Illinois Environmental Protection Agency
Bureau of Air, Permit Section
1021 N. Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Project Summary for a Construction Permit Application from Oasis Industries, Inc. for changes to Its Reinforced Plastic Composites Production Plant in Aurora, Illinois

Site Identification NO.: 089407AAL
Application No.: 07010044
Date Received: February 13, 2007

Schedule
Public Comment Period Begins: March 14, 2007
Public Comment Period Closes: April 13, 2007

Illinois EPA Contacts
Permit Analyst: Shashi Shah
Community Relations Coordinator: Brad Frost

I. INTRODUCTION

Oasis Industries, Inc. (Oasis) has proposed to modify its existing plant in Aurora. The plant manufactures polyester resin plastic products, for example fiberglass bathtubs and shower enclosures. The modification of the plant requires a permit from the Illinois EPA because it would involve changes to the emission units at the plant and increases in emissions.

II. PROJECT DESCRIPTION

Oasis proposes a modification, to its existing plant that will replace the existing Gel Coat and Acrylic Process Lines with a single continuous overhead conveyor system production line that will be able to produce both Gel Coat and Acrylic Products. Operations that are currently conducted in separate booths will be conducted at stations along the conveyor system.

With the proposed modification the existing Gel Coat Process Line consisting of four booths will be decommissioned. The existing resin storage and mixing tank will continue to be used. Components from the existing Gel Coat Process Line, such as chopper guns, exhaust fans; fan motors, ductwork, and dampers will be used in the new conveyorized process line. One of the existing grinding booths will be demolished to allow space for the new conveyorized process line.

The existing Acrylic Process Line will also be decommissioned. The existing resin storage and mixing tank will continue to be used. The existing thermoforming machine used to form acrylic sheets will be relocated adjacent to the new conveyorized process line. Components from the existing Acrylic Process Line, such as chopper guns, exhaust fans; fan motors, ductwork, and dampers will be used in the construction of the new conveyorized process line.

The new Conveyorized Process Line, including overhead conveyance and track system and connecting attachment will be installed on the east part of the existing plant. The new line will include two gel coat application stations and one misting station where acrylic bonding resin is spray applied. The misting station is a new step and process that will be required on the new line with the combining of the two-manufacturing process and the need to apply a bonding resin to the backside of the acrylic sheet as formed. The conveyorized line will also include five spray application stations for skin coat/ final coat application of both the Gel Coat Product as well as the Acrylic product. New mold storage area and holding fixture areas to accommodate the new line will be constructed south of the conveyorized process line.
PM emissions will be controlled by filters on the spray booths on the conveyorized process line.
VOM emissions will be controlled by using resins and gel-coats that meet the MACT standard.

III. PROJECT EMISSIONS

The potential annual emissions from the modified plant would 98.0 tons of VOM, the majority of which would be styrene, a hazardous air pollutant. This reflects the maximum emissions requested by Oasis based on the maximum production and usage of materials by the plant as specified by Oasis and standard emission factors developed by USEPA for fiberglass manufacturing operations in the application. Actual annual emissions from the plant would be less to the extent that the actual utilization of the equipment will be less than the maximum level and lower emitting materials are used.

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 basis requirements for sources in Illinois. The proposed construction/modification will readily comply with applicable state emission standards.

The plant is also subject to the federal National Emission Standard for Hazardous Air Pollutant – Maximum Achievable Control Technology (NESHAP – MACT) standard, 40 CFR 63 Subpart WWWW, for Reinforced Plastic Composites Production. The Illinois EPA is administering NESHAPs in Illinois on behalf of the USEPA under a delegation agreement. Materials used at the plant should comply with this standard.

V. APPLICABLE REGULATORY PROGRAMS

This project is not considered a major project under the state rules for Major Stationary Sources Construction or Modification 35 IAC Part 203. This is because the potential emissions of VOM from the modified plant, as limited by the permit, would be less than the major source threshold of 100 tons per year.

VI. DRAFT PERMIT

The conditions of the draft permit contain limitations and requirements to assure that this facility will be operated as a non-major source. The draft permit includes enforceable limitations on usage of material and its VOM content. These limitations assure that the plant remains below the levels at which it would be considered a major source for purposes of MSSCAM.

The permit conditions also establish appropriate compliance procedures, including inspection practices, recordkeeping requirements, and reporting requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the plant is operating within the limitations set by the permit.

VII. REQUEST FOR COMMENTS

It is the Illinois EPA’s preliminary determination that the application for the proposed project 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 permit for the project..

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit.