

ILLINOIS POLLUTION CONTROL BOARD

June 12, 1980

ENVIRONMENTAL SITE DEVELOPERS, INC., )  
 )  
 ) Petitioner, )  
 )  
 ) v. ) PCB 80-15  
 )  
 ) ENVIRONMENTAL PROTECTION AGENCY, )  
 )  
 ) Respondent. )

JOSEPH MADDOX, ATTORNEY AT LAW, APPEARED ON BEHALF OF THE PETITIONER.

WILLIAM SELTZER AND JOHN WILLIAMS, ATTORNEYS AT LAW, APPEARED ON BEHALF OF THE RESPONDENT.

OPINION AND ORDER OF THE BOARD (by D. Satchell):

This matter comes before the Board upon a petition appealing the denial of a solid waste disposal site development permit, filed January 18, 1980 by Environmental Site Developers, Inc. (ESD). The letter of denial cited violations of Rules 313 and 315 of Chapter 7: Solid Waste Rules and Regulations which concern water pollution by landfills. The Board has received several written comments from the public. Hearings were held in Springfield on April 24, 30 and May 6, 1980. Members of the public attended and commented. Since the hearings some members of the public have withdrawn their objections.

The site in question is situated near Lake Springfield at the southeast corner of Springfield, Sangamon County. East Lake Drive runs generally east-west across Spaulding Dam at the northeast end of the lake. The City of Springfield (City) operates the V. Y. Dallman III coal-fired electric power unit south of East Lake Drive on the east side of the lake. There is a waterworks located adjacent to the power plant. Slurried fly ash and water treatment sludge are pumped under East Lake Drive, across to the east of the spillway and Sugar Creek. ESD has an option to purchase a thirty-two acre tract to the north of the ash ponds and states the site will be about thirty-nine acres. It proposes to construct a series of berms to accept a calcium sulfate/sulfite sludge from the scrubber unit being installed in the power plant.

An alternative site for the disposal of the sludge is Burkett's landfill which is somewhat farther away (R. 482; Resp. Ex. 2). The Agency has issued a supplemental permit for the landfill to accept this sludge. Over its expected twenty year life a large amount of fuel will be saved by utilization of the ESD site which is very close to the power plant. The alternative site would

involve more movement of heavy trucks on city streets. In addition there is a possibility of selling the gypsum sludge for manufacture of wallboard or plaster of paris. If it is mixed with other refuse it will lose its potential value (R. 186).

Section 39(a) of the Environmental Protection Act (Act) requires that in denying a permit the Agency transmit to the applicant a detailed statement of the reasons the permit was denied. The letter must identify regulations which may be violated if the permit were granted, the specific type of information, if any, which the Agency deems the applicant did not provide it and a statement of specific reasons why the Act and regulations might not be met if the permit were granted.

On December 12, 1979 the Agency issued a letter of denial which stated as follows:

The pollution potential to waters of the State of Illinois, from your proposed disposal of flue gas desulfurization sludges within the Based Flood\* plain of Sugar Creek, is unacceptable. Rules 313, 315, Part III, Chapter 7, Solid Waste, Illinois Pollution Control Board Rules and Regulations, adopted July 27, 1973. Based upon the above, this Agency must deny the permit request.

\*"Based Flood" means a flood that has a one percent or greater chance of recurring in any year or a flood of a magnitude equalled or exceeded once in 100 years, on the average, over a significantly long period.

Considerable evidence was received concerning noise, dust and the possibility of mine subsidence under the proposed site. These problems are beyond the scope of the denial letter and will not be further considered by the Board. There is also testimony concerning fencing, cover and the intended practice of dumping from the berms rather than filling from the toe. These are not cited in the denial letter and also relate to the operating as opposed to the development permit.

The Agency indicated that the basis of its concern was that the facility was to be located in a flood plain (R. 88). At the hearing the Agency admitted that its objections were limited to its concern that flood waters would scour or damage the berms so as to allow leachate to migrate from the site and to the characterization of the sludge as inert (R. 91, 96). Petitioner seems to agree that it was adequately informed that this was the basis of the denial (R. 144). The Agency was satisfied that the pro-

not have the odor problems and oxygen demand of the sulfide/sulfite sludge and has a crystalline structure which is more favorable to dewatering (R. 177). Whereas the older sludges were 30% water and had a consistency like toothpaste, the proposed unit will produce a moist powder with 10-20% water (R. 177; Pet. Ex. 2). It will contain about 0.08% fly ash which could contain up to 150 ppm lead and other trace elements (R. 206). The saturated leachate would contain about 2500 ppm of soluble calcium salts. The only problems would be those associated with hardness or total dissolved solids (R. 182). ESD proposes to install in each bermed area drains which will route any leachate to a pond for treatment if necessary. The Agency has issued to another operation a supplemental permit for this same sludge (Pet. Ex. 7).

The Board has long held that the issue on appeal of a permit denial is whether the Agency erred and not whether new material which was not before the Agency persuades the Board that a permit should be granted. [Soil Enrichment Materials v. EPA, PCB 72-264, 5 PCB 715 (1972)] "The Agency errs in denying a permit only when the material, as submitted to the Agency by the applicant, proves to the Board that no violation of the Act or regulations will occur if the permit is granted," [Oscar Mayer and Company v. EPA, PCB 78-14, 30 PCB 397, 399 (1978)]

In its application ESD stated that the material was "inert." "In a hearing on a Section 40 petition, the applicant must verify the facts of his application as submitted to the Agency, and, having done so, must persuade the Board that the activity will comply with the Act and regulations." (Oscar Mayer and Company v. EPA, op. cit., 398) The evidence presented at the hearing has persuaded the Board that the material is indeed inert in the sense that its disposal as ESD proposes should pose little environmental hazard. The decision of the Agency is reversed.

This case could have been handled more easily had the Agency fully complied with the requirements of Section 39(a) of the Act in issuing a denial letter and had ESD responded with a supplemental application.

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

Mr. Werner concurred.

posed berms were high enough that they would not be overtopped by expected flooding (R. 93). The Agency was satisfied that the soil at the site was suitable (R. 92, 470).

Sugar Creek usually floods at least once a year between Spaulding Dam and the Sangamon River east of Springfield (R. 17, 535). The source of this flooding is water which backs up from the Sangamon and water from the lake when the spillway gates are opened (R. 480, 535). The City operates ash ponds adjacent to the spillway (R. 532; Resp. Ex. 1). At one time the City had difficulty with berm erosion, but this was resolved by placing riprap alongside the channel from the spillway. There has been no difficulty resulting from erosion on the side away from the spillway (R. 534, 536, 539). ESD's berms will be beyond the existing ash ponds, away from the spillway and will be protected with riprap (R. 107, 149).

Some of the citizen witnesses contended that construction of a berm around thirty-nine acres in a flood plain would tend to raise the flood level (R. 21, 330, 364). Although this could have water pollution potential, it was not specified in the denial letter.

The permit application described the sludge as "inert" (R. 96, Agency Record). Mr. Cavanaugh, the Agency's land permit section manager, testified that flue gas desulfurization sludges (FGD) in his experience were not inert (R. 90, 96, 440). He testified that he consulted the "Flue Gas Desulfurization Sludge Disposal Manual" (R. 442; Resp. Ex. 11). The Petitioner seems to agree that this is a reliable source on this topic (R. 183). The manual indicated that FGD sludges produce leachates far in excess of drinking water standards so that under proposed federal regulations it would be classified as a hazardous waste (R. 442). The sludge involved in the permit application appeared to be similar to that in the manual (R. 453, 472, 515). However, the FGD sludge most closely identified with the sludge involved here was blended with fly ash (R. 435). Apparently results from comparable sludge were not available.

The new scrubber represents a technological advance over the scrubbers described in the manual. The Dallman plant will have an electrostatic precipitator to remove around 99.5% of the fly ash ahead of the two loop scrubbing operation (R. 204). The scrubber employs limestone rather than lime and operates at a low pH in the first loop (R. 175). Under these conditions calcium sulfide and sulfite are oxidized to the sulfate. The resulting product is in excess of 90% calcium sulfate as gypsum. This does

ORDER

The case is remanded to the Agency for issuance of a development permit.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order were adopted on the 12<sup>th</sup> day of June, 1980 by a vote of 5-0.

  
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Christan L. Moffett, Clerk  
Illinois Pollution Control Board