STATE OF MISSOURI

DEPARTMENT OF NATURAL RESOURCES

EMERGENCY PERMIT
FOR MANAGEMENT OF HAZARDOUS WASTE

PERMITTEE

Owner: Dyno Nobel, Incorporated
2795 E. Cottonwood Pkwy
Suite 500
Salt Lake City, UT 84121

Operator: Dyno Nobel, Incorporated
Carthage Plant
17562 Gum Road
Carthage, MO 64836

Permittee Contact: Jacob Cauble, CHMM
Environmental/Lab Supervisor
Dyno Nobel, Incorporated
Carthage Plant
17562 Gum Road
Carthage, MO 64836

FACILITY LOCATION

Carthage Plant
17562 Gum Road
Carthage, MO 64836
Jasper County
EPA ID# MOD029719200

INTRODUCTION

The Missouri Department of Natural Resources (Department) hereby issues an emergency permit to the Dyno Nobel, Incorporated, Carthage Plant (Dyno), for the treatment of hazardous waste. This emergency permit is issued under the authority of the Missouri Hazardous Waste Management Law, Sections 260.350 to 260.434, RSMo, and all regulations promulgated thereunder. Applicable regulations are found in Code of State Regulations 10 CSR 25-7.270(1),

which incorporates by reference Code of Federal Regulations 40 CFR 270.61, Emergency Permits. As such, the Department has regulatory responsibility for issuance of this Permit.

Reference:

1. Letter dated November 6, 2015, from Jacob Cauble, CHMM/Dyno Nobel, Inc., to Kyra Moore, Missouri Department of Natural Resources, Director of Air Pollution Control Program, RE: Disposal Plan for Sodium Nitrite Contaminated Dynamite, Dyno Nobel Inc. – Carthage Missouri

EVENT DESCRIPTION

This emergency permit authorizes thermal treatment by open burning of about 18,000 pounds of sodium nitrite-contaminated dynamite. One of the primary products manufactured at the Dyno Nobel Carthage Plant is dynamite, a nitroglycerin-based explosive. One of the primary ingredients of dynamite is sodium nitrate. Sodium nitrate used for dynamite production can have no more than 0.05% sodium nitrite without impacting the safety of the product. The aforementioned product contains sodium nitrite well above this specification. The dynamite contains nitroglycerin and ethylene glycol dinitrate. Therefore, the waste dynamite may exhibit or contain D001, ignitable hazardous waste and D003, reactive hazardous waste, from this process.

PERMIT CONDITIONS

The permit conditions listed below are to be followed during the life of this emergency permit:

1. The Permittee shall follow the "Disposal Plan for Sodium Nitrite Contaminated Dynamite" included in the letter to Kyra Moore, dated November 6, 2015, as amended by:

    a. E-mail dated November 17, 2015, from Jacob Cauble, CMHH, Dyno Nobel, Inc. to Dave Walker, Missouri Department of Natural Resources, RE: Questions on Disposal Plan,

    b. E-mail dated November 19, 2015, from Jacob Cauble, CMHH, Dyno Nobel, Inc. to Dave Walker, Missouri Department of Natural Resources, RE: Discussions on Emergency Burn, and

    c. Any subsequent Department-approved revisions to this Plan.

2. The Permittee shall comply with Occupational Safety and Health Administration (OSHA) or Mine Safety and Health Administration (MSHA) regulations for worker protection, as applicable.

3. After completion of the thermal treatment of the waste dynamite by open burning, the Permittee shall remove and properly characterize all residues and wastes from the operation. The Permittee shall also properly characterize and dispose of all other wastes associated with the storage and disposal of the waste dynamite, including but not limited to, the wastewater and barrels used for temporary storage of the waste dynamite. The Permittee shall dispose of all residues and wastes from the operation and the storage of the waste dynamite appropriately and in accordance with all state and federal regulations, based on the results of the characterization analyses.

4. After all residues and wastes from the operation are removed, the Permittee shall perform a site inspection of the burn pads at the burning ground used for thermal treatment. The site inspection shall be used to verify the removal of all potentially hazardous wastes.

5. Within 60 calendar days of expiration of this emergency permit, or completion of thermal treatment of the waste dynamite, whichever is earlier, the Permittee shall submit a report of the thermal treatment activities and the characterization and disposal of all other wastes associated with the waste dynamite as a closure report. The report shall include the following, at a minimum:

   a. Color photographs showing the thermal treatment operation and the cleaned up pads after completion of the thermal treatment operation.

   b. Laboratory report(s) providing the results of characterization analyses of wastes associated with the thermal treatment operation.

   c. Copies of the site inspection conducted on the burn pads and burning grounds after completion of the thermal treatment and any cleanup activities. The report should include a discussion of any corrective actions taken, if such actions were necessary.

   d. Laboratory report(s) providing the results of analyses of any samples collected to demonstrate or verify the removal of all potentially hazardous wastes from the concrete burn pads. The Department shall approve the sampling and analyses prior to samples being collected for this requirement.

   e. The owner or operator shall sign the report, making the certification under 10 CSR 25-7.270(1) and (2) which incorporates or modifies 40 CFR 270.11(d) that the information provided in the closure report is true, accurate, and complete.

6. The Permittee shall comply with requirements of 10 CSR 25-7.268(1) and (2), which incorporates or modifies 40 CFR Part 268, Land Disposal Restrictions, as applicable.

This emergency permit is effective for 90 calendar days from the date of issuance. This emergency permit may be terminated by the Department Director or his/her designee at any time without process if he/she determines that termination is appropriate to protect human health and the environment.

EFFECTIVE DATES OF PERMIT: November 30, 2015 to February 28, 2016

[Original signed by Sara Parker Pauley]

November 30, 2015
Date

Sara Parker Pauley, Director
DEPARTMENT OF NATURAL RESOURCES