

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES

Matt Blunt, Governor • Doyle Childers, Director

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SEP 16 2008

Mr. Chris Schwedtmann
APAC-Missouri Inc.
P.O. Box 1117
Columbia, MO 65205

RE: Temporary permit for portable plant, PORT-0581
Permit Expiration Date: December 1, 2008
Project Number: 2008-07-070
Temporary Permit Number: 092008-005

Dear Mr. Schwedtmann:

The Department of Natural Resources' Air Pollution Control Program completed a review of your July 21, 2008 request for a temporary permit to allow your portable asphalt plant, PORT-0581, at your existing site in Lafayette County (0S21, T51N, R24W) to test the feasibility of burning glycerin and glycerin amended with 2% methanol in the asphalt drum dryer. The Air Pollution Control Program is hereby granting your request for this temporary operation, provided the glycerin or glycerin amended with 2% methanol are not listed or characteristic hazardous waste due to any processes or constituents. This permit does not allow the burning of ignitable glycerin from biodiesel production.

During the testing period, the portable plant will be using a combination of number 4 fuel oil and glycerin in the drum dryer. All other combustion equipment at the site, such as the diesel engine and the asphalt heater, will still burn diesel fuel. The asphalt dryer will burn approximately 900 gallons of glycerin/number 4 fuel oil mixture per hour. The portable plant will test fuel mixture with various content of glycerin and number 4 fuel oil, but the glycerin content will not be greater than 50%.

Since the burning of glycerin is relatively new, not much has been done to characterize emissions from the combustion of glycerine. The Agricultural Utilization Research Institute (AURI) in Minnesota performed a test in April, 2007 to determine emissions from the combustion of a fuel containing 10% glycerine and 90% yellow grease in a boiler. The results from this test suggest that the PM₁₀, NO_x and SO_x emissions from the combustion of glycerin should be less than from the combustion of number 4 fuel oil. Since the asphalt drum dryer will be placed 1,000 feet from the nearest property boundary and previous daily ambient impact analysis performed on this plant at this distance using number 4 fuel oil shows that the plant will be in compliance with the National Ambient Air Quality Standards (NAAQS) for these pollutants, the plant should still be

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in compliance with NAAQS while burning glycerin. Please be aware that this determination is based on one test and the reliability of this test has not been confirmed. The purpose of this temporary permit is to study the feasibility of burning glycerin in the drum dryer and to characterize emissions from burning glycerin in hopes that more reliable data can be obtained during testing.

The emissions of each criteria pollutant (PM_{10} , NO_x , SO_x , VOC and CO) should be below 100 tons per year due to the short time (90 days) that the plant is permitted to burn glycerin at this site. The baghouse on the asphalt drum dryer shall be in use at all times when PORT-0581 is operating. Best Management

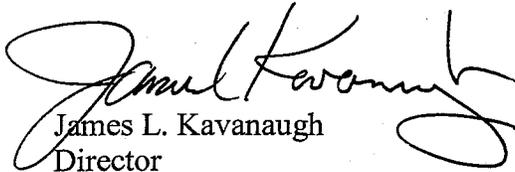
Practices shall be used to control PM_{10} emissions from haul roads and storage piles.

The combustion of glycerin may produce acrolein. There are no reliable data that can be used to determine acrolein emissions from the combustion of glycerin in an asphalt dryer. However, it is known that burning glycerin at temperatures greater than 800 degrees Celsius can minimize acrolein emissions. Therefore, the asphalt drum dryer for PORT-0581 shall be operated at no less than 800 degrees Celsius.

A copy of this letter and your permit must be kept on-site with the plant and be made available to Department of Natural Resources' personnel upon request. If the conditions surrounding this approval change, such as substantiated citizen complaints or failure to meet the New Source Performance Standards, approval for this site may be revoked. If we can be of further assistance, please feel free to contact Mr. Chia-Wei Young with the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102, or by telephone at (573) 751-4817. Thank you for your time and attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM


James L. Kavanaugh
Director

JLK:cwyk

Enclosures

c: Northeast Regional Office
PAMS File: 2008-07-070