance or installation installed in the outstate Missouri area after February 24, 1971 or in the Springfield metropolitan area after September 24, 1971.

**Permit Condition 2**

S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S11, S12, S14  
 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants<sup>6</sup>

**Emission Limitations:**

The permittee shall not discharge into the ambient air from any source, not exempted under 10 CSR 10-6.220, any air contaminant of opacity greater than forty (40%) percent. A source with a 40% opacity limit may emit air contaminants with opacity over 40%, but not greater than 60% for an aggregate length of time not to exceed six (6) minutes in any 60 minutes. Where the presence of uncombined water is the only reason for failure of an emission to meet the opacity requirements, the opacity requirements shall not apply.

**Monitoring / Recordkeeping:**

The permittee will follow the monitoring and recordkeeping requirements listed in *Core Permit Requirements* for 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants, starting on page 18.

<b>Ammonium Nitrate Neutralizer</b>			
Equipment Number	Description	Control Devices	Permit Conditions
E03	Ammonium Nitrate Neutralizer, Constructed 1964, Continental Boilers and Sheet Iron Works	CD2, Mist Eliminator; CD3, Wet Cyclonic Separator; CD4, Demister; CD5, Tube & Shell Condenser	1

**Permit Condition 1**

E03  
 10 CSR 10-6.400 Control of Emission of Particulate Matter From Industrial Processes

**Emission Limitation:**

The permittee shall operate the *Control Devices* whenever the associated emission units are operating.<sup>7</sup>

**Monitoring / Recordkeeping:**

The permittee shall keep maintenance logs, using Attachment D (or its equivalent), which shall include the following:

- 1) Incidents of malfunction with impact on emissions, duration of event, probable cause, and corrective action.
- 2) Maintenance activities, inspection schedule, repair actions, and replacements, etc.

<sup>6</sup> *Existing source*-any equipment, machine, device, article, contrivance or installation installed or in construction in the outstate Missouri area on February 24, 1971 or in the Springfield metropolitan area on September 24, 1971.

Exception: If the source is altered, repaired, or rebuilt at a cost of fifty percent (50%) or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing, but shall be considered new as defined in this regulation.

<sup>7</sup> For this emission unit, the emission limit establishes a federal requirement for the control device and thus provides an exemption from the pound per hour limit.

<b>Boiler</b>			
Equipment Number	Description	Control Devices	Permit Conditions
E15	Victory Boiler (B-6003), 98.991 MMBtu per hour natural gas fired boiler, VS-4-68, constructed 05/20/2011	Low NO <sub>x</sub> burners with flue gas recirculation	

<b>Permit Condition 1</b>
E15 10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**Emission Limitation:**

- 1) The permittee shall use exclusively pipeline grade natural gas as defined in 40 CFR 72.2. or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels.
- 2) The permittee shall operate the low NO<sub>x</sub> burners as installed and per the manufacturer’s specifications.

**Recordkeeping:**

The permittee shall keep maintenance records for the boiler, including the low NO<sub>x</sub> burner. These records shall include incidents of malfunction (with impact on emissions), duration of event, probable cause, corrective actions, maintenance activities (with inspection schedule), repair actions, etc.

<b>68% Acid Concentrator</b>			
Equipment Number	Description	Control Devices	Permit Conditions
E16	68% Acid Concentrator, Pfaudler RT-4, manufactured 1981	C1, Condenser collects acid vapor from column top to return to system; C2, Condenser collects vapor not condensed in C1 to return to system; C3, Condenser collects weak distillate to send to acid storage or industrial sewer	

<b>Permit Condition 1</b>
E15 10 CSR 10-6.060 Construction Permits Required: Permit Number: 102012-007

**Emission Limitation:**

The permittee shall install, operate and maintain a high pressure shut down loop, which will initiate 68% concentrator unit shut down prior to reaching 15 pounds per square inch (psi).

**Monitoring:**

The permittee shall keep an operating and maintenance log for the high pressure shut down loop, which shall include the following:

- 1) Incidents of malfunction with impact on emissions, duration of event, probable cause, and corrective action.
- 2) Maintenance activities, inspection schedule, repair actions, and replacements, etc.

**Recordkeeping:**

The permittee shall use their computerized maintenance tracking system (SAP) will be used to track maintenance and repairs of the unit as an ongoing record.

<b>ICE Group</b>			
Equipment Number	Description	Location	Permit Conditions
	16 HP gasoline emergency generator installed in 1980's		
	305 HP diesel firewater pump installed 1993 (part of Ashland purchase effective 1/28/13)		
	20 HP gasoline emergency generator installed 1980's (part of Ashland purchase effective 1/28/13)		
	11 HP gasoline backup air compressor installed 1970's (part of Ashland purchase effective 1/28/13)		
	15 HP gasoline backup air compressor installed 2011 (part of Ashland purchase effective 1/28/13)		
	240 HP gasoline backup process water pump installed 1970's (part of Ashland purchase effective 1/28/13)		
	208 HP gasoline backup firewater pump installed 1970's (part of Ashland purchase effective 1/28/13)		

**Permit Condition 1**

ICE Group  
 10 CSR 10-6.070 New Source Performance Regulations  
 40 CFR Part 63, MACT Subpart ZZZZ —National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

**Emission Limitation:**

The permittee shall perform the following:

- 1) Change oil and filter every 500 hours of operation or annually, whichever comes first. [§63. 6602 and Table 2c]
- 2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first.
- 3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- 4) You may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the

- manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. [§63. 6640(f)(1)(ii)]
- 5) You shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [§63. 6625(e)]
  - 6) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions you shall install a non-resettable hour meter if one is not already installed. [§63. 6625(f)]
  - 7) You shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after with time the emission standards applicable to all times other than startup in Table 2c to this subpart apply. [§63. 6625(h)]
  - 8) You shall be in compliance with the emission limits and operating limitations in this subpart that apply to you at all times. At all times, you shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [§63.6605]

**Notification and Reporting:**

The permittee shall report all deviations as defined in the *General Permit Requirements* Section in the semi-annual monitoring report. [§63.6650(f)]

**Recordkeeping:**

The permittee shall keep the following records:

- 1) Records of the occurrence and duration of each malfunction of operation or the air pollution control equipment and monitoring equipment. [§63.6655(a)]
- 2) Records of all required maintenance performed of the air pollution control and monitoring equipment.
- 3) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal and usual manner of operation.
- 4) Keep records to show continuous compliance with each operating limitation that applies by [§63.6655(d), §63.6640(a), and Table 6]:
  - a) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
  - b) Develop and follow your own maintenance plan which shall provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- 5) You shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. [§63.6655(e)]
- 6) Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [§63.6655(f)]

## IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. Consult the appropriate sections in the Code of Federal Regulations (CFR), the Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

### **10 CSR 10-6.045 Open Burning Requirements**

- 1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
- 2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - a) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
    - ii) Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
    - iii) St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
    - iv) St. Louis metropolitan area. The open burning of household refuse is prohibited;
  - b) Yard waste, with the following exceptions:
    - i) Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
    - ii) Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
    - iii) St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      - (1) A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      - (2) A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      - (3) The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      - (4) In each instance, the twenty-one (21)-day burning period shall be determined by the director of Public Health and Welfare of the City of St. Joseph for the region in which the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the department director; and

- iv) St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- 3) Certain types of materials may be open burned provided an open burning permit is obtained from the director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- 4) Dyno Nobel Inc. may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Dyno Nobel Inc. fails to comply with the provisions or any condition of the open burning permit.
- a) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- 5) Reporting and Recordkeeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005 shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the director.
- 6) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971 is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

#### **10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions**

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
- a) Name and location of installation;
- b) Name and telephone number of person responsible for the installation;
- c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
- d) Identity of the equipment causing the excess emissions;
- e) Time and duration of the period of excess emissions;
- f) Cause of the excess emissions;
- g) Air pollutants involved;
- h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;

- i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
  - 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under Section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under Section 643.080 or 643.151, RSMo.
  - 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under Sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
  - 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

#### **10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61 Subpart M National Emission Standard for Asbestos**

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.

- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

#### **10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall submit full emissions report either electronically via MoEIS, which requires Form 1.0 signed by an authorized company representative, or on Emission Inventory Questionnaire (EIQ) paper forms on the frequency specified in this rule and in accordance with the requirements outlined in this rule. Alternate methods of reporting the emissions, such as spreadsheet file, can be submitted for approval by the director.
- 2) The permittee may be required by the director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the emissions report.
- 6) The permittee shall complete required reports on state supplied EIQ forms or electronically via MoEIS. Alternate methods of reporting the emissions can be submitted for approval by the director. The reports shall be submitted to the director by April 1 after the end of each reporting year. If the full emissions report is filed electronically via MoEIS, this due date is extended to May 1.
- 7) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 8) The permittee shall collect, record and maintain the information necessary to complete the required forms during each year of operation of the installation.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

#### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

**10 CSR 10-6.170**

**Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin<sup>8</sup>**

**Emission Limitation:**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

**Monitoring:**

The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.

The permittee shall maintain the following monitoring schedule<sup>9</sup>:

- 1) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.
- 2) Should no violation of this regulation be observed during this period then-
  - a) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
  - b) If a violation is noted, monitoring reverts to weekly.
  - c) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once per month.
    - ii) If a violation is noted, monitoring reverts to weekly.
- 3) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency.

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<sup>8</sup> Dyno Nobel Inc. and Hercules share a common property boundary between the two adjacent facilities. At one time, the two chemical manufacturing plants were part of the same company, Hercules Incorporated. The two facilities share common utilities for steam, air, water and electricity, each sharing in the associated costs.

In regards to 10 CSR 10-6.170, Hercules and Dyno Nobel have agreed to consider the "property line of origin" the outer perimeter of the "combined properties of both facilities".

<sup>9</sup> The reissuance of this operating permit will not affect the frequency of monitoring. The permittee may continue their current monitoring schedule-for all affected emission units.

**Recordkeeping:**

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

**10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

**10 CSR 10-6.165 Restriction of Emission of Odors**

**This requirement is not federally enforceable.**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour. This odor evaluation shall be taken at a location outside of the installation's property boundary.

**10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions in excess of the limits specified by this rule. This permit will contain the opacity limits identified (10, 20 or 40 percent) for the specific emission units.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on each emission unit using the procedures contained in U.S. EPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The permittee must maintain the following monitoring schedule<sup>10</sup>:
  - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after permit issuance.

<sup>10</sup> The reissuance of this operating permit will not affect the frequency of monitoring. The permittee may continue their current monitoring schedule-for all affected emission units.

- b) Should the permittee observe no violations of this regulation during this period then-
  - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
  - ii) If a violation is noted, monitoring reverts to weekly.
  - iii) Should no violation of this regulation be observed during this period then-
    - (1) The permittee may observe once per month.
    - (2) If a violation is noted, monitoring reverts to weekly.
- 3) If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency.

**Recordkeeping:**

The permittee shall maintain records of all observation results using Attachments B or C (or their equivalent), noting:

- 1) Whether any air emissions (except for water vapor) were visible from the emission units;
- 2) All emission units from which visible emissions occurred;
- 3) Whether the visible emissions were normal for the process;
- 4) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions; and,
- 5) The permittee shall maintain records of all U.S. EPA Method 9 opacity tests performed.

**10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements**

The permittee shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the department. Certain business entities that meet the requirements for state-approved exemption status must allow the department to monitor training classes provided to employees who perform asbestos abatement.

**Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
- 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.

- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
- a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

### **10 CSR 10-6.065(6)(C)1.B Permit Duration**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### **10 CSR 10-6.065(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)**

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

#### **10 CSR 10-6.065(6)(C)1.F Severability Clause**

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

#### **10 CSR 10-6.065(6)(C)1.G General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to

the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

#### **10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions**

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

#### **10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios**

None

#### **10 CSR 10-6.065(6)(C)3 Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;

- b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
- c) Whether compliance was continuous or intermittent;
- d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
- e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

#### **10 CSR 10-6.065(6)(C)6 Permit Shield**

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
  - a) The applicable requirements are included and specifically identified in this permit, or
  - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
  - a) The provisions of Section 303 of the Act or Section 643.090, RSMo concerning emergency orders,
  - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,
  - c) The applicable requirements of the acid rain program,
  - d) The authority of the Environmental Protection Agency and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
  - e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

#### **10 CSR 10-6.065(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

### **10 CSR 10-6.065(6)(C)8 Operational Flexibility**

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under Section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting or compliance requirements of the permit.
  - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days' notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

### **10 CSR 10-6.065(6)(C)9 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 11201 Renner Blvd., Lenexa, KS 66219, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

- c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
- d) The permit shield shall not apply to these changes.

#### **10 CSR 10-6.020(2)(R)12 Responsible Official**

The current responsible official for this facility is Samuel J. Correnti, Jr., Plant Manager. Mr. Samuel J. Correnti, Jr. has been the responsible official of record since August 10, 2012. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

#### **10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) receives notice from the Environmental Protection Agency (EPA) that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) The Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire;or
- c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) The Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

#### **10 CSR 10-6.065(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## **VI. Attachments**

Attachments follow.









## STATEMENT OF BASIS

### Permit Reference Documents

The department relied on these documents in the preparation of the operating permit. The department did not incorporate these by reference; therefore, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received August 22, 2003; revised February 20, 2012;
- 2) Most recent five (5) years of Emissions Inventory Questionnaire (MoEIS data system), [2011, 2010, 2009, 2008 and 2007]; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

None

### Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program (APCP) has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

#### 10 CSR 10-6.100, Alternate Emission Limits

This rule applies to installations that emit volatile organic compounds in the ozone nonattainment areas of the state. Since this installation is in an ozone attainment area, it is not subject to this rule.

#### 10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

This rule does not apply to E15, Natural gas-fired boiler based on the following rule exemptions:

- (1)(A) This rule applies to any installation that is an emission source of sulfur compounds, except—*
  - 1. Emission sources subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070; or*
  - 2. Combustion equipment that uses exclusively pipeline grade natural gas as defined in 40 CFR 72.2. or liquefied petroleum gas as defined by American Society for Testing and Materials (ASTM), or any combination of these fuels.*

#### 10 CSR 10-6.400, Restriction of Particulate Matter from Industrial Processes

Screening & Coating. These are considered to be an insignificant source according to present APCP policy, even though 10 CSR 10-6.220 and 10 CSR 10-6.400 apply, due to potential emissions being less than 200 lbs/year, based on best engineering judgment. These processes take place in a fully enclosed area after the dust has been drawn off by a counter-current of air through the drying drums. In addition, the application of wet coating prevents further dust emissions.

### Construction Permit Revisions

The following revisions were made to construction permits for this installation:

None

### **New Source Performance Standards (NSPS) Applicability Issues**

10 CSR 10-6.070, New Source Performance Regulations

40 CFR Part 60, Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction Or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.*

40 CFR Part 60, Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction Or Modification Commenced After May 19, 1978, and Prior to July 23, 1984.*

40 CFR Part 60, Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction Or Modification Commenced After July 23, 1984.*

- 1) Diesel Fuel and Gasoline Storage Tanks: The storage tanks are listed in the installation description, but no reference to the tanks is made in the permit document. The tanks' capacities are each less than 10,567 gallons and thus too small for NSPS Subparts K, Ka, or Kb to be applicable.
- 2) Prill Coating and Additives Storage Tanks: These are considered to be an insignificant source due to there being no specific applicable requirements and potential emissions being less than de minimis levels. Neither the prill coating nor the additives contain VOC or HAPs. Thus, NSPS Subparts K, Ka, and Kb and NESHAPS Subpart V are not applicable.
- 3) Ammonium Nitrate Solution Storage Tanks: These are considered to be an insignificant source due to there being no specific applicable requirements and potential emissions being less than de minimis levels. Construction Permit #0893-003 was obtained for one of these tanks – a 7,000 ton stainless steel tank; however, the permit contained no special conditions.

40 CFR Part 60, Subpart G, Standards of Performance for Nitric Acid Plants

The emission units at this installation related to the production of nitric acid were not constructed or modified after August 17, 1971. Therefore, the above regulation was not cited in the operating permit.

If the installation should undertake any projects, in the future, which involve construction, reconstruction, or modification of any equipment related to the production of nitric acid, the installation must follow all applicable requirements of the above rule related to that specific project.

40 CFR Part 60 Subpart Ga New Source Performance Standards for Nitric Acid Plants (NSPS);

Under Section III. summary of the final NSPS paragraph A. a Nitric Acid Production Unit (NAPU) is defined as “any facility producing weak nitric acid by either the pressure or atmospheric pressure process”. The 68% concentrator unit will not produce any weak nitric acid; it will use nitric acid (56%) produced at the ammonia oxidation process and concentrate it to 68% via the use of excess process steam to drive off moisture. The unit does not incorporate the use of either the pressure or atmospheric pressure process to produce nitric acid.

Under Section III. summary of the final NSPS paragraph B., the specific pollutant listed to be regulated under the NSPS is NO<sub>x</sub>. Dyno Nobel Inc. believes this NO<sub>x</sub> limitation specifically applies to continuous NO<sub>x</sub> emissions from acid producing units. The 68% concentrator unit does not produce acid and will not produce any emissions under normal operations. Under malfunction conditions (as previously reported), the emitted pollutant will primarily be nitric acid vapor which may cause the

formation of minimal amounts of NO<sub>x</sub>. The proposed 68% nitric acid concentrator does not produce nitric acid; therefore, the referenced NSPS rule does not apply.

### **Maximum Achievable Control Technology (MACT) Applicability Issues**

10 CSR 10-6.075, Maximum Achievable Control Technology Regulations

40 CFR Part 63, Subpart T, National Emission Standards for Halogenated Solvent Cleaning

The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. Wipe cleaning activities, such as using a rag containing halogenated solvent are not covered under the provisions of this subpart.

**Parts Cleaning and Degreasing.** This is considered to be an insignificant source due to there being no specific applicable requirements and potential emissions being less than de minimis levels. The parts cleaner/degreaser does not contain HAPs; thus, MACT Subpart T is not applicable.

40 CFR Part 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers

The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals on or after September 8, 1994, and are either major sources or are integral parts of facilities that are major sources as defined in 40 CFR 63.401.

Chromium-based compounds are not used in any of the cooling towers at this installation. Therefore, the above regulation was not cited in the operating permit.

If the installation should, in the future, use any chromium-based compounds in any of its cooling towers, the installation must follow all of the applicable requirements of the above rule.

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability Issues**

None

### **Compliance Assurance Monitoring (CAM) Applicability Issues**

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard. At one point, the department believed that CAM did apply to E03. However, exemptions in state rule 10 CSR 10-6.400, now removed any specific emission limit, leaving only visible emissions and control device maintenance limits in place.

Therefore, CAM does not apply.

### **Greenhouse Gas Emissions**

This installation is a major source for greenhouse gases. Major stationary sources are required by the Clean Air Act (CAA) to obtain Part 70 operating permits. While Part 70 permits generally do not

establish new emissions limits, they consolidate applicable requirements, as defined in Missouri State Regulations 10 CSR 10-6.020(2)(A)23, into a comprehensive air permit. At the time of permit issuance, there were no applicable GHG requirements for this source.

Note that this source is subject to the Greenhouse Gas Reporting Rule. However, the preamble of the GHG Reporting Rule clarifies that Part 98 requirements do not have to be incorporated in Part 70 permits operating permits at this time. In addition, Missouri regulations do not require the installation to report CO<sub>2</sub> emissions in their Missouri Emissions Inventory Questionnaire; therefore, the installation's CO<sub>2</sub> emissions were not included within this permit. The applicant is required to report the data directly to EPA.

**Updated Potential to Emit for the Installation**

Pollutant	Potential to Emit (short tons/year) <sup>11</sup>
CO	16.3
CO <sub>2</sub> e	490,000.0 <sup>12</sup>
HAP	0.8
NO <sub>x</sub>	1,138.5
PM <sub>10</sub>	197.1
PM <sub>25</sub>	109.9
SO <sub>x</sub>	0.3
VOC	1.7

**Other Regulatory Determinations**

10 CSR 10-6.400, Restriction of Emission of Particulate Matter From Industrial Processes

An analysis of 10 CSR 10-6.400 limits can be found in Enclosure A to the *Statement of Basis*. The analysis demonstrates that all emission units qualify for one of three exemptions to the rule. Only one unit, E03, needs the control devices to meet the limit. However, the combined control efficiencies are greater than ninety percent (90%), thereby also qualifying for an exemption. A permit condition has been included for E03 to insure that a control efficiency greater than 90% is maintained.

10 CSR 10-6.170, Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

This regulation applies to fugitive particulate emissions, with the intent of restricting and preventing fugitive emissions from traveling off property. Dyno Nobel Inc. and Hercules share a common property boundary between the two adjacent facilities. At one time, the two chemical manufacturing plants were part of the same company, Hercules Incorporated. The two facilities share common utilities for steam, air, water and electricity; each sharing in the associated costs.

In regards to 10 CSR 10-6.170, Hercules and Dyno Nobel have agreed to consider the “property line of origin” the outer perimeter of the “combined properties of both facilities”.

<sup>11</sup> Each emission unit was evaluated at 8,760 hours of uncontrolled annual operation unless otherwise noted.

<sup>12</sup> The value reported by the permittee for their CO<sub>2</sub>e for 2012 was 407,712 metric tons. That was down 2% from the 2011 level. The permittee's calculated CO<sub>2</sub> was 5,668 metric tons.

**Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

1. The specific pollutant regulated by that rule is not emitted by the installation;
2. The installation is not in the source category regulated by that rule;
3. The installation is not in the county or specific area that is regulated under the authority of that rule;
4. The installation does not contain the type of emission unit which is regulated by that rule;
5. The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

Prepared by:

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Randy E. Raymond  
Environmental Technician

**Enclosure A: 10 CSR 10-6.400 Analysis**

EU	Description	Process Weight Rate (ton/hr)	Emission Factor (lb/ton)	Capture Device Efficiency (%)	Control Device Efficiency (%)	Uncontrolled Emission Rate (lb/hr)	Controlled Emission Rate (lb/hr)	Allowable Emission Rate (lb/hr)	PTE is less than 0.5 lbs per hour? (with control / without control)	Is unit in compliance without controls?	Is the Control Efficiency Greater Than 90%?	Is unit in compliance with controls?	PTE as percentage of Allowable
E03	AMMONIUM NITRATE NEUT.	47.000	4.35	100	99.4	204.45	1.29	44.00	NO	NO	YES	YES	3%
E04	PRILL EVAPORATOR	40.000	0.52	100	50.0	20.80	10.40	42.53	NO	YES	NO	YES	24%
E05	PRILLING TOWER	40.000	0.7636	100	0.0	30.54	30.54	42.53	NO	YES	NO	YES	72%
E06	#1 PRILL PREDRYER	20.000	0.2288	100	99.0	4.58	0.05	30.51	YES/w	YES	YES	YES	0%
E07	#1 PRILL DRYER	20.000	0.1716	100	99.0	3.43	0.03	30.51	YES/w	YES	YES	YES	0%
E08	#1 PRILL COOLER	20.000	0.2064	100	99.0	4.13	0.04	30.51	YES/w	YES	YES	YES	0%
E09	#2 PRILL PREDRYER	20.000	0.2288	100	99.0	4.58	0.05	30.51	YES/w	YES	YES	YES	0%
E10	#2 PRILL DRYER	20.000	0.1716	100	99.0	3.43	0.03	30.51	YES/w	YES	YES	YES	0%
E11	#2 PRILL COOLER	20.000	0.2064	100	99.0	4.13	0.04	30.51	YES/w	YES	YES	YES	0%
E12	PRILL REMELT EVAPORATOR	7.000	0.52	100	99.0	3.64	0.04	15.10	YES/w	YES	YES	YES	0%
E13	PRILL BULK LOADOUT	100.000	0.02	100	0.0	2.00	2.00	51.28	NO	YES	NO	YES	4%



Jeremiah W. (Jay) Nixon, Governor

Sara Parker Pauley, Director

# DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

## MEMORANDUM

DATE: August 5, 2013

TO: 2003-08-093

FROM: Randall E. Raymond, Environmental Technician

SUBJECT: Response to Public Comments

Three comments were received on the draft operating permit. They are all from U.S. EPA Region VII staff. The comments are addressed in the order in which they appear within the letter(s).

**Comment 1:** There are too many Permit Condition #1's which in the long run could prove to be a source of confusion. Therefore I'd suggest a sequential numbering of Permit Conditions from 1 to 5.

**Response to Comment:** The department disagrees with the commenter. All the permit conditions are separated by *Emission Unit* listings and descriptions. In addition, each title "Permit Condition" is followed and references specific emission unit identification numbers. The following shows how they are listed in the Table of Contents:

III.-EMISSION-UNIT-SPECIFIC-EMISSION-LIMITATIONS.....	8 ¶
VISIBLE-EMISSION-SOURCES .....	8 ¶
Permit-Condition-1 .....	8 ¶
S15,S16 & All-Other-Stacks-10-CSR-10-6.220-Restriction-of-Emission-of-Visible-Air-Contaminants .....	8 ¶
Permit-Condition-2 .....	9 ¶
S01,S02,S03,S04,S05,S06,S07,S08,S09,S10,S11,S12,S14,10-CSR-10-6.220-Restriction-of-Emission-of-Visible-Air-Contaminants .....	9 ¶
Ammonium-Nitrate-Neutralizer .....	9 ¶
Permit-Condition-1 .....	9 ¶
E03-10-CSR-10-6.400-Control-of-Emission-of-Particulate-Matter-From-Industrial-Processes .....	9 ¶
Boiler .....	10 ¶
Permit-Condition-1 .....	10 ¶
E15-10-CSR-10-6.070-New-Source-Performance-Regulations-40-CFR-Part-60,Subpart-A-General-Provisions-and-Subpart-Dc-Standards-of-Performance-for-Small-Industrial-Commercial-Institutional-Steam-Generating-Units .....	10 ¶
68%-Acid-Concentrator .....	10 ¶
Permit-Condition-1 .....	10 ¶
E15-10-CSR-10-6.060-Construction-Permits-Required-Permit-Number-102012-007 .....	10 ¶
ICE-Group .....	11 ¶
Permit-Condition-1 .....	11 ¶
ICE-Group-10-CSR-10-6.070-New-Source-Performance-Regulations-40-CFR-Part-63,MACT-Subpart-ZZZZ-National-Emissions-Standards-for-Hazardous-Air-Pollutants-for-Stationary-Reciprocating-Internal-Combustion-Engines-(compliance-not-required-before-May-3,2013) .....	11 ¶

The following is an example of what the Permit Conditions look like:

<p style="text-align: center;"><b>Permit Condition 2</b></p> <p>S01, S02, S03, S04, S05, S06, S07, S08, S09, S10, S11, S12, S14</p> <p>10-CSR-10-6.220 Restriction of Emission of Visible Air Contaminants</p>
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There are six (6) permit conditions in the entire operating permit, not five (5). The operating permit was not changed as a result of this comment.

**Comment 2:** The ICE group Permit Condition includes some references to the fact that the compliance date for these requirements is May 3, 2013. Obviously, this operating permit will be issued well after the compliance date. Therefore, you may want to consider alternate wording to be sure that Dyno Nobel is in compliance with the 40 CFR 63, subpart ZZZZ standards at the time of operating permit issue.

**Response to Comment:** The department agrees with the commenter. The reference to the May 3, 2013 compliance deadline has been removed. The permittee has filed a statement that they are in compliance with Part 63 ZZZZ. They have started engine logs and maintenance records on May 2, 2013. The operating permit was changed as a result of this comment.

**Comment 3:** Several of the draft permit conditions include a mix of the modal verbs “shall” and “must” to describe the permittee’s obligation. It is MDNR’s customary practice to use “shall” throughout all the permit condition requirements and EPA would therefore recommend the use of “shall” in lieu of “must.”

**Response to Comment:** The department agrees with the commenter. All “must” words in the permit conditions have been changed to “shall”. The operating permit was changed as a result of this comment.

RER/kjc