

Illinois Environmental Protection Agency
Bureau of Air, Permit Section
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Project Summary for an Application from
Nanophase Technologies Corporation for
Federally Enforceable State Operating Permit (FESOP) for
1319 Marquette Drive
Romeoville, Illinois 60446

Site Identification No.: 197090ABE
Application No.: 05090050

Schedule

Public Comment Period Begins: 04/30/2007
Public Comment Period Closes: 05/30/2007

Illinois EPA Contacts

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I. INTRODUCTION

Nonophase Technologies Corporation has applied for a Federally Enforceable State Operating Permit (FESOP) for its Romeoville, Illinois location. 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 renewed permit that it would propose to issue for the plant. However, before renewing 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

Namophase Technologies Corporation makes specialty chemicals in the nano microns range. The emission units at this plant that require an operating permit include pilot plant, PVS reactor stations and oxide coating process. These units are sources of emissions because the raw materials associated with the manufacturing processes constrain volatile organic materials (VOM) which are admitted in the atmosphere during the manufacturing processes.

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 been operating this plant under 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 (VOM) in the Greater Chicago Area. The standards limit VOM emissions to no more than 8 lbs/hour. The application shows that the plant is in compliance with applicable state emission standards.

V. CONTENTS OF THE PERMIT

The permit that the Illinois EPA is proposing to issue would identify the specific emission standards that apply to the emission units at the plant. As explained, the VOM emissions are subject to 35 Ill. Adm. Code 218.301 which requires emissions of VOM be no greater than 8 lbs/hour. 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.

The permit conditions would also continue to 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 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 renewal 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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