

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 18 1996

OFFICE OF
ENFORCEMENT AND
COMPLIANCE ASSURANCE

MEMORANDUM

SUBJECT: PSD Applicability Determination for Power Boiler No. 4 at the Potlatch Corporation Facility in Lewiston, Idaho

FROM: Bruce C. Buckheit, Director
Air Enforcement Division (2242A)

TO: Anita Frankel, Director
Office of Air Quality (OAQ-107)
Region X

In response to a request from Region X, dated August 15, 1996, for an applicability determination for the Potlatch Corporation, Lewiston facility, Idaho (Potlatch), we have reviewed and evaluated the submitted information. Upon the review, we have determined that:

- The tire-derived fuel (TDF) is not municipal solid waste; therefore, the exemption provided in 40 CFR 52.21(b)(2)(i)(d) does not apply to the No. 4 power boiler.
- Potlatch did change the method of operation on the No. 4 power boiler by burning TDF in the boiler, thus effectively modifying its PSD permit.
- Since this change in method of operation resulted in a significant SO₂ emissions increase, as defined in 40 CFR 52.21(b)(23), and in the potential to emit for the facility, it constitutes a major modification of that facility, as defined in 40 CFR 52.21.(2)(i).

Potlatch, a major facility for NO_x emissions, applied for a PSD permit in 1978, requesting exemption from review for SO₂ emissions from the No. 4 power boiler based upon a voluntary SO₂ emission limit of 100 tons per year. This SO₂ limit was then incorporated into a federally-enforceable construction permit issued by the Idaho Division of Environmental Quality (IDEQ).

U.S. EPA issued a PSD permit (PSD-X-80-18) to Potlatch on September 30, 1980, for the construction of the wood waste-fired boiler. Condition # 5 of this permit states that any construction, modification or operation of the wood-fired power boiler shall be in accordance with the application which resulted in the PSD permit and that any activity undertaken in a manner that is inconsistent with the PSD-X-80-18 application shall be subject to

EPA enforcement action under the Clean Air Act.

In 1983, IDEQ issued a revised permit to operate (No. 13-114000003) allowing Potlatch to burn other fuels that include tire chips (shredded motor vehicle tires) in power boiler No. 4 provided the combination of the additional wastes did not exceed 20 % of the total fuel rate on a dry basis. That permit also limited the total sulfur content to 0.5 %, dry basis. Potlatch began burning tires sometime prior to June 1991.

In January and February of 1996, Potlatch conducted a performance test of the No. 4 power boiler and estimated the emission rate of 46 pounds of SO₂ per ton of tires burned. According to Region X's calculations, that emission rate results in 262 to 383 tons per year of actual SO₂ emissions (while the potential emissions are much higher). These stack test results indicated that Potlatch not only increased the SO₂ emissions to exceed 100 tons per year in violation of the limit in its own PSD permit application and in the IDEQ permit to construct the boiler, but also exceeded the maximum 250 t/y increase that could exempt Potlatch from the PSD requirements. Potlatch has argued that the change in fuel usage does not constitute a PSD modification, claiming the tire chips constitute a fuel generated from municipal solid waste that is exempt from PSD review, as provided in 40 CFR 52.21(b)(2)(i)(d).

Upon review of information provided by Potlatch, existing regulations, and U.S. EPA applicability determinations signed by John Calcagni, OAQPS on August 31, 1992 and Donna M. Ascenzi, Region VI, on February 7, 1985 (attached) we conclude that; (1) the tire chips burned alone (as an individual component) are not municipal solid waste, (2) SO₂ emissions from the No. 4 power boiler increased significantly above 40 t/y - a "significant" rate according to 40 CFR 52.21(b)(23)(i), (3) by adding TDF, Potlatch did modify the boiler by changing the boiler's method of operation approved in the PSD permit, and, (4) therefore, boiler No. 4 is not exempt from PSD review.

The regulatory exemption from the PSD review process was intended for a mixture of collected wastes not just one selected individual solid waste component. The memorandum signed by John Calcagni states that "TDF does not, by itself, constitute MSW and TDF is not 'generated from' MSW within the meaning of the PSD exclusion, which was intended to address 'fuel consisting of either the total collected mixture of municipal type waste (i.e., MWS) or the bulk of such mixture excluding the noncombustible waste fraction [i.e., refuse-derived fuel (RDF)]." In addition, this exemption is not affected by the changes in the NSPS definitions of the Municipal Solid Waste (MSW) under the Municipal Waste Combustor rule as the purposes of NSPS and New Source Review regulations are different. According to the preamble (Federal Register, Vol 45, No. 154, Thursday, August 7, 1980, 52704), "the NSPS program does not involve assessments of the impact of a source on air quality. In EPA's view, any switch to another fuel or raw material that would distort a prior assessment of a source's air quality impact should have to undergo scrutiny."

If you have any questions, please call Zofia Kosim, P.E., of my staff at 202-564-8733.

Attachemnts: (2)

cc: Greg Foote, OGC
Dan DeRoeck, OAQPS