

PROJECT SUMMARY

I. INTRODUCTION

The Illinois Environmental Protection Agency (Illinois EPA) is proposing to issue a general Federally Enforceable State Operating Permit (FESOP) for existing aggregate processing plants. The purpose of a general permit is to cover multiple number of facilities, which have similar operations. The Illinois Association of Aggregate Producers (IAAP) requested the Illinois EPA to develop a general permit for very large aggregate processing plants. The IAAP believes that at this time there may be only two aggregate processing plants that may request coverage under the proposed permit.

The proposed general permit would establish limits on an aggregate processing plant's operations and emissions so as to prevent the aggregate processing plant from being major source of emissions so that an operating permit does not have to be obtained under the Clean Air Act Permit Program. The proposed limits would be accompanied by recordkeeping and reporting requirements to assure that each aggregate processing plant is operated in compliance with the emission standards established by both the United States Environmental Protection Agency (USEPA) as well as the Illinois Pollution Control Board (Board).

Once the general permit is issued, eligible sources will be able to request coverage by a permit. The Illinois EPA will maintain a listing of sources that have received this general permit and the listing will be available upon request.

II. SOURCE DESCRIPTION

An aggregate processing plant's operations include crushing, screening, material handling, size classification and storage operations. The screens separate large boulders from finer rocks that do not require primary crushing. The crushed product and the undersized material are discharged onto a conveyor and are conveyed to a storage pile for temporary storage and later use.

Crushed product from the primary crusher and the undersized material from the temporary storage pile are conveyed to a vibrating screen. This unit separates oversized rock from the smaller stone. The material that is too large to pass through the top deck of the screen is processed in the secondary and tertiary crushers.

Conveyors are used to convey the material to storage piles. When needed, this stockpiled aggregate is loaded onto trucks and transported off-site.

Aggregate processing plants are sources of emissions because particulate matter (PM) is generated by the crushing, screening, or transfer of the aggregate and is also emitted from storage piles and plant roads. Emissions from the crushing, screening, and conveying operation may be controlled by natural occurring moisture in the materials or the use of water spray bars to provide moisture that will reduce emissions of particulate matter. Fugitive dust is also controlled by good housekeeping practices or by the application of water or chemical dust suppressants as required keeping emissions to a minimum.

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.

These types of plants will be operating 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 to 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 particulate matter less than 10 microns in diameter (PM₁₀). These types of operations must be within the following limits in order to apply for the general FESOP:

- Process no more than 20,000,000 tons of aggregate per year.
- Contain no more than thirty-five (35) crushers (any combination of primary, secondary, and tertiary).
- Contain no more than sixty (60) screening units.
- Contain no more than four hundred (400) conveying systems and storage bins (any combination) with associated transfer points.
- Control dust by using spray systems or natural occurring moisture content of procession materials greater than 1.5% by weight.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The Board has standards for sources of regulated pollutants for an aggregate processing plant. An aggregate processing plant would readily comply with all applicable Board standards.

The USEPA has also adopted standards for new crushers, conveyors, and screens, which comprise an aggregate processing plant, for which construction was commenced after August 31, 1983, the federal New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60.000. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. These general permits address compliance with the USEPA's standard for affected Nonmetallic Mineral Processing Plants.

V. CONTENTS OF THE PERMIT

The general permit that the Illinois EPA is proposing to issue would continue to identify the specific emission standards that apply to the emission units at each plant. As explained, the aggregate processing plants are subject to the federal NSPS for Nonmetallic Mineral Processing Plants and the Board's regulations for fugitive dust, which requires certain emission units to be operated under an operating

program, which is designed to significantly reduce fugitive particulate matter emissions through good housekeeping practices. 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 PM₁₀. (Annual emissions of other pollutants from the plant are well below the 100 ton major source threshold.)

The conditions of the proposed permits contain limitations and requirements to assure that an aggregate processing plant will be operated in compliance with the applicable state and federal air pollution control requirements. These conditions require appropriate compliance procedures, including inspection practices, recordkeeping and reporting requirements. The source must carry out these procedures on an on-going basis to demonstrate that an aggregate processing plant is operating within the limitations set by the permit and is properly controlling emissions. The permit also sets limitations on the amount of the aggregate processed by such a plant.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the aggregate processing plants 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 these lifetime general operating permits for these types of operation.

Comments are requested on the proposed conditions on this draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.