

Illinois Environmental Protection Agency

Public Notice
Proposed Issuance of a Construction Permit to
Archer Daniels Midland Company in Decatur

Archer Daniels Midland (ADM) has applied to the Illinois EPA for a construction permit to build a new Glycols production plant at its Decatur complex located at 4666 Faries Parkway in Decatur. The main purpose of the new plant will be to process byproduct glycerol and/or sorbitol into higher value products and byproducts. The three principal products to be produced include USP grade glycerin, propylene glycol (PG), and ethylene glycol (EG). The main byproducts from this process will be simple alcohols (i.e., a mixture of ethanol, methanol, and water) and various butanediol (BDO) isomers.

The increase in emissions from new equipment and increased utilization of existing equipment will cause the project to be a major modification for emissions of particulate matter (PM), volatile organic material (VOM), sulfur dioxide (SO₂), nitrogen oxides (NO_x), and carbon monoxide (CO), subject to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, for these pollutants

Based on its review of ADM's applications, the Illinois EPA has made a preliminary determination that this project is entitled to a construction permit. **The Illinois EPA is accepting comments prior to making a final decision on the application for this project. Comments must be postmarked by midnight April 8, 2007.** If sufficient interest is expressed in this matter, a hearing may be held. Comments, questions and requests for information, should be directed to Brad Frost, Bureau of Air, Illinois EPA, Box 19506, Springfield, IL 62794-9506, phone 217/782-2113, TDD 217/782-9143.

Persons wanting more information may view the draft permits and project summaries at www.epa.gov/region5/air/permits/ilonline.htm (please look under All Permit Records, PSD, New). These documents and the application may also be viewed at the Illinois EPA's offices at 2125 S. First Avenue in Champaign, 217/278-5800 and 1340 N. Ninth St., Springfield, 217/782-7027 (please call ahead to assure that someone will be available to assist you). Copies of the documents will be made available upon request.

Since the project is subject to the Prevention of Significant Deterioration rules, ADM must use Best Available Control Technology to control emissions of PM, VOM, SO₂, NO_x, and CO. ADM has proposed a water scrubber on the non-condensable gas (NCG) stream; thermal oxidation to control VOM emissions from the low-pressure flash vent; collection and scrubbing of vent emissions from most tanks that store material with vapor pressures above 0.25 psia; a Leak Detection and Repair (LDAR) program for components in VOM service; submerged filling for loadout operations; the use of natural gas and good combustion practices for the boilers; enclosure of bulk material handling operations to prevent visible fugitive emissions and venting of collected emissions through a filter control device; and the use of drift eliminators for the cooling water towers.

An air quality analysis was required for emissions of PM, SO₂, NO_x, and CO from the project. The analysis indicated that impacts for these pollutants are not significant, i.e., the impacts are below the significant impacts levels set by USEPA. An assessment of VOM emissions on ambient ozone levels was performed. The screening indicates that the impact of the facility on ozone levels combined with background ozone levels would yield a total impact below the 1-hour ozone National Ambient Air Quality Standard.