



Jeremiah W. (Jay) Nixon, Governor

Sara Parker Pauley, Director

DEPARTMENT OF NATURAL RESOURCES

dnr.mo.gov

October 2, 2014

CERTIFIED MAIL – 7009 0960 0000 8848 4146

RETURN RECEIPT REQUESTED

Curt Gardner, P.E.
Senior EHS Specialist
BASF Corporation
Agriculture Division
3150 Highway JJ
Palmyra, MO 63461-2611

RE: Class 1 Permit Modification with Prior Director's Approval
Replace/Modify several components for Incinerator "B"
BASF Corporation, Hannibal Plant, Palmyra, Missouri
EPA ID# MOD050226075

Dear Mr. Gardner:

The Missouri Department of Natural Resources (Department) hereby approves BASF Corporation's (BASF) Class 1 Permit Modification request, dated August 15, 2014, without changes. The modification request was to replace/modify several components for Incinerator "B" at the BASF facility. We are approving the Class 1 Permit Modification requiring prior director approval for the following equipment upgrades and replacements.

- Replacement of the Oxidizer shell and the Spray Contactor with thicker, more resilient material, without changing the internal diameters or the combustion gas residence time.
- Installation of a rubber expansion joint between the Spray Contactor and Quench Tank.
- Installation of an internal weir to cool the newly installed expansion joint. There shall be no change in the combustion gas flow or overall combustion gas quenching.
- Replacement of components of the Downcomer used to introduce combustion gas under the liquid surface of the Quench Tank with those having oval holes of equivalent flow area to the square holes previously employed.
- Replacement of the Quench Tank with upgraded materials to increase pressure ratings of the equipment without changing the liquid holding capacity or internal diameter.



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- Replacement of the equalization line connections and piping between the Quench Tank and Entrainment separator with increased diameter equipment.
- Strengthening of the incinerator dome through a thicker flange, additional bolts and strengthened fasteners without changes to the internal dimensions of the dome's refractory arch.
- Change the mechanical recirculation pumps' method of moving quench water from a reliance on static liquid head pressure to powered pumping in order to enhance safety and reliability.

BASF must send a notice of the modification to everyone on their facility mailing list and the appropriate units of state and local government within 90 calendar days after the date of this letter, as outlined in Code of State Regulations [10 CSR 25-7.270(1)] incorporating the Code of Federal Regulations [40 CFR 270.42(a)(1)(ii)] and as modified by 10 CSR 25-7.270(2)(A)6 and 10 CSR 25-7.270(2)(B)10. BASF must send a copy of the notice to the Department.

If you have questions regarding this letter, please contact Mr. Nathan Kraus, P.E., of my staff at the Missouri Department of Natural Resources, Hazardous Waste Program, P.O. Box 176, Jefferson City, MO 65102-0176, by telephone at (573) 751-3553 or 1-800-361-4827, or by e-mail at nathan.kraus@dnr.mo.gov. Thank you.

Sincerely,

HAZARDOUS WASTE PROGRAM

[Original signed by Richard A. Nussbaum]

Richard A. Nussbaum, P.E., R.G.
Chief, Permits Section

RAN:nkt

c: Ken Herstowski, P.E., Project Manager, U.S. EPA Region 7
Northeast Regional Office, Missouri Department of Natural Resources

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