

Illinois Environmental Protection Agency  
Bureau of Air, Permit Section  
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Project Summary for a  
Construction Permit Application From  
Tate & Lyle for a  
Fifth Feed Dryer in  
Decatur, Illinois

Site Identification No.: 115015ABX  
Application No.: 11050020

Illinois EPA Contacts

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Important Dates

Application Received: May 13, 2011  
Comment Period Begins: September 2, 2011  
Comment Period Closes: October 2, 2011

## I. Introduction

Tate & Lyle has applied for a construction permit for a fifth feed dryer at its corn wet milling plant in Decatur, Illinois. This project would also include improvements in emission controls for existing feed dryers that would result in a large reduction in emissions of volatile organic material (VOM) from the source. The project would enable all of the feed material produced by the corn wet mill to routinely be dried, so that none of this material must be landfilled. The project would also enable the Permittee to conduct extended maintenance outages of the existing feed dryers.

## II. Project Description

At its Decatur plant, Tate & Lyle processes raw corn to produce a variety of products including starches, animal feeds, dextrose, and other products. There are presently four feed dryers in the corn wet milling area. They are rotary steam tube dryers, and emissions are controlled by scrubbers followed by combustion in the existing Gluten Meal Dryer Furnace, where a portion of the exhaust is used as combustion air. These dryers are aging, and have suffered some loss of capacity.

The proposed project would involve installation of a fifth feed dryer along with a regenerative thermal oxidizer and changes in the ducting of emissions of the existing four feed dryers. These changes will allow Tate & Lyle to dry more material and perform needed maintenance and repairs on the existing dryers, while also decreasing VOM emissions.

## III. Emissions

The proposed project would only be significant under the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 for emissions of VOM (See Condition 6 of the draft permit for the permitted emissions of the new dryer.).

The project would be accompanied by an enforceable reduction in VOM emissions from existing Dryers 3 and 4 and the permanent shutdown of the Xanthan Gum Process. When combined with emissions allowed for the Fifth Feed Dryer and the Existing Feed Handling Operations and other contemporaneous increases, the project has a net decrease in VOM emissions of over one hundred tons per year (See Attachment 3 of the draft permit). Accordingly, the project is not a major project for emissions of VOM.

## IV. Applicable Emission Standards

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The Board has standards for emission of NO<sub>x</sub>, SO<sub>2</sub>,

CO, VOM, and PM. The corn wet mill readily complies with all applicable Board standards.

#### V. Draft Permit

The conditions of the permit would contain limitations and requirements to ensure that the project would not be a major modification for emissions of VOM. For this purpose, the permit would set limitations on the amount of VOM emitted by the new dryer and existing Feed Dryers 3 and 4.

The permit conditions would also establish appropriate compliance procedures, including testing, monitoring, and recordkeeping requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the facility is operating within the limitations set by the permit and is properly controlling emissions.

The provisions of the construction permit would eventually be incorporated into an operating permit for the plant.

#### VI. Request for Comments

It is the Illinois EPA's preliminary determination that the application for permit meets all applicable state and federal air pollution control requirements, subject to the conditions proposed in the draft permit. The Illinois EPA is therefore proposing to issue a permit for construction of a fifth feed dryer.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 IAC Part 164.

KTH:kth