ILLINOIS POLLUTION CONTROL BOARD
April 25, 1991

SEXTON ENVIRONMENTAL SYSTEMS, INC.,	)	
Petitioner,	)	
v.	)	PCB 91-4 (Permit Appeal)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
Respondent.	)	

MR. CLIFTON A LAKE, APPEARED ON BEHALF OF THE PETITIONER; AND

MR. CHARLES NORTHRUP AND MR. THEODORE DRAGOVICH, APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by J. Anderson):

This matter comes before the Board on a petition for permit review filed on January 7, 1991, by Sexton Environmental Systems Inc. (SES). SES appeals the inclusion of Special Condition No. 29 (Condition) in an Experimental Development Permit issued for two years by the Environmental Protection Agency (Agency) on December 3, 1990. The Condition imposes hazardous waste fees pursuant to Section 22.2 of the Environmental Protection Act (Act) (Ill. Rev. Stat. 1989, ch. 111-1/2, par. 1022.2).* The Permit governs operations at a site located at 2225-39 Harrison Street, Chicago, Cook County, Illinois.

On February 25, 1991, the Agency filed a motion for summary judgment; on March 7, 1991, SES filed its response in opposition; on March 8, 1991, the Board denied the Agency's motion. Hearing was held on March 11, 1991, at which Mr. Larry Lawrence, president of SES, presented testimony. On March 26, 1991, both the Agency and SES filed post-hearing briefs, and on April 5, 1991, the parties filed reply briefs.

BACKGROUND

SES, an Illinois Corporation, is a wholly owned subsidiary of John Sexton Contractors Co. SES sought the experimental

----

* By Orders of March 8 and March 28, 1991, the Board granted motions by SES to maintain as confidential certain information in the permit record and the hearing transcript.

development permit to allow it to construct and operate a pilot plant, to 10% scale, that is designed to render innocuous "hazardous (infectious) hospital waste" by a proprietary process involving chemical treatment. (Pet. p. 1, January 7, 1991).* The experimental permit issued by the Agency authorized SES to develop a solid waste management site to treat only "hazardous (infectious) hospital waste"; treatment of RCRA hazardous wastes is forbidden in Condition 12. Condition #29 states: "All hazardous (infectious) hospital waste shall be subject to fees in accordance with 22.2 of the Environmental Protection Act." (SES Pet. January 7, 1991, Ex. 1, p. 1,3, 4)

The pilot plant is to be operated as a research facility under a lease agreement with, and under the jurisdiction of, the Illinois Medical Center Commission (Commission) (see Illinois Medical Center District Act, Ill. Re. Stat. ch. 111 1/2, para. 5001). A special oversight committee of the Commission consists of representatives from the Commission, the University of Illinois College of Medicine, Rush-Presbyterian-St Luke's Medical Center, Cook County Hospital, Westside V.A. Medical Center, and the Chicago Technology Park. The leased facility is located about one mile west of downtown Chicago, and the City of Chicago's Zoning Department has concurred with the use of the site for a temporary research project as approved by the Commission. (Exp. Permit Appl. Sec. 1.0, Sec. 4.0; R. pp. 11-12).**

SES asserts that the chemical treatment process is designed "to destroy all biologically active material" and "to produce wastestreams capable of being recycled into useful products." (R. p. 12). As previously stated, the pilot plant will not receive any RCRA hazardous wastes. SES states that the pathogenic microorganisms are the constituents of concern, that the chemical composition of the substrate materials is not altered, and that the process does not "result in any wastewater discharges to surface waters or to publically-owned treatment works nor any emissions of pollutants to the atmosphere." (R. p. 14) SES states that "inherent in the process is the ability to produce recyclable wastestreams of paper pulp, plastics, metal and glass." (R. p. 9).

* The Board's regulations add "infectious" to the statutory term Hazardous Hospital Waste only to identify the characteristic of the waste being regulated pursuant to the statutory mandate. This opinion generally will use the term as found in the regulations, i.e. hazardous (infectious) hospital waste. These regulations were adopted in Docket R80-19, May 28, 1981 and are codified at 35 Ill. Adm. Code 809.901 et seq.

** Section 39.2(h) exempts the City of Chicago from the siting approval requirements commonly known as "SB 172".

SES intends, after one year of operation under the experimental permit and validation of the process, to initiate full scale commercial operation in the State. (R. p.9). SES also intends to seek an amendment to the Board's Part 809 Hazardous (infectious) Hospital Waste regulations to include its process as an approved treatment for rendering the waste innocuous; presently, only incineration, or sterilization by autoclaving or ethylene oxide chemical treatment are approved under the regulations under 35 Ill. Adm. Code 809.903 and 809.904. SES testified that it has already received encouraging responses on the recycling potential once it demonstrates that its process does render the waste innocuous. SES's contacts include Western Michigan University in Kalamazoo and varous mills and recycling brokers. Meanwhile, the wastestreams produced under the experimental permit will be disposed in an out-of-state landfill. (R. pp. 24-27).

ISSUES

SES has based its challenge of Experimental Permit Condition No. 29 on three arguments:

1. That the Board wrongly decided in a prior case that the hazardous waste treatment fee of Section 22.2 of the Act is applicable to incineration of "hazardous (infectious) hospital waste". See: National Environmental Services Corporation v. Illinois Environmental Protection Agency, PCB 89-129 (July 19, 1990) (appeal pending)

2. That the NESC case is not precedential in this case because SES' proprietary process is not a "treatment" that is provided for in the Board's hazardous (infectious) hospital waste regulations, and thus does not result in "treatment" for purposes of the fee provisions of Section 22.2.

3. That the SES process separates the components of the hazardous (infectious) hospital waste into recyclable paper, plastic, glass and metal wastestreams, thus falling under the exemption from the fee provisions in Section 22.2(b)(1)(D).

(Pet. Brief, p.1, March 26, 1991).

BOARD DISCUSSION

For the reasons expressed below, the Board finds, as a matter of law, that, until the SES' process is allowed by Board regulation, SES is not providing a method of treatment of the hazardous (infectious) hospital waste. Thus, the provisions of Section 22.2 do not apply.

The Board has concluded that it need not, certainly at this juncture, address either the issue as to whether the Board was in

error in its NESC decision (which involved incineration, a Board authorized treatment) or the issue as to whether SES is exempt under the recycling provisions of Section 22.2.

Hazardous (infectious) hospital waste is in a distinct, indeed unique, category in the statutes. In P.A. 84-1308, effective August 25, 1981, the Legislature expressly defined hazardous (infectious) hospital waste: a) as waste whose infectious characteristics had not been rendered innocuous, b) banned non-rendered-innocuous waste from landfilling, and c) mandated that the Board, by regulation, provide methods of treatment to render the waste innocuous. The provisions are quoted in full as follows:

Section 3.13

> "HAZARDOUS HOSPITAL WASTES" means waste generated in connection with patient care that is contaminated with or may be contaminated with an infectious agent that has the potential of inducing an infection and has not been rendered innocuous by sterilization or incineration.

Section 21. No person shall:

> (m) Deposit any hazardous hospital wastes in any landfill on or after January 1, 1981. All such waste shall be properly incinerated or processed by an alternative method pursuant to regulations adopted by the Board. This requirement shall take effect by January 1, 1981.

The Board adopted the mandated regulations in R80-19. (See note, p. 2). The methods of allowable treatment are found in 35 Ill. Adm. Code 809.903 and 809.904. They provide for "rendering innocuous" by sterilization in an autoclave, sterilization in a commercial ethylene oxide unit, and by incineration. No other methods for rendering the waste innocuous have been added since the initial regulatory proceeding. Indeed, none have been proposed to the Board for consideration.

It is not in dispute that SES' chemical treatment process does not fall within the listed methods in the regulations. Nor is it in dispute that the waste remains a hazardous (infectious) hospital waste after the SES process. This is because the waste cannot be considered to have been rendered innocuous, regardless of the success of the process biologically, until the Board's regulations have been amended to include the SES process on the list of approved treatment methods. The Agency requires the waste to be managed as a hazardous (infectious) hospital waste in its Special Condition 21.

The Agency also stated:

> Because the waste treated by the SES process remains a hazardous (infectious) hospital waste it may not be reused. Only after a hazardous (infectious) hospital waste has been rendered innocuous can the possibility of reuse be considered.
>
> Agency Brief, p. 8, March 26, 1991

The Agency nevertheless argued that the Section 22.2(b)(1)(D) treatment fee provisions apply. Section 22.2(b)(1)(D) states in pertinent part:

> For purposes of this subsection (b), the term "treatment" is defined as in Section 3.49 but shall not include recycling, reclamation or reuse.

Section 3.49 defines treatment as follows:

> "TREATMENT" when used in connection with hazardous waste means any method, technique or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste <u>so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage or reduced in volume</u>. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous. (emphasis added)

The Agency argues that the SES treatment process is a method, technique or process, that it is designed to change the physical, chemical, or biological character or composition of the waste, that the SES application indicates that the waste will be reduced in size, and that the biological elements will be rendered inactive and thus change its character and composition. (Agency Brief, p. 6).

While disputing some of the Agency's characterizations (see p. 2 above), SES goes on to argue that, while the destruction of pathogens might "in ordinary parlance" be "treatment", it is not "treatment" for regulatory purposes. SES then states:

> The Agency cannot have it both ways. It cannot regulate the residue of SES' processing of hazardous (infectious) hospital waste as if there had been no "treatment," and at the same time impose the Section 22.2 fee which applies

> only to hazardous waste received for "treatment." Because SES' process clearly is not "treatment" of hazardous (infectious) hospital waste for purposes of Part 809 of the regulations it cannot be reasonably be (sic) interpreted as "treatment" for purposes of Section 22.2 of the Act.
>
> SES Reply Brief, p. 5, April 5, 1991.

The Board has concluded that the SES process cannot be categorized as a "treatment" during the experimental permit period with the meaning of the "hazardous hospital waste" statute and Board regulations, or within the meaning of Section 3.49.

The only statutory characteristic of hazardous hospital waste that makes it even arguably a hazardous waste is its infectious characteristic. Moreover, the statutory designation of the wastes as "hazardous hospsital wastes" is by definition linked solely to the fact that such wastes have not been rendered innocuous. It is only this failure to be "rendered innocuous" that causes the wastes to be specially regulated at all (and then only if it comes from hospitals). Pursuant to the Board definition in 35 Ill. Adm. Code 809.901(f), "Innocuous hospital waste" is defined as not a special waste, and is no longer banned from disposal in a landfill, including a non-hazardous waste landfill.* Once the statutory requirement is fulfilled that the waste is rendered innocuous only by treatment methods approved by the Board, the special regulatory oversight required of this defined waste ceases. The general definition of "treatment" in Section 3.49 should not construed so as to be at odds with the specific treatment provisions in the hazardous (infectious) hospital waste statute or regulations.

The process which SES has been authorized to use on a pilot basis is an experimental one. At the present time, it cannot be demonstrated, to a regulatory certainty, that the SES process in fact will "treat" hazardous hospital waste "so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume" within the meaning of Section 3.49. Until the success of the SES process can be determined, SES' operation is more appropriately and temporarily characterized as a transfer station for hazardous (infectious) hospital waste en route to its disposal offsite and out-of-state, rather than as a hazardous waste treatment site. As a matter of logic, as well as statutory

* "Hospital pathological wastes" is listed as an industrial process waste, a special waste (See Sections 3.17 and 3.45 of the Act). The Board understands that it is for this reason that the Agency has continued to require municipal landfills to get a supplemental permit to accept the "innocuous waste".

construction, the precise nature of SES operation cannot be determined until its experiment has been completed.

Put another way, even if SES' process causes the waste to become biologically inactive, the Agency cannot issue any operating permit or other authorization that would purport to have the waste rendered innocuous until SES successfully demonstrates to the Board that its treatment process should be listed.* It is at this time that SES can pursue its hazardous waste and recycling exemption arguments. Only by this procedure can any treatment occur under the regulations. We also point out that the other physical, etc. "treatments" in the Section 3.49 definition referenced in Section 22.2 are not relevant in that they refer to characteristics other than the only one for which hazardous (infectious) hospital waste is being regulated. The Experimental Permit in fact forbids the waste to contain any RCRA hazardous wastes, as noted above.

The Board notes that today's result allows for the development of new methods to deal with infectious wastes, while avoiding economic disincentives for such efforts during their development phase.

Finally, since the Agency appeared to argue both sides of the matter (Agency Brief, p. 8,9, March 26, 1991), we note that it was proper for SES not to have contracted for or otherwise initiated recycling or reuse of the wastestream generated under experimental permit. As noted earlier, we need not address the recycling issue here, but point out that SES cannot purport to others that the waste is innocuous, nor can SES allow any portion of the waste to end up in an Illinois landfill.

This Opinion constitutes the Board's findings of fact and conclusions of law in this matter.

ORDER

Special Condition #29 of the Environmental Permit No. 1990-108-DE-Ex, issued by the Agency to Sexton Environmental Systems, Inc. is hereby struck.

Section 41 of the Illinois Environmental Protection Act, Ill. Rev. Stat. 1989, ch. 111½, par. 1041, provides for appeal of final orders of the Board within 35 days. The Rules of the Supreme Court of Illinois establish filing requirements.

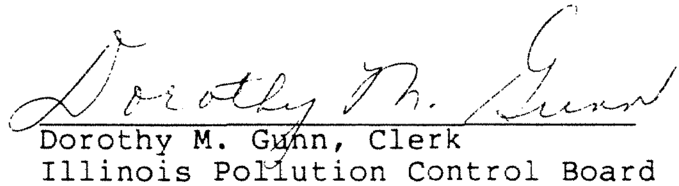
IT IS SO ORDERED.

* We note that the authority of the Agency to rely on the experimental permit provisions in the Board's Part 807 regulations to issue this experimental permit was not argued here.

J. Dumelle, R. Flemal and B. Forcade dissented.

J. T. Meyer concurred.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 25th day of April, 1991, by a vote of 4-3.



Dorothy M. Gunn, Clerk
Illinois Pollution Control Board