

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

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

Permit Number: **07 2 009 - 004** Project Number: 2008-09-026

Parent Company: EBV Explosives Environmental Company

Parent Company Address: P.O. Box 1386, Joplin, Missouri 64802

Installation Name: EBV Explosives Environmental Company

Installation Address: 3078 County Road 180, Joplin, Missouri 64802

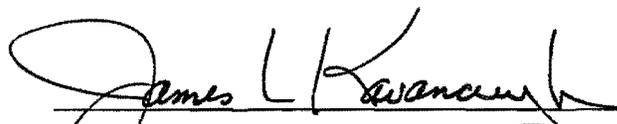
Location Information: Jasper County, S25, T28N, R32

Application for Authority to Construct was made for:  
 The construction of a thermal treatment chamber to remove the propellant from rocket motors. This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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

JUL = 2 2009

EFFECTIVE DATE

  
 DIRECTOR OR DESIGNEE  
 DEPARTMENT OF NATURAL RESOURCES

## STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

**You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review.** In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the departments' Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

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**SPECIAL CONDITIONS:**

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

*The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."*

EBV Explosives Environmental Company  
Jasper County, S25, T28N, R32

1. Stack Testing Requirements
  - A. EBV Explosives Environmental Company (EBV EEC) shall conduct initial performance testing on the Propellant Thermal Treatment Facility (PTTF) (EP1) to confirm the emission rates shown in Table 1. These tests shall be done in accordance with the procedures outlined below.

Table 1: Summary of Emission Rates (lb/hr)

Pollutant	Emission Rate
Particulate Matter less than 10 microns in Diameter (PM <sub>10</sub> )	0.632
Nitrogen oxides (NO <sub>x</sub> )	0.571
Hydrogen Chloride	0.270
Dioxins/Furans (TEQ) <sup>1</sup>	9.7E-09

<sup>1</sup>Dioxins/Furans (TEQ) means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

- B. A completed Proposed Test Plan (form enclosed) must be submitted to the Air Pollution Control Program at least 30 days prior to the proposed test date of any such performance tests so that a pretest meeting may be arranged, if necessary, and to assure that the test date is acceptable for an observer to be present. The Proposed Test Plan must include specification of test methods to be used and be approved by the director prior to conducting the required emissions testing.
    - C. Within 60 days of achieving the maximum design rate of the PTTF, the owner/operator shall have conducted the required performance tests.

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#### SPECIAL CONDITIONS:

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

- D. Two copies of a written report of the performance test results must be submitted to the director within 90 days of completion of the performance testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required Environmental Protection Agency (EPA) Method for at least one sample run for each air pollutant tested.
  - E. No later than 30 days after the performance test results are submitted, EBV EEC shall provide the director with a report that establishes the emission rate of each air pollutant tested in Special Conditions No. 1.A. This report shall report the emission rates in pounds per hour and tons per year in order that the Air Pollution Control Program may verify the potential emissions from this project.
  - F. If the results of the performance testing shows that the emission rates are greater than those used in the emissions analysis herein, then EBV EEC shall evaluate what effects these higher emission rates would have had on the permit applicability and modelling applicability of this project. EBV EEC shall submit the results of any such evaluation within 30 days of submitting the Performance Test Results report required in Special Conditions 1.E. of this permit.
  - G. The above time frames associated with this performance testing condition may be extended upon request of EBV EEC and approval by the director.
2. Propellant Thermal Treatment Chamber Requirements
- A. EBV EEC shall control the feed rate to the Propellant Thermal Treatment Chambers (PTTC) (EU1) and (EU2) to a maximum of 1.01 tons (gross motor weight) per hour.
  - B. EBV EEC shall limit the feed material to the PTTC units (EU1) and (EU2) to M26 MLRS rocket motor segments as specified in the application.
  - C. EBV EEC shall record the total amount of rocket motor segments

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

combusted in each PTTC (EU1) and (EU2) in units of gross motor weight at least once every day.

- D. EBV EEC shall maintain an operating and maintenance log for the Propellant Thermal Treatment Chambers (EU1) and (EU2) which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
3. Cyclone Requirements
- A. EBV EEC shall control emissions from the Propellant Thermal Treatment Chambers (EU1) and (EU2) using cyclones (CD1) and (CD2) as specified in the permit application. The cyclones (CD1) and (CD2) shall be operated and maintained in accordance with the manufacturer's specifications.
  - B. EBV EEC shall maintain an operating and maintenance log for the cyclones (CD1) and (CD2) which shall include the following:
    - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
    - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.
4. Spray Dryer Requirements
- A. EBV EEC shall control emissions from the PTTCs (EU1) and (EU2) using a spray dryer (CD3) as specified in the permit application. The spray dryer (CD3) shall be operated and maintained in accordance with the manufacturer's specifications.
  - B. EBV EEC shall install, certify, operate, calibrate, and maintain a Continuous Emission Monitoring System (CEMS) to measure and record the hydrogen chloride in the feed stream entering the spray dryer (CD3) and exiting the exhaust stack (EP1).
  - C. EBV EEC shall control and record the feed rate of soda ash to the spray dryer (CD3) using the CEMS results for hydrogen chloride as specified in the application.
  - D. EBV EEC shall maintain an operating and maintenance log for the

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## SPECIAL CONDITIONS:

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

spray dryer (CD3) and auxillary equipment which shall include the following:

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

### 5. Baghouse Requirements

- A. EBV EEC shall control emissions from the Propellant Thermal Treatment Chambers (EU1) and (EU2) using baghouses (CD4, CD5, and CD6) as specified in the permit application. The baghouses (CD4, CD5, and CD6) shall be operated and maintained in accordance with the manufacturer's specifications. Each baghouse shall be equipped with a gauge or meter, which indicates the pressure drop across the control device. These gauges or meters shall be located such that the DNR employees may easily observe them. Replacement filters for the baghouses (CD4, CD5, and CD6) shall be kept on hand at all times. The bags shall be made of polyamide as specified in the application.
- B. EBV EEC shall monitor and record the operating pressure drop across the baghouses (CD4, CD5, and CD6) at least once every 24 hours. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's performance warranty.
- C. EBV EEC shall install and monitor a broken bag detector for each baghouse (CD4, CD5, and CD6) that indicates when a baghouse has exceeded an emission rate of one (1) microgram per cubic meter of particulate matter.
- D. EBV EEC shall maintain an operating and maintenance log for the baghouses (CD4, CD5, and CD6) which shall include the following:
  - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

### 6. Induced Draft Fan Requirements

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#### SPECIAL CONDITIONS:

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

- A. EBV EEC shall capture emissions from the Propellant Thermal Treatment Chambers (EU1) and (EU2) and maintain the PTTC under negative pressure using induced draft fans (CD7 and CD8) as specified in the application.
- B. EBV EEC shall determine the minimum stack flow necessary to achieve a minimum air velocity of 200 feet per minute at each opening in the PTTCs (EU1) and (EU2).
- C. EBV EEC shall continuously monitor and record the stack flow to demonstrate compliance with special condition 6.B.
- D. Each PTTC (EU1) and (EU2) shall be equipped with a gauge or meter which indicates the pressure inside the chamber. Each PTTC (EU1) and (EU2) shall be maintained at a minimum pressure differential of -0.1 inches of water column. EBV EEC shall monitor and record the operating pressure inside the PTTC (EU1) and (EU2) at least once every 24 hours. These gauges or meters shall be located such that the DNR employees may easily observe them.
- E. EBV EEC shall maintain an operating and maintenance log for the fans (CD7 and CD8) which shall include the following:
  - 1) Incidents of malfunction, with impact on emissions, duration of event, probable cause, and corrective actions; and
  - 2) Maintenance activities, with inspection schedule, repair actions, and replacements, etc.

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

Project Number: 2008-09-026  
Installation ID Number: 097-0138  
Permit Number:

EBV Explosives Environmental Company  
3078 County Road 180  
Joplin, MO 64802

Complete: October 7, 2008

Parent Company:  
EBV Explosives Environmental Company  
P.O. Box 1386  
Joplin, MO 64802

Jasper County, S25, T28N, R32

REVIEW SUMMARY

- EBV EEC has applied for authority to construct a combustion chamber to thermally treat the rocket propellant for the M26 Multiple Launch Rocket System (MLRS).
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are hydrogen chloride (HCl) (CAS# 7647-01-0) and dioxins/furans which are products from the combustion of the ammonium perchlorate based rocket propellant.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- The Maximum Achievable Control Technology (MACT) standard, 40 CFR Part 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors* does not apply to the proposed equipment because the thermal treatment chamber does not meet the 40 CFR 260.10 definition of an incinerator as referenced in the MACT.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to the proposed equipment.
- Cyclones, a spray dryer and bag houses are being used to control the particulate and hydrogen chloride emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions considering controls of particulate matter less than 10 microns in diameter (PM<sub>10</sub>) and HCl are below de minimis levels.

- This installation is located in Jasper County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels and below screening model action levels.
- Emissions testing are required for the equipment.
- An amendment to your Part 70 Operating Permit is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

### INSTALLATION DESCRIPTION

EBV EEC is a reactive hazardous waste processing facility located in Jasper County, Missouri near the city of Joplin. EBV EEC operates two incinerators for the sole purpose of disposing of reactive hazardous wastes. The hazardous wastes include explosive/reactive materials, explosive and energetic devices, propellants, nitroglycerin containing pharmaceuticals, ammunition and materials contaminated with explosive/reactive waste. The facility accepts hazardous waste from the following groups: government agencies, such as the Department of Defense, the explosives manufacturing industry, users of explosive devices and materials, and various other manufacturing industries.

The facility operates two hazardous waste incinerators which are subject to the Hazardous Waste Combustor MACT, 40 CFR 63 Subpart EEE. As a requirement of this MACT, the facility obtained a Part 70 Operating Permit from the Air Pollution Control Program (APCP) in 2002. The facility also holds a Hazardous Waste Facility Permit, known as an RCRA permit, from the Missouri Department of Natural Resources. The following table summarizes the construction permits that have been issued to EBV EEC from the APCP.

Table 2: Summary of Construction Permits

Permit Number	Description
0990-002	The installation of two (2) hazardous waste incinerators.
0894-007	The installation of a diesel fired emergency generator.
0990-002B	The elimination of the direct liquid feed system for the incinerator.

## PROJECT DESCRIPTION

EBV EEC proposes to construct an MLRS disassembly building for the demilitarization of the M26 MLRS rockets. No potential emissions are expected from the disassembly of the rockets. Upon separation from the warhead, the rocket motor is considered reactive hazardous waste and will be transferred to another building known as the PTF.

As part of this project, EBV EEC proposes to construct the building known as the PTF which will be equipped with two (2) thermal treatment chambers (EU1) and (EU2) for the destruction of the propellant used in the MLRS rocket motors. At this stage of the process, each rocket motor weighs approximately 336.6 lbs of which 216.5 lbs are an ammonium perchlorate based propellant. The following table is a summary of the constituents in the liquid propellant mixture. It is assumed that the isocyanates and maleic anhydride are completely consumed in a reaction with HTPB to bind the ammonium perchlorate, an oxidizer, with the aluminum fuel to create a solid rocket fuel.

Table 3: Composition of MLRS Rocket Motor Propellant: Arcadene 360B

Chemical Name	CAS Number	% by Weight
Ammonium Perchlorate	7790-98-9	69
Aluminum Powder	7429-90-5	18
Hydroxyl-terminated polybutadiene (HTPB)	69102-90-5	9.15
Dioctyl Adipate	103-23-1	2
Iron Oxide	1332-37-2	1
Isophorone Diisocyanate (IPDI)	4098-71-9	0.65
Tetraethylenepentami	112-57-2	0.15
Maleic Anhydride	108-31-6	0.025
Triphenyl Bismuth	603-33-8	0.025

Each rocket motor is approximately nine (9) inches in diameter and seven (7) feet long. The first step in the destruction of the propellant is to dissect the rocket motor into 8 -10 segments with an underwater saw. The rocket motor segments are then transferred to one of two thermal treatment chambers (EU1) and (EU2) where the segment is ignited by a 0.008 MMBTU/hr natural gas fired torch (EU3). Once ignited, the segment travels through the combustion chamber (EU1) or (EU2) inside a rotary conveying system and is allowed to burn itself out. Each thermal treatment chamber (EU1) and (EU2) can process up to 3 rocket motors per hour, for a combined maximum hourly design rate of 1299 lbs propellant per hour (or 1.01 tons rocket motor gross weight per hour). Although the combustion process allows the motor to burn on its own, the combustion is controlled by restricting the feed rate of the propellant which consists of a fuel (aluminum) and an oxidizer (ammonium perchlorate) with a binder. To prevent the chambers from exceeding maximum safe operating temperatures, the temperature will be monitored and the feed rate controlled to stay within safe operating temperatures.

The atmosphere in the combustion chambers (EU1) and (EU2) is held under negative pressure by induced draft fans (CD7) and (CD8) located toward the end of the air pollution control system (APCS). The APCS includes cyclones (CD1) and (CD2), a spray dryer (CD3) and bag houses (CD4, CD5, CD6). A thermal oxidizer will also be installed after the cyclones and is equipped with a 2.5 MMBTU/hr natural gas fired burner. However the function of the thermal oxidizer is not to combust any residual

organics, but rather to heat the system during start-up. Using the thermal oxidizer as a control device would make the proposed project subject to the hazardous waste combustor MACT 40 CFR 63 Subpart EEE. EBV EEC does not want the PTF to be subject to the MACT therefore EBV EEC has decided not to use the thermal oxidizer while rocket motors are being treated in the PTF units (EU1) and (EU2). As the thermal oxidizer will not be used as a control device during normal operation, it is not included in the discussion of the APCS.

It has also been determined that the use of a natural gas fired torch to ignite the MLRS rocket propellant does not satisfy the requirement of controlled flame combustion as referenced in the 40 CFR 260.10 definition of an incinerator. Therefore, even though the PTF combusts hazardous waste, the PTF will not be subject to the hazardous waste combustor MACT 40 CFR 63 Subpart EEE. Consequently, the modification to the RCRA permit for the PTF will incorporate many of the MACT requirements including the emission rate limitations and testing requirements. As the limitations in the MACT (and, subsequently the RCRA permit) are stricter than those required for construction permitting, the applicant has requested that the emission rates used in the construction permit be only as strict as required. Therefore, most of the emissions rates and testing requirements as detailed in the special conditions of the construction permit for the PTF are different and less strict than those required in the RCRA permit.

#### EMISSIONS/CONTROLS EVALUATION

The pollutants of concern for this project are PM<sub>10</sub> and the hazardous air pollutants, hydrogen chloride and dioxins/furans. The emission factors used to estimate emissions from the combustion of natural gas were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 1.4 *Natural Gas Combustion* (July 1998). All other emission factors and control efficiencies were provided by the applicant and were based on emissions testing for the existing reactive waste incinerator (Permit Number 0990-002). Potential emissions of the application represent the potential of the new equipment, assuming continuous operation (8760 hours per year.) The following table provides an emissions summary for this project.

Table 4: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels <sup>1</sup>	Existing Potential Emissions	Potential Uncontrolled Emissions of the Project	Potential Controlled Emissions of the Project	Project Conditioned Potential
PM <sub>10</sub>	15.0	1.83	4829.711	2.769	N/A
SO <sub>x</sub>	40.0	0.83	0.006	0.006	N/A
NO <sub>x</sub>	40.0	16.44	2.499	2.499	N/A
VOC	40.0	0.23	0.059	0.059	N/A
CO	100.0	6.88	0.905	0.905	N/A
Lead	0.6	0.14	N/A	N/A	N/A
HAP (Hydrogen Chloride)	10.0	0.02	1184.579	1.185	N/A
HAP (Dioxins/Furans)	6(10 <sup>-7</sup> )	N/D	4.25(10 <sup>-8</sup> )	4.25(10 <sup>-8</sup> )	N/A

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

<sup>1</sup>The value for hazardous air pollutants represents the screening model action level (SMAL)

The primary products from the combustion of Aluminum and Ammonium Perchlorate are aluminum oxide particulates and hydrogen chloride acid gas. Each thermal treatment chamber (EU1) and (EU2) will be vented to its own cyclone (CD1) and (CD2) where approximately 90% of the particulates, comprised mainly of aluminum oxide, will be removed. Following the cyclone, the effluent gases are combined into one stream and vented to a spray dryer (CD3) where the exhaust gases are quenched from 1600°F to 375°F with a mixture of soda ash and water. The soda ash neutralizes the acid gas to remove approximately 85% of the hydrogen chloride in the spray dryer. The introduction of soda ash is a significant source of particulate matter that must be later removed by the bag house. The following formula was used to estimate the average feed rate of soda ash in pounds per hour:

$$\text{Soda Ash Feed Rate (lb/hr)} = \text{MW (soda ash)} \times 1.05 \times \text{MFR (HCl)} \div (2 \times 0.65)$$

MW	= molecular weight of soda ash (lb/lb-mol)
1.05	= safety factor
MFR (HCl)	= molar flow rate of HCl (lb-mol/hr)
2	= stoichiometry
0.65	= utilization of soda ash in the spray dryer (further neutralization is expected in the baghouse filter bags)

The molar flow rate of hydrogen chloride is measured in the thermal oxidizer exhaust stack, and the feed rate of soda ash is automatically adjusted to be in stoichiometric excess. Approximately 10% of the particulates generated by the spray dryer (including sodium salts and unreacted soda ash) are collected at the bottom of the spray dryer.

The remaining particulates are expected to travel with the effluent stream to one of three bag houses (CD4, CD5, and CD6). The bag houses are operated in parallel and the system is designed such that one bag house needs to be operating for each thermal treatment chamber that is operating. The third bag house functions as a spare. The unreacted soda ash is filtered by the bag house and is expected to react with the remaining hydrogen chloride in the effluent stream. The total control for hydrogen chloride considering the spray dryer and bag house together is expected to be 99.9%.

100 percent capture of the exhaust gases is achieved by two induced draft fans (CD7) and (CD8) which will maintain the PTTCs (EU1) and (EU2) and the APCS (CD1 – CD8) under negative pressure. The fans will normally be operated together, each handling part of the total flow, however, the fans are sized such that either fan can accommodate the total system flow. Effluent gas from the fans is vented to a single exhaust stack (EP1) that is 2 feet in diameter, 50 feet tall, and 50 feet from the nearest property boundary. Effluent gas is exhausted to the ambient air at approximately 350°F.

#### PERMIT RULE APPLICABILITY

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

## APPLICABLE REQUIREMENTS

EBV EEC shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

## GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information, 10 CSR 10-6.110*  
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required June 1 for the previous year's emissions.
- *Operating Permits, 10 CSR 10-6.065*
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin, 10 CSR 10-6.170*
- *Restriction of Emission of Visible Air Contaminants, 10 CSR 10-6.220*
- *Restriction of Emission of Odors, 10 CSR 10-3.090*

## SPECIFIC REQUIREMENTS

- *Restriction of Emission of Particulate Matter From Industrial Processes, 10 CSR 10-6.400*
- *Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260*
- *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating, 10 CSR 10-3.060*

## STAFF RECOMMENDATION

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

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Kathi Jantz  
Environmental Engineer

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Date

### PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated September 9, 2009, received September 12, 2009, designating E-One Holdings, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Southwest Regional Office Regional Office Site Survey, dated October 28, 2008.

Mr. David Zoghby  
Vice President Sales  
EBV Explosives Environmental Company  
P.O. Box 1386  
Joplin, MO 64802

RE: New Source Review Permit - Project Number: 2008-09-026

Dear Mr. Zoghby:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Kathi Jantz, at the Departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale  
New Source Review Unit Chief

KBH:kjl

Enclosures

c: Southwest Regional Office  
PAMS File: 2008-09-026

Permit Number: