

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

April 26, 1991

Jane E. Gilbert
Division of Licensing and Enforcement
Bureau of Air Quality Control
Department of Environmental Protection
State House, Station No. 17
Augusta ME 04333

Dear Ms. Gilbert:

On February 5, 1991, you submitted a letter regarding the Pine State Power Cogeneration Project and International Paper Company (pulp mill). That letter requests EPA's input on the issues associated with these two sources. Pursuant to your request, the following paragraphs summarize the situation and associated issues as well as provide comments on the Department of Environmental Protection's approach.

A gas-fired cogeneration facility, Pine State Power, is proposing to locate adjacent to International Paper Company. Pine State Power will generate electricity for Central Maine Power Company, and supply the by-product steam to International Paper. Your letter states that the new cogeneration facility will replace steam that has previously been generated by oil-fired power boilers at the pulp mill.

Your letter indicates that the two sources are owned, controlled, and operated by separate entities, so Maine will issue a separate construction permit to the cogeneration facility. EPA concurs with this determination based on information transmitted to us in recent telephone conversations. In order to confirm this determination you indicated that the cogeneration project's board of directors has 5 members. Only one of the members is from the pulp mill. Furthermore, you indicated that, out of the cogeneration facility's total capacity, approximately 83% will be sold to the grid and only 17% will be transferred as steam to the pulp mill. EPA has no definitive policy for determining whether this is one or two sources. EPA makes this type of determination on a case-by-case basis. In this case, EPA concurs that the cogeneration project and the pulp mill should be treated as two separate sources. This determination is based on the facts you presented and several guidance materials included in Enclosure

Your letter also implies that the ambient air impact analyses show violations of the SO₂ and possibly particulate matter national ambient air quality standards (NAAQS) when the cogeneration facility and pulp mill boilers operate simultaneously. The letter does not present enough facts about the modeling and the operation of the two plants. The letter indicates that the cogeneration facility cannot operate at the same time as more than one of the pulp mill's power boilers. Subsequent conversations with Lynne Hamjian of my staff indicate that International Paper has since requested the Department of Environmental Protection's (DEP's) approval to maintain and operate one of the boilers at all times. What is the exact situation? What modes of operation cause violations? Which standards are of concern? Why would burning natural gas at the cogeneration plant cause SO₂ violations? Are there any existing violations? How do these plants impact the prevention or significant deterioration (PSD) increments? These questions must be answered in order to deal with the situation properly.

Lastly, your letter presents the following resolution to the problem, based on a similar situation in New York. Your letter states the following:

"The Maine cogeneration facility will be held responsible to react to the existing pulp mill boilers. Thus the cogeneration facility will be required by license condition to monitor the fuel consumption by the two existing power boilers at the mill as well as by the cogeneration facility.

If fuel consumption by the power boilers at the mill exceeds a specified minimal level (determined based on the modeling demonstration), the cogeneration facility must cut production to a license-specified level, over which the modeling demonstration has predicted violations. Corresponding records of the fuel consumption data shall be required to be kept by the cogeneration facility.

The pulp mill facility will be required by license to install a fuel flow monitor which will provide output in the cogeneration facility's control room.

By holding the cogeneration facility solely responsible for maintaining total fuel use levels low enough to ensure compliance with the standards, no question remains as to which party to hold responsible should total fuel consumption levels exceed the limit."

As stated above, further information is necessary for EPA to give an appropriate response. However, assuming that there are no existing violations, we will offer the following suggestions to assist you in licensing these two facilities. EPA concurs with holding one facility solely responsible for maintaining total

fuel use levels below a set threshold. As stated above, this ensures that there is no question as to which party is responsible in a violation situation. EPA also concurs that this could all be done in the cogeneration facility's construction permit as long as the permit is written in clearly enforceable language and requires the cogeneration facility to monitor the operations of International Paper's boilers. This will ensure that all of the restrictions are federally enforceable.

As you know, only some conditions of license renewals are federally enforceable (see enclosed letter to Dennis Keschl dated April 96, 1991). Specifically, conditions which were part of the original construction permit for the source, provided that the permit was issued after EPA approved Maine's licensing regulation would be federally enforceable; whereas additional conditions imposed by the DEP at the time of the renewal may not be federally enforceable. Therefore, conditions imposed in International Paper in its license renewal may not be considered federally enforceable unless Maine submits a single-source state implementation plan (SIP) revision. This means that if there are existing modeled violations of the NAAQS due to the operation of the power boilers at the pulp mill, or if Maine wishes to hold the pulp mill solely responsible for maintaining total fuel use levels below a set threshold rather than the cogeneration plant, then a single-source SIP revision may be necessary.

If you or your staff have any questions, please contact Lynne Hamjian of my staff at (617) 566-3250.

Sincerely,

David B. Conroy Chief
Planning and Technical Evaluation Section

cc: Dennis Keschl, ME DEP
Bryoo Sproul, MC DEP
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Norma Gordon, ME DEP