UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

April 4, 1995

Lawrence D. Conant, Chief Operating Officer
Waterworks International, Inc.
24 Fairfield Street
Maynard, MA 01754

Dear Mr. Conant:

This letter is in response to your letter dated March 1, 1995 regarding Waterworks International, Inc's. intent to build a spent sulfuric acid regeneration plant in East Providence, Rhode Island. Your primary concern was the applicability of the Resource Conservation and Recovery Act (RCRA) Subtitle C - Hazardous Waste Management regulations to the regeneration process. As you correctly indicated in your letter, spent sulfuric acid used to produce virgin sulfuric acid is specifically excluded under the definition of a solid waste in accordance with 40 CFR § 261.4 (a)(7). Therefore, the Subtitle C regulations would not apply to the process as proposed in your letter. However, the exclusion does not apply if the spent acid is "accumulated speculatively", as set out at 40 CFR § 261.1(c).

While the RCRA Subtitle C (EPA) regulations clearly exclude spent sulfuric acid as a solid waste, the Rhode Island Division of Waste Management's hazardous waste regulations may supercede and, in some instances, be more stringent than the EPA regulations. We suggest that you contact the State's Division of Waste Management to clarify the applicability of their regulations to your process.

You also raised a concern for the potential presence of wastes exhibiting the characteristic of toxicity using the Toxicity Characteristic Leaching Procedure (TCLP), as defined in 40 CFR § 261.24, in the spent sulfuric acid. In accordance with 40 CFR § 261.1, the spent acid is not considered a solid waste. Therefore, as previously indicated, the Subtitle C regulations would not apply to your proposed process. Additionally, 40 CFR § 263.20 (the manifesting requirements) also would not apply. However, as you indicated in your letter, various State authorities may have more stringent requirements regarding the transport, storage or treatment of spent sulfuric acid. You should make yourself aware of their individual requirements.

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Should you have any additional questions or concerns regarding this letter, please contact Sharon Leitch of my staff. She may be reached at 617-573-9617.

Sincerely,

Gary B. Gosbee, P.E., Chief
Permits and State Programs Section

cc: Beverly Migliore, RIDEM

Shone
~~Joan Jenn~~
Please prepare response, for my signature
MTR
Cecey

Waterworks International, Inc.
24 Fairfield St.
Maynard, MA 01754
March 1,1995

Mr. Gary Gosbee
Rhode Island Waste Regulation Chief
U. S. Environmental Protection Agency
HRR-CAN 3
JFK Federal Building
Boston, MA 02203

Dear Sir:

This letter is a follow-up to our telephone conversation of February 27th. Waterworks has developed a proprietary process for the regeneration of spent sulfuric acid. We plan to build our first plant in East Providence, Rhode Island. This facility will accept spent sulfuric acid from generators throughout New England. In general, this spent acid has been diluted with water by the generator and may have picked up some additional metal or organi contaminants. In general, this material is currently neutralized with sodium hydroxide or some other caustic material at the generator's facility. The residual solids are sent off site for disposal and the water is typically sent to the local municipal sewer. Our plan is to collect the spent acid in containers, transport those containers to our facility and regenerate the acid.

It is our understanding that a spent acid regeneration facility is exempt from RCRA as detailed in 40CFR 261.4 (a)(7). We would like confirmation of this exemption. Additionally, we are currently preparing a Waste Analysis Plan for this facility. Our primary goal is to insure that we are not transporting hazardous waste to the facility. In that regard we intend to confirm that no hydrochloric or nitric acid has been mixed with the sulfuric acid. It is our understanding that such a mixture would be a hazardous waste and therefore not legally processed at our facility. We also will exclude "spent batteries" from our facility, although we may process spent acid from "spent batteries". Do we need to be concerned with TCLP materials defined in 40CFR 261.24? There are some materials, such as mercury, that are listed in Table 1 of 261.24 but that occur in virgin sulfuric acid. Additionally, there are some materials like lead, that are common contaminants in sulfuric acid. Do we or our customers, the generators of the spent acid, need to be concerned with these contaminants? Our understanding is that since the spent acid is being regenerated, that we would not fall under any other classification of hazardous waste as long as the material can be processed in our facility. Our Waste Analysis plan will address any wastes generated at our facility, specifically regarding land disposal of any such wastes. As generator of that waste, we recognize our responsibility is the same as any other generator.

Regarding the transport of the spent acid to our facility, it is our undertanding that the exemption under 40CFR 261.4(a)(7) also excludes us from any manifest requirements under 263.20. We recognize that there may be a manifest requirement as determined by state law, for example transport of spent acid from Massachusetts to our facility. Is our understanding on the Federal manifests correct?

Our intention is to open the facility this summer. Our goal is to have the Waste Analysis Plan complete in the near future and would therefore appreciate a rapid response to the above issues as well as an indication of any issues we may have overlooked. If you have questions, please call me at (508) 583-6285.

Sincerely,

Lawrence D. Conant
Chief Operating Officer

conditions such as loss of a set of black liquor evaporators or loss of a recovery furnace. When this occurs, the black liquor in the impoundment is accumulated in excess of what can be accommodated at the facility and so may not be recycled, or not be recycled for a long time.

In light of these uncertainties, the Agency is investigating further whether black liquor stored in an impoundment before recycling in the Kraft process is a waste. In addition, we note that black liquor that is disposed of and not recycled is a waste, and if hazardous, a hazardous waste. This includes black liquor that leaks, leaches, or overflows from an impoundment and is not recycled. Furthermore, the final rule states that black liquor stored before recycling remains subject to the rules on speculative accumulation. Thus, paper mills accumulating black liquor must show that they are recycling 75% of the amount on hand at the beginning of a one-year period.

In summary, today's final rule states that:

• Black liquor accumulating before recycle to the Kraft paper process is not a Subtitle C solid waste. At least for the present time, this exclusion includes black liquor that is stored in a surface impoundment before recycling. The person accumulating must show that the black liquor is not being accumulated speculatively, or the black liquor will be considered to be a waste;

Black liquor that is recycled in some other manner could be a waste and black liquor that is disposed of is a waste.

2. *§ 261.4(a)(7): Spent Sulfuric Acid Used to Produce Virgin Sulfuric Acid.* Spent sulfuric acid is frequently used as a feedstock in the production of virgin sulfuric acid. It is normally reintroduced into the original sulfuric acid production process where sulfur values are recovered and absorbed into existing sulfuric acid. 45 FR 14487 n.30. Under the proposal, spent sulfuric acid recycled in this way was not considered to be a solid waste because it was used as an ingredient, used in a primary process, and was burned in an industrial furnace. See 48 FR 14483, 14487 n.30, 14488 n.31.

As discussed earlier (see Section E. above), some commenters questioned the regulatory status of spent materials that are reclaimed and then used as feedstocks. We indicated that normally the spent material would be considered to be a solid waste until it was reclaimed. However, we agree that our discussion of spent sulfuric acid at proposal (in footnote 30) created some confusion.

To eliminate any confusion, we are promulgating a specific exclusion stating that spent sulfuric acid recycled in this way is not a solid waste. As we explained at proposal, the spent sulfuric acid recycling process more closely resembles a manufacturing operation than a reclamation process. In addition, the operation is well established, and accounts for approximately 9% (in 1982) of the roughly 33 million tons of sulfuric acid produced annually. At least one state (California) has indicated by statute that spent sulfuric acid returned to the sulfuric acid production process is not a solid waste. EPA is therefore declaring explicitly that spent sulfuric acid returned to a sulfuric acid production process is not a solid waste. The acid is a hazardous waste if disposed (assuming it is corrosive or exhibits other hazardous waste characteristics), and could be a hazardous waste if recycled in some other manner (such as burning for energy recovery).

J. § 261.2(f): Burden of Proof in Enforcement Actions

EPA proposed that if respondents in enforcement actions raised a claim that a particular secondary material was not a solid waste (or was conditionally exempt from regulation) because it was recycled in a particular manner then they had the burden of proof to show that they were indeed recycling in that way. (Proposed § 261.2(d) and 48 FR 14492.) We are adopting this provision in the final regulation.

As discussed earlier in Section F, RCRA creates a broad remedial scheme to ensure that hazardous wastes are managed safely from cradle-to-grave. The regulatory framework envisaged for this problem extends to hazardous wastes being recycled, and normally includes any hazardous secondary material that is being recycled or that is accumulated with expectation of recycling.

Certain exceptions to this remedial scheme to exist. We think it appropriate, and the rule states explicitly, that the burden of proof (in the sense of both the burden of producing evidence and the burden of persuasion) is on the persons claiming that their hazardous secondary material is not a waste because it is within the terms of any of these exceptions. This provision, thus, restates the legal principle that parties claiming the benefits of an exception to a broad remedial statutory or regulatory scheme have the burden of proof to show that they fit the terms of the exception. *See, e.g. SEC* v. *Ralston Purina Co.*, 346 U.S. 119, 126 (1953) (exception to Securities Act registration requirements); *U.S.* v. *First City National Bank of Houston*, 386 U.S. 361, 366 (1967) (exception to merger provisions of Clayton Act); *Arnold* v. *Ben Knowsky, Inc.*, 361 U.S. 388, 393 (1960) (exception to Fair Labor Standards Act for retail sales); *Weyerhauser, Inc.* v. *Costle*, 590 F.2d 1011, 1040 (D.C. Cir. 1978) (burden of proof is on applicant for Agency-created fundamentally different factors variance).

Viewed another way, the regulations presume that hazardous secondary materials stored before recycling are hazardous wastes. The person accumulating can prove, however, that the materials are not wastes due to the manner of recycling (including the amount of material being recycled). These facts are within the special knowledge of the person accumulating the material. Presumptions of this type have been upheld consistently when they further interpret a remedial statutory purpose, guard against harm to public health and safety, and where the facts to rebut the inference are particularly within the knowledge of the other party. *See Beth Israel Hospital* v. *NLRB*, 437 U.S. 482, 493, 502 (1978); *U.S.* v. *General Motors Corp.*, 561 F.2d 923, 924 (D.C. Cir. 1977) (Leventhal J. dissenting in part).

Furthermore, this type of claim is an affirmative defense, for which it is appropriate that the person asserting the defense have the burden of proof. In addition, the facts underlying the recycling defense would be peculiarly within the knowledge of the party asserting the defense, a situation as noted above where it is appropriate for that party to have the burden of proving the issue. We thus disagree with those commenters claiming that the Agency lacked authority, or was ill-advised, to allocate a burden of proof in this regulation. Indeed, the Agency has allocated burdens of proof to respondents in other regulations that create an affirmative defense or an exception to a generally applicable principle. See § 122.42(n)(4) (permittee has burden of proof to establish the affirmative defense of upset); § 124.5 (National Pollutant Discharge Elimination System permit applicant has burden of persuasion that a permit authorizing a discharge of pollutants should be issued). This allocation of the burden of proof was affirmed in *American Petroleum Institute* v. *EPA*, 661 F.2d 340, 353, 354 (5th Cir. 1981).

There is no formal recordkeeping requirement in the regulation. However, persons must keep whatever records or other means of substantiating their claims that they are not managing a