

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
Berlin Industries, Inc. for a
Federally Enforceable State Operating Permit (FESOP) for
175 Mercedes Drive
Carol Stream, Illinois 60188

Site Identification No.: 043020ABK
Application No.: 96060075

Illinois EPA Contacts

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I. INTRODUCTION

Berlin Industries, Inc. has applied for a Federally Enforceable State Operating Permit (FESOP) for its commercial lithographic printing plant at 175 Mercedes Drive in Carol Stream. This plant requires an air pollution control operating permit because it is a source of emissions. The Illinois EPA has prepared a draft of the permit that it would propose to issue for the plant. However, before issuing the permit, the Illinois EPA is holding a public comment period to receive comments on this proposed action and the terms and conditions of the draft permit that it would propose to issue.

II. SOURCE DESCRIPTION

Berlin Industries operates heatset web offset lithographic printing presses controlled by a regenerative thermal oxidizer. Ink and fountain solution are transferred from rubber-covered "blanket" cylinders to one or both sides of the moving paper web. The printed paper passes through a heated dryer to evaporate the ink oil and set the image, and then is directed through cutting and folding finishing equipment. The heatset press dryer is maintained under a net negative static pressure relative to a press room to ensure a complete capture of all VOM evolved within the dryer, as well as some of the VOM evolved outside of the dryer. The exhaust from each press dryer is directed to the regenerative thermal oxidizer to control VOM emissions. The products produced at this source include newspaper inserts and direct mailers.

Also one non-heatset offset lithographic printing press and inkjet printing units are being used at the commercial lithographic printing plant.

The emissions of volatile organic material (VOM) resulting from the use of lithographic printing-related materials and coating materials such as lithographic inks, fountain solution additives, coatings and cleaning solvents. These materials contain organic solvents which are emitted to the atmosphere during their use. To minimize VOM losses from manual press cleaning operations, a manual blanket wash cleaning solvent is used that has a low VOM composite partial vapor pressure (<10 mmHg at 20°C). In addition, all cleaning materials, including the used cleaning towels, are stored in closed containers at all times they are not in use. This source controls VOM emissions from printing presses by using a regenerative thermal oxidizer. A regenerative thermal oxidizer is an emission control equipment that destroys VOM emissions by at least ninety percent.

III. GENERAL DISCUSSION

Federally Enforceable State Operating Permits (FESOPs) are federally enforceable, that is, the terms and conditions of the permits can be enforced by USEPA under federal law, as well as by Illinois government and the public under state law. These permits can establish federally enforceable limitations on the operation and emissions of a source that restrict the potential emissions of the source.

The source has applied for a FESOP because the actual emissions of the plant are below the levels at which the plant would be considered a major source under Title V of the federal Clean Air Act. However, in the absence of federally enforceable limitations, the plant's potential emissions would be such that the plant would be considered a major

source. The permit acts to restrict the plant potential emissions so that it need not be considered a major source. As a result, the source does not need not obtain a Clean Air Act Permit Program (CAAPP) permit for the plant, as would otherwise be required.

The FESOP limits the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10 tons for an individual HAP and 25 tons for combined HAPs.

IV. APPLICABLE EMISSION STANDARDS

All emission units in Illinois must comply with state emission standards adopted by the Illinois Pollution Control Board. These emission standards represent the basic requirements for sources in Illinois. The Board has specific standards for units emitting volatile organic material in the greater Chicago Area. The printing operation at Berlin Industries is regulated by 35 Ill. Adm. Code 218.207. These regulations require afterburner control that reduces VOM emissions by ninety percent. Fountain solution is required to be five percent VOM by volume or less. Cleaning solutions used on any lithographic printing lines are required to be thirty percent VOM or less or they are required to have a low VOM composite partial vapor pressure less than 10 mmHg at 20°C (68°F). The application shows that the plant is in compliance with applicable state (AND FEDERAL) emission standards.

V. CONTENTS OF THE PERMIT

This permit that the Illinois EPA is proposing, will identify the specific emission standards that apply to the emission units at the plant. The conditions of this permit are intended to ensure that the source continues to comply with applicable emission standards.

The permit would also contain limitations and requirements to assure that this plant is operated as a non-major source. The permit would limit the operation and annual emissions of the plant to below the major-source-thresholds of 100 tons for VOM, 10 tons for an individual HAP and 25 tons for combined HAPs. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The permit conditions would also require appropriate compliance procedures, including inspection practices as well as recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that the plant is being operated within the limitations set by the permit and that the plant's emissions are being properly controlled.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the source has met the requirements for issuance of its permit. The Illinois EPA is therefore proposing to renew the permit.

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 166.

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