ILLINOIS POLLUTION CONTROL BOARD
November 5, 1981

TECHNICAL SERVICE COMPANY, INC., a Corporation, Petitioner,	)	
v.	)	PCB 81-105
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	

MR. THOMAS J. IMMEL, BURDITT AND IMMEL, APPEARED ON BEHALF OF THE PETITIONER;

MR. WILLIAM E. BLAKNEY, ASSISTANT ATTORNEY GENERAL, APPEARED ON BEHALF OF THE RESPONDENT.

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

This matter comes before the Board on a June 22, 1981 petition for appeal by Technical Service Company, Inc. (Technical Services) to reverse the decision of the Illinois Environmental Protection Agency (Agency) announced on June 9, 1981 denying Technical Services' developmental permit for a non-hazardous solid waste management facility located in Henry County, Illinois. The permit application had been submitted to the Agency on March 11, 1981. Hearings were held on August 25, August 26, September 23 and September 29, 1981 in Atkinson, Illinois. Members of the public were present and did testify.

Technical Services has applied for this permit to accept generally aqueous wastes (possibly sulfur dioxide (sic) and dissolved oils) which would be brought into the facility by truck (R. 39-42). As originally proposed the project included the recycling of oil after separation of oil and water in Pond Number One; two additional ponds for temporary storage of waste water; a land treatment basin to evaporate water; disposal trenches to receive soil and residual solids; and a sludge drying bed to receive thick aqueous sludges. The subject property is located in an area which was strip mined approximately forty years ago (R. 57).

Pond Number One has been developed and presently contains several hundred thousand gallons of liquid including poly-chlorinated biphenyl contaminated oil. That pond is the subject of litigation in the Henry County Circuit Court (R. 44-46) and has been specifically excluded from the permit application which is under consideration here (R. 43).

In its petition for permit review, Technical Services alleges that the Agency's denial dated June 9, 1981 is either void or defective for the following reasons:

1. It was issued a day beyond the time limit for Agency action;

2. It alleges purported violations of the Environmental Protection Act, which are not even alleged to have occurred on the property which is the subject matter of the March 11th application;

3. It contains serious misstatements of fact and indeed contains several statements which are false and were known to be false at the time they were made;

4. It was issued without affording the Petitioner an opportunity to answer, contest, or rebut the allegations contained in the letter which formed the basis for the denial, in violation of both State and Federal law; and

5. The denial is further based on technical reasons which are fully rebutted by technical information supplied to the Agency during the permitting process.

First, the Board finds that the permit did not issue by operation of law due to expiration of the time limit for Agency action prior to Agency denial. It is true that Section 39(a) of the Environmental Protection Act (Act) allows the applicant to "deem the permit issued" if the Agency fails to take final action "within 90 days after the filing of the application." However, Procedural Rule 105(a) states that "any period of time prescribed by these rules or the Act shall begin with the first business day following the day on which the act... occurs." Since the application was submitted to the Agency on March 11, 1981, final Agency action was not required until June 10, 1981. Since the Agency's denial letter was issued on June 9, 1981, it was timely and the permit did not issue by operation of law.

Second, in a permit appeal review, the issues are defined by the Agency's denial letter. The burden of proof is placed upon the applicant to demonstrate that the reasons for denial detailed by the Agency are inadequate to support a finding that permit issuance will cause a violation of the Act or Board rules. Thus, Technical Services' allegations are best considered in the context of the denial letter, which cites fourteen possible violations of the Act in consecutively numbered paragraphs.

Paragraphs 1 through 7 of the denial letter center on activities occurring at Pond Number One. The Agency contends that the site is in violation of Sections 12(a) and (d), and 21(a), (d) and (f) of the Act and Rules 210, 302(A) and 501(D) of Chapter 7:

Solid Waste, in that special and hazardous wastes have been placed in the pond threatening to cause water pollution, that these activities were carried out without proper permits or manifests and without paying the necessary fee. Technical Services, on the other hand, contends that the substances deposited in that pond are not wastes at all, and, therefore, that it was not required to comply with any of these provisions. This contention is based upon their intent to recycle the material which was purchased for $26,000 from Alcoa Aluminum (R. 43-45). Mr. Rapps, an engineer working for Technical Services, testified that it was acquired for the sole purpose of resale and that had not litigation ensued in circuit court, it would have been sold by the time of hearing (R. 46). Technical Services argues further that Pond Number One cannot be the basis of permit denial in that it has been specifically excluded from the permit application.

The Agency certainly has the authority to consider the general area of the site in determining whether a permit shall be issued. However, the violations alleged in paragraphs 1 through 7 are only material to this case insofar as they relate to the prospective operator's prior experience in waste management operations. There is no allegation that Pond Number One will in and of itself contribute to violations at the applied for site.

Further, these allegations, coupled with those allegations in paragraph 9 are insufficient to warrant permit denial based upon the operator's prior experience. None of these allegations have resulted in a finding of wrongdoing on the part of Technical Services. They all center on proceedings in People v. Technical Services Company, Inc., 81-CH-8, which is still pending. Further, Technical Services' argument that the material in Pond Number One is not a waste is at least arguably supported by the Appellate Court decision in IEPA v. IPCB and Safety-Kleen Corp., No. 80-650, PCB 80-12, 37 PCB 363. Therefore, the Board finds that paragraphs 1 through 7 and 9 are insufficient to support Agency denial of the permit. For this reason the Board need not decide whether state or federal law required a hearing on these issues prior to Agency denial of its permit.

The Board also will not consider paragraphs 8 and 12 as a proper basis for denial in that the Agency and Technical Services filed a stipulation on October 9, 1981 that these paragraphs are no longer in issue and are withdrawn as a basis for denying the permit. Therefore, only paragraphs 10, 11, 13, and 14 remain for consideration. These allegations are as follows:

...

> 10. The applicant has not submitted adequate proof that operation of the solid waste management site will not cause a violation of the Environmental Protection Act or Rules (Rule 207, Chapter 7) and prevent the pollution of land or groundwater in that at least ten feet of clay, having a permeability not greater than 1×10^{-7} cm/sec. has not been

shown to exist in the bottom and sidewalls of waste impoundments and disposal areas. The applicant has stated an assumed permeability in the approximately forty-five acre area that is comprised of mixed surface mining spoil based on two permeability tests performed of samples containing shale, but not identified as to depth that were later compacted prior to testing, and on permeability tests performed on other parcels of land in the area. The Agency cannot conclude that such assumptions are valid. Permeability tests performed on samples from the areas and depth of the impoundments and disposal trenches would more closely describe existing permeabilities in those areas. The provision of clay liners recompacted to measured densities and moisture content could also result in demonstration of the required degree of imperviousness. No such liners were specified.

11. The preliminary hydrogeologic evaluation of the Illinois State Geological Survey indicates widespread deposits of water laid sand and gravel in the Henry Formation and that sand deposits have been mapped immediately north of the site. We cannot conclude that permeable lenses do not extend into this area that has been strip mined and is proposed for waste storage and disposal. Data that describes the geological sequences from undisturbed areas in or around the proposed site were not included with the data submitted.

...

13. A correlation between the groundwater level information submitted by Technical Services and the depth of the impoundments and trenches as shown on the site plans indicate that if the ponds and trenches are excavated as shown on the site plans, the bottom of the impoundments and trenches, including at least storage pond #1, would be below the groundwater.

14. The monitoring well design does not conform to Agency procedures in that well screens are set into the shale that underlies the spoil and not at the level of the existing water table. Screens set from the existing water table to the depth of the shale could probably have a better chance of collecting soluble or liquid wastes that might migrate out of storage impoundments or disposal areas.

The Board rejects paragraph 14 as a sufficient basis for permit denial. Technical Services has indicated its willingness to place or modify any wells in conformity with whatever the Agency may require by way of permit conditions (R. 137), thereby safisfying monitoring concerns.

The Board also rejects paragraph 11 as a sufficient basis for permit denial. While the Illinois State Geological Survey suggested that there had been some sand deposits mapped north of

the site, it also found that there do not appear to be any such deposits beneath the site (R.116 and 366). Technical Services' borings confirm that and "appear to be almost void of sand grains" (R. 116). Since Technical Services' facility lies within a strip mined area, it seems unlikely that sand formations would exist within the spoil material which composes the site and which extends substantially north of the site (R. 117-120).

The Board also rejects paragraph 13 as a sufficient basis for permit denial. Once again, shortcomings in construction or operation of Pond Number One cannot be used in this case as a basis for denial of a permit at another site. Further, the placement of impoundments and trenches below the groundwater table does not in and of itself pose a threat to the environment. If the liners of the impoundments and trenches are sufficiently impermeable, environmental problems can be avoided. However, if they are not, any such problems are magnified by placement beneath the groundwater table. Therefore, while this reason for denial is insufficient standing alone, it may well add to the sufficiency of paragraph 10.

Thus, this entire proceeding hinges upon whether Technical Services has made an adequate showing that the mine spoil material which composes the site is of such permeability that the environment will be adequately protected. This is due to the fact that in the original application no liners were proposed for the storage ponds and disposal trenches, which are formed simply by excavating the spoil material and compacting the surface to 95% of Standard Proctor (Pet. Ex. 5, pp. 80-82). However, it appears that even this compaction will be unnecessary in that the in situ density averages about 95.5% of Standard Proctor with a lowest reported field density of 91.7% of Standard Proctor (Pet. Ex. 14).

Technical Services hired Whitney and Associates to perform permeability tests on the mine spoil material (R. 47-48). Two samples were analyzed with reported results of 2.1×10^{-10} cm/sec. and 5.6×10^{-10} cm/sec. (Pet. Ex. 5, p. 44 and R. 53-54) at Standard Proctor (R. 61). Since the in situ compaction is less than Standard Proctor, Mr. Rapps assumed a maximum permeability of 10^{-7} cm/sec. (Pet. Ex. 5, p. 47 and R. (Sept. 29) p. 168).*

Dr. Piskin, an Agency engineer, disagreed with that assumption (R. 337-339). He felt, based upon his experience, that the permeability of mine spoil material would be between 10^{-5} and 10^{-6} cm/sec. (R. 362). He also testified that the spoil material is basically saturated silt which will not have 10^{-7} cm/sec. permeability (R. 379).

Without deciding whether permeability of less than 10^{-7} cm/sec. is required, the Board nevertheless upholds the Agency's denial of the permit on the basis that Technical Services has

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* Since the September 29 transcript is numbered rather than following from earlier transcripts R(Sept. 29) will be used to designate it.

not made an adequate showing that the permeability of the in situ material is such that the environment will be adequately protected by its use as a liner material. The Agency correctly noted that only two permeability tests were run on samples which were taken from indefinite depths and which were compacted beyond their in situ levels (see Pet. Ex. 5, Part IV).

Technical Services does present testimony and exhibits in an attempt to overcome these shortcomings, but even this additional information falls short of the necessary showing. For example, grain size analyses are presented for twelve samples (Pet. Ex. 5, Part 3, pp. 31-42) which show reasonable uniformity of composition. However, grain size is but one factor which determines permeability. Similarly, Technical Services has provided a soil composition analysis of 56.4% silt, 35.2% clay and 8.4% sand (using A.S.T.M. standards) and has compared that to other sites with similar compositions which exhibit permeabilities of 10^{-7} to 10^{-8} cm/sec. (Pet. Ex. 11). However, these classifications are solely dependent upon grain size and, therefore, have no greater reliability than that the grain size analyses. Finally, John Taylor, an employee of Mr. Rapps, has indicated that the permeability of samples tested is representative of soils found over the entire site, but this assertion is largely unsupported (Pet. Ex. 5, Part 4).

Technical Services has failed to demonstrate that the assumed maximum permeability of 10^{-7} cm/sec. is in fact the maximum permeability which exists at the bottom and sides of the ponds and trenches. The two samples were tested at a compaction which was not the same as in situ conditions, and Technical Services has not demonstrated that the assumed maximum necessarily follows from the test results. Further, even if such a showing had been made, Technical Services still would not have met its burden of proof in that it failed to demonstrate that those two samples were in fact representative of the site as a whole, or even of the areas immediately surrounding and under the ponds and trenches involved here.

For those reasons the Agency's denial of Technical Services' permit is upheld. Of course, Technical Services may reapply for a permit upon remedying these deficiencies.

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

ORDER

The Board hereby affirms the Illinois Environmental Protection Agency's June 9, 1981 permit denial in this matter.

IT IS SO ORDERED.

I, Christan L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 5th day of November, 1981 by a vote of 5-0.

Christan L. Moffett, Clerk
Illinois Pollution Control Board