

ILLINOIS POLLUTION CONTROL BOARD
June 30, 1983

FRINK'S INDUSTRIAL WASTE, INC.,)
)
) Petitioner,)
)
) v.) PCB 83-10
)
 ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,)
)
) Respondent.)

THOMAS J. IMMEL (BURDITT & IMMEL) AND DONALD L. SHRIVER (DOWNEY, YALDEN, SHRIVER & YALDEN) APPEARED ON BEHALF OF PETITIONER, AND

E. WILLIAM HUTTON & JOSEPH R. PODLEWSKI APPEARED ON BEHALF OF RESPONDENT.

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

This matter comes before the Board on the January 26, 1983 appeal by Frink's Industrial Waste, Inc. (Frink's) of the January 19, 1983 denial by the Illinois Environmental Protection Agency (Agency) of permits to operate four waste storage tanks. The tanks are located on a 4.8 acre site approximately two miles north of the Village of Pecatonica in Winnebago County.

The concrete tanks at issue (known as Tanks 1-4, and located in a building) have an aggregate capacity of about 80,000 gallons. Tanks 1 and 4 receive oily wastes, Tank 3 receives waste solvents, and Tank 2 receives high pH alkaline materials. These wastes are "treated" insofar as the liquids separate by gravity as they are retained in the tanks. Some liquids are reclaimed, while wastewaters and sludges are transported off-site for treatment and/or disposal.

The Agency's stated reasons for permit denial were that:

1. "Recent samples collected by the applicant and by the Agency from downgradient monitor wells indicate that synthetic organic chemicals continue to contaminate groundwater (Section 12 (a, d, and f) of the Act; 35 Illinois Admin. Code, 309.241, 725.190). The source of groundwater contamination must be found and eliminated. Action must be taken to assure that no future groundwater contamination will occur. Because the source of the groundwater contamination is not known at this time, no single tank or portion of the facility may be eliminated as a contributing source of the contamination.

2. The applicant failed to implement or provide a groundwater monitoring program capable of precisely determining the facility's impact on the quality of the uppermost aquifer underlying the facility (35 Admin Code, 725.190). The reapplication proposed additional downgradient wells that would monitor the water table; however, they were not installed. Installation of the proposed wells would have allowed determination of the direction of shallow groundwater movement and would have allowed sampling at the groundwater table where materials with a specific gravity of less than 1.0 would occur."

By its Orders of January 27 and February 10, 1983 the Board granted Frink's January 26, 1983 motion for stay of the effect of denial of these operating permits, with the result that Frink's has been able to continue to accept wastes during the pendency of this appeal. On February 16, 1983 the Agency filed a Record consisting of 152 exhibits, and on May 27, 1983 filed additional exhibits 153-163. Each filing was the subject of a motion to file instanter, which motions are hereby granted. On June 28, 1983, the Board received a letter from the Agency dated June 23 containing the results of an Agency January 13, 1983 lab water analysis which the Board incorporated into the Agency Record as Exhibit 164.

Hearing in this matter was held in Rockford on March 31, 1983. Testimony was given in support of the permit issuance by Randall Olson, Frink's president, and in opposition by Eugene Theios, Manager of the Disposal Alternatives Unit of the Permit Section of the Agency's Division of Land Pollution Control, by Maichle Bacon, Director of Environmental Health Winnebago County Health Department, and by Cindy Hunter and Adrienne Ahlstrom, residents of property neighboring the Frink's facility.* Each party submitted closing arguments.**

* At hearing, the hearing officer admitted 6 exhibits by stipulation of the parties (H.O. Ex. 1-6), and a written statement by another Frink's neighbor, Debbie Flynn as H.O. Ex. 7. Frink's also presented one exhibit (Pet. Ex. 1). As the Agency presented no exhibits at hearing, and as its Record is not page-numbered, references to it will appear as "IEPA Ex. _____".

**The Board notes that in its brief, Frink's refers by number to various "Exhibits in Support of Permit Appeal" filed by it January 26 and February 8, 1983 (Frink's Ex. 1-30). Most of these exhibits are contained in the Agency Record. Those which are not are Frink's Ex. 1, a memorandum dated July 13, 1981 concerning a phone call between Frink's and Agency personnel, Frink's Ex. 8, a July 29, 1982 letter from T. Immel to J. Podlewski concerning the lagoon excavation, Frink's Ex. 11 and 13 being laboratory reports by Aquasearch, and Frink's Group Ex. 30, several January 26-27 letters from the Agency to Frink's denying (footnote continued on p. 3)

As will be discussed later, the issues before the Board reduce themselves to the questions of whether Tanks 1-4 can be eliminated as the source of the undisputed groundwater contamination at the Frink's site, and whether its submitted groundwater monitoring program is adequate. Additional issues have crept or been interjected into this action however, as a result of confusion concerning the nature of the Board's Chapter 7: Solid Waste regulations, the occurrence and peculiar circumstances surrounding groundwater contamination at the Frink's site, and start-up difficulties involving the Agency's consolidated permit review program (in which the Agency's air, land, and water divisions are to give coordinated review to the various permit applications which may be required for the operation of any single facility). The latter has made this record difficult to deal with, in that supplements to the record have been necessary when the Agency has located additional relevant documents, and documents which the Board would have assumed would be included in the Agency record are not.

Given these circumstances, a more detailed than usual recitation of the facts of this case is a necessary prelude to a discussion of the issues argued by the parties.

SITE HISTORY* AND PERMIT DENIAL

Randall Olson, then doing business as Frink's Sewer Service, was issued a permit to develop the 4.8 acre site to "store, transfer, and process special and hazardous wastes in August, 1979 (IEPA Ex. 9); as the Agency Record does not contain all of the engineering reports and site plans incorporated into the development permit by reference, it is not possible to accurately speak of the required development. However, as of February, 1980, the storage and processing facilities consisted of a four-compartment tank building (currently numbered Tanks 1-4), to the south of which was a pump building, and 13 underground oil storage tanks.

(continuation of footnote from p. 2)

several supplemental waste stream permits. Group Ex. 30 is stricken from the record as the events occurred after the closing of the Agency's permit record. The rest are stricken because there is no evidence that these materials were ever received by the Agency, and no argument or stipulation was made at hearing or any other time that these documents should have been part of the Agency record.

*For demonstrative purposes, attached to this Opinion as Appendix A is a reduction of the Frink's oversize site plan sheet submitted as Pet. Ex. 1, depicting the site "as built" June 25, 1982, and containing handwritten notations. The original scale was 1" = 50'; the Board has added an adjusted scale to reflect the reduction. Attached as Appendix B is a reduction of the 11" X 14" p. 1 of H.O. Group Ex. 3 which, while less clear, shows the location of abandoned storage lagoons. The Board has not adjusted the scale reflected on the exhibit to account for the reduction.

Two of the tanks were located to the east of the pump building (currently numbered Tanks 16-17), and the rest to the south of it. Two liquid storage lagoons existed to the east of the structures. One monitoring well (W-1) had been installed to the south of the structures and lagoons (IEPA Ex. 160, Ex. 11, last unnumbered page).

The proposed processing of waste materials seems to have involved settling of wastes in Tanks 1-4 and subsequent pumpage of liquids to the underground tanks or lagoons (IEPA Ex. 4).

On April 2, 1980 the Agency issued an experimental permit to operate portions of this facility, expiring March 31, 1981. Among other special conditions, the Agency prohibited "use of any... lagoons...to handle any liquid waste (IEPA Ex. 16). April, 1980 inspections of the site following permit issuance revealed that the two 200,000 gallon capacity lagoons were still in use. The north lagoon was reported as being "full of oily industrial waste, while the south had a small amount of...sewage wastes" (Ex. 21). Drainage of these lagoons appears to have begun in June, 1980; the oil waste lagoon was drained and filled in as of August 14, 1980, and the sewage lagoons as of November 12, 1980 (Ex. 27-41).

In December, 1980 representatives of the Agency divisions of land, air, and water pollution met to coordinate their activities in regards to the Frink's facilities, and produced a list of site improvements needed. It had been noted that no water monitoring had previously been required by permit (IEPA Ex. 40); among the "priority #1" items noted was to have Frink's "complete a groundwater monitoring program based on RCRA Federal Regulations published May 19, 1980". Another priority item involved excavation of the abandoned oil lagoon, removal and disposal "under Agency supervision", and analysis of soil samples for seepage of contaminants (IEPA Ex. 42, p. 2-3).

On June 26, 1981 the Agency denied a request, among others, for a land division permit to operate treatment facilities at the site.* Among reasons for denial were the above described concerns regarding the abandoned oil lagoon and groundwater monitoring (IEPA Ex. 51, p. 2). Since that time, various activities have taken place in regard to each of these problem areas. In the interest of clarity, the Board will separately outline the developments in each area.

The Lagoon

On August 20, 1981, Frink's advised the Agency of its opposition to the taking of any soil borings which would pierce the liner of either the closed oil or sewage lagoons. Frink's

*On February 5, 1982, the Air Division issued a permit to allow operation of Tanks 1-4 and 16-17 through February 5, 1983 (IEPA Ex. 68). It is unclear how issuance of this permit relates to permit denials by the land division.

argued that no leaching had been discovered in any monitoring wells,* that the lagoon closing had been subject to Agency inspection, that penetration of the lagoon sides or bottoms could cause leaching, and that a more appropriate test would be to bore around the lagoons to elevations below them. Frink's stated that if borings were to be taken through lagoon liners that it

"disclaims any and all liability for any future complications or leaching from either lagoon and will expect the IEPA to assume all liability therefor and hold [Frink's] harmless thereon" (IEPA Ex. 54).

In response, the Agency rejected Frink's attempt to disclaim liability, on the grounds that it was Frink's burden to prove that its operation and closure of these lagoons had not created a groundwater contamination potential. Lack of evidence concerning leaching was considered non-determinative, based on the location of the existing well and "lack of knowledge regarding the direction and depth of groundwater flow". The Agency stated that the only way to prove that the soil beneath the lagoon's liner had not been contaminated would be to first penetrate and test the soil just outside the lagoons, and then if necessary to penetrate the liner and test the subgrade. It was asserted that future leaching could be prevented "by casing and sealing the boring holes immediately after completion of the boring with an approvable sealing compound". The only alternative to soil boring was said to be removal of all contaminated materials in and under the lagoons (IEPA Ex. 56).

Frink's chose the alternative removal option. Based on the procedure suggested by the Agency, Frink's applied for and received on November 13, 1981 a permit to excavate and remove the contaminated soil (IEPA Ex. 58, 61, 63). The permit specified that "the waste and contaminated cover soil and subsoil will be excavated and hauled immediately by truck to a secure landfill for disposal," and that the excavation would remain open until such time as analysis of split samples taken by Frink's and the Agency showed no contamination of the remaining soil (IEPA Ex. 61).

Some not entirely documented deviation from this procedure was agreed to by the Agency and Frink's, apparently providing that no soil should be removed unless contamination was found (IEPA Ex. 79-80).

Excavation of the lagoon commenced June 24, 1982. A reference sample was taken from a location 50-60' from the northeast corner of the property. Four feet of cover was removed, whereupon a "dark, charcoal-gray oily sludge" appeared; a sample of this was taken at the 4'8" level. Some 32" of sludge was removed. A subsoil sample was removed from within 1' below the sludge (7' below the surface), and another 1' below the previous one (8'3" below the surface). The latter two samples consisted

*By this point, 2 monitoring wells existed.

of a "gravelly, clay-orange soil with sand and many stones", and were taken using the blade of a spade (presumably after excavation by the backhoe). The site was then covered with a plastic cover (sic) (IEPA Ex. 81).

The analysis of these samples (attached to the memo dated June 24) were apparently completed July 16. The only sample showing signs of any contamination was the sludge itself, showing the presence of a number of the following synthetic organic chemicals in the noted concentrations: including trichloroethylene (1700 ppm) tetrachloroethylene (1900 ppm), toluene (1100 ppm), xylenes (1400 ppm), C₃ substituted benzenes (800 ppm), C₄ substituted benzenes (300 ppm), naphthalene (80 ppm) and aliphatic hydrocarbons (4800 ppm) (IEPA Ex. 81).

Agency memos do not recite weather events occurring between the June 24 excavation and the August 3 removal of soils and sludges from the area. Correspondence between Frink's and the Agency indicates that:

"During the period the excavation remained open, ...approximately 11 inches of rain fell and went directly through the liner after becoming commingled with the material above the liner. None of the water was contained in the excavation. Every bit of it went through the hole as if someone had pulled a plug out of a bathtub." (IEPA Ex. 148.)

It is to be noted that the parties strenuously disagree concerning who bore responsibility for the piercing of the lagoon bottom and leaving the excavation open. Frink's asserts that it was over its objection and the Agency's insistence (IEPA Ex. 145), while the Agency asserts that it was by agreement (IEPA Ex. 81). Compare Frink's Brief, p. 25-28, with Agency Brief, p. 15.

The last sample of groundwater taken from Frink's monitoring wells* prior to the excavation had been on May 5, 1982, and showed no synthetic organic chemicals present in the groundwater (IEPA Ex. 74). Samples were taken on June 28, four days after the initial excavation. These samples revealed first-time presence of synthetic organic chemicals in Frink's groundwater. This is particularly the case as to Well No. 4 (also known as G104, closest, and located to the southwest of the old lagoons) which showed among other chemicals 1000 ppb of trichloroethylene (TCE)** (IEPA Ex. 85). Samples taken July 27 indicated increasing contamination, TCE readings having risen to 2600 ppb in Well No. 4 (Ex. 92).

*At this point 6 monitoring wells had been installed. See Pet. Ex. 1.

**Ingestion of two liters per day of water over a lifetime containing 1 ppb TCE results in an increased cancer risk of 3.6×10^{-7} ; the same consumption of water containing 1000 ppb increases the risk to 3.6×10^{-4} . The "acceptable" level of cancer risk is the range between 10^{-7} to 10^{-5} (IEPA Ex. 99).

On August 3, Agency inspectors noted that Frink's had disposed of materials excavated June 24 the previous week. Excavation of the balance of the lagoon proceeded. Soil samples were taken of surface material, subsoil 2" beneath the sludge, and subsoil 15" below the sludge. Approximately 120 cubic yards of material were removed from the lagoon for disposal. The hole had been refilled in the evening of August 3, and site grading completed by August 18. Analysis of the soil samples, completed in October, showed the presence of synthetic organic chemicals in all soil samples, even the undisturbed cover. The subsoil 15" below the sludge showed TCE present at 2400 ppb.

Groundwater Monitoring

Following the June 26, 1981 operating permit denial, on August 20, 1981 Frink's submitted an engineering report proposing to construct four new monitoring wells to supplement the existing shallow well and the deep drinking water well which had supplied all previous data. Location of the wells was premised on the belief that the groundwater would follow surface topography, so that shallow groundwater would most likely flow toward the south and discharge into surface water in the Pecatonica Valley (IEPA Ex. 55). A supplemental permit to install these wells was issued November 30, 1981 (IEPA Ex. 65).

Various permits were again denied November 30, 1981 (IEPA Ex. 66). Another supplemental report dated January 20, 1982 indicated that monitoring well W-3 on the southwest corner of the site had been completed, and that three others, W-4, 5, 6 could be completed by April, 1982 (IEPA Ex. 67). A May 14, 1982 Agency inspection report indicates that all 4 wells had been installed (Ex. 76). Drillers well logs were submitted in another supplemental engineering report dated June 25, 1982 (Ex. 83).

Frink's monitoring wells and plan were reviewed by the Agency, the Illinois State Water Survey (ISWS), and the Winnebago County Department of Public Health, with particular care after the June-July, 1982 samplings showed groundwater contamination on the Frink's site, raising fears of contamination of private wells located south of Frink's (IEPA Ex. 87, 88, 90, 95). Various permits were again denied August 5, 1982. Groundwater contamination was specifically cited. The denial letter stated that the source of contamination needed to be determined and additional monitoring needed to be done (IEPA Ex. 100).

On August 23, 1982 Frink's submitted a certified engineer's report of tests of Tanks 1-4 (concrete tanks housed in the tank building) and Tanks 16-17, the two underground steel tanks adjacent to the pump house, finding them to be "structurally sound" and exhibiting no signs of leakage (IEPA Ex. 108). On September 15, 1982 the Agency agreed to issue short-term supplemental permits only for Tanks 1-4 on the basis of the August tank test, with Tank 1 storage contingent upon a re-test of the sludge line to Tank 1.

Tanks 16-17 were required to be leak tested. At the same time, the Agency suggested locations for 2 additional monitoring wells based on its own and ISWS analysis, although noting that "[p]lacement of wells pursuant to these suggestions does not guarantee automatic acceptance of a groundwater monitoring program" (IEPA Ex. 113). The required re-test of Tank 1 was made October 7 (IEPA Ex. 115).

On October 26, Frink's submitted a supplement to engineering report addressing location of additional monitoring wells. Three additional wells were proposed. The report noted that the "lack of available data to accurately determine the direction of shallow groundwater movement" could be remedied only by placement of additional wells and collection of monitoring data (IEPA Ex. 119). On December 3 another supplemental report was prepared concerning Frink's May-October monitoring results. Frink's engineer opined that the jump in organic solvent levels in Well No. 4 between a no detectable level on May 5 and 1000 mg/l TCE on June 28 indicated a quick injection of material from some source: a) the breached lagoon, b) a surface spill, or c) direct dumping of a contaminant into a well (sabotage). Facility records indicated spillage of an alkaline rinse only, so b) was eliminated. Sabotage was not eliminated as a source. However, analysis of the lagoon sludge contained TCE (1800 mg/l), trichloroethane (320 mg/l) and pentane (250 mg/l), all of which showed up in Well 4 on 7 sample dates between June 28 and October 25. Based on the downward trend in TCE concentration, it was surmised that the source was not a continuing one. It was noted however that even if such were the case, some residual adhering to the surface of the particles in the subsurface strata and to the subsurface of the monitoring well casing could result in continuing detection of contaminants. The presence of tetrahydrofuran in Wells 5 and 6 in addition to No. 4 during June-July only was attributed to the fact that the compound is a constituent of the material used to solvent weld the PVC casing pipe (IEPA Ex. 128).

A December 1 split sample taken from Well #4 showed that TCE levels had risen from 230 ppb October 25 to 14,000 ppb, based on figures generated by Frink's consulting lab Aquasearch (IEPA Ex. 128, 139, but see IEPA Ex. 138 showing 68 ppb and 11,000 ppb on each respective date). Frink's hypothesized to the Agency that:

"the dramatic increase in the elevation of the water table brought about by the extraordinary rainfalls of recent weeks has entrained contaminants which were adhering to soil particles and carried them into the well (No. 4). The well itself has been pumped almost constantly, and a cone of influence has been created so that groundwater immediately adjacent to the well moves into it from all directions" (IEPA Ex. 139).

Internal review of these documents by the Agency indicate that various personnel discounted Frink's explanations. It was concluded without explanation that there had been no adequate

testing to prove that Tanks 1-4 were free of leaks. The underground tanks near well 4 were also found not to have been proven leak-free.

The lagoon excavation was ruled out as a contamination source on several theories. One was the dramatic increase in synthetic organic chemicals between October and December. Another was that while the lagoon sludge did contain two contaminants found in Well 4, 4 others were found in the well water. Question was raised as to whether Well 4 actually monitored the lagoon area as opposed to the tank area, and whether the May and June analysis of it were comparable because of differences in sample analysis methods. It was opined that the contamination source could be continuous, as the August-September pumpage of 100,000 gallons of water from Well 4 could have purged the aquifer, and so depressed the October readings (IEPA Ex. 135, 138, 141).

On or about December 27, 1982, a temporary test boring was drilled at a point 9.5 feet south and 6.7 feet east of the southwest corner of the pump building (R.30, Pet. Ex. 1). A mud stirring sample was split for analysis by the Agency and Frink's contractor Aquasearch Laboratory. Frink's sample vial was broken in transport to the Aquasearch laboratory in Oak Creek, Wisconsin, but an analysis was nonetheless performed. In a January 11, 1983 letter to the Agency, Frink's reported that its analysis indicated that the "sample is clear" (Ex. 144).

[The Aquasearch laboratory report, submitted at hearing, indicated the presence of 1500 ppb 1,2 dichloroethane and 200 ppb dibromochloromethane (H.O. Ex. 2). The Agency laboratory analysis, which was submitted to the Board June 28, 1983, stated "organic solvents not detected" (Agency Ex. 164). The special analysis form did not indicate detection levels for the method. The covering letter to this exhibit indicated that, while the analysis had been completed January 13, 1983, that no "Special Analysis Form" had been completed because the lab intended to do a second analysis. The form was completed "early in May", 1983.]

Frink's was verbally advised by the Agency that it suspected the various underground tanks of being contaminant sources. Frink's therefore determined to take all underground tanks out of service, and to implement closure plans on them all.

As of January 17, 1983 Frink's had narrowed its permit application to a request for an operating permit for Tanks 1-4 only. As Tanks 1-4 had been certified as sound, it was Frink's belief that they could be eliminated as a possible pollution source. Frink's suggested that a limited operating permit be issued for the four tanks, with conditions, among others, that Well 4 be continuously monitored and that the groundwater monitoring program Frink's had submitted be put into place (IEPA Ex. 145).

On January 19, the Agency received results of a Well 4 sample taken December 28 and 30, showing TCE readings of 550 ppb (IEPA Ex. 146). The Frink's application to operate Tanks 1-4 was denied the same day, for the reasons quoted at p. 1-2, supra.

At hearing, the parties stipulated to admission of well samplings since denial of the permit. Well 4 showed TCE readings of 4200 ppb January 19 and 260 ppb March 2. Testimony presented at hearing will be discussed in the context of the issues as argued by the parties.

ISSUES

Chapter 7 Applicability

The first argument between the parties concerns whether and what requirements of Chapter 7 provide the umbrella framework for the Agency's decision in this matter. Frink's asserts that Chapter 7 does not apply at all, since its facility is not the "solid waste management site" the Chapter was written to regulate. Frink's argues that, "[b]y [so] calling a facility like Frink's ..., the Agency succeeds in shoehorning the site into the permit requirements of Chapter 7, but then is left without any standards within that Chapter to govern the rest of the permitting process" (Brief at 3). The Agency of course argues that the Chapter does apply.

More specifically, Frink's argues that the Agency should have determined only whether a permit should issue to operate Tanks 1-4. The Agency explains that Rule 202(a) of Chapter 7 requires an operating permit for each "site" which has received a Rule 201 development permit. Since the "site" to be developed consisted of 4.8 acres, the Agency argues that it was required to look at the "site" as a whole and could not assess a four-tank site as Frink's would have had to apply for a modification of its site development permit in the form required by Rule 205 and to have received such a permit before the Agency could issue a four-tank permit. It further argues that this does not amount to a mere exercise in "paper shuffling", since the configuration of a groundwater monitoring program would vary depending on whether a 4.8 acre site or a one building, four-tank site is at issue. The Agency says that Frink's should have known that modification of its development permit was needed, since it had requested modification of its development permit in 1981 in order to install additional monitoring wells.

Frink's argument is that even if applicable, Chapter 7 does not specify that closure of a portion of a facility is a modification of development, or that installation of monitoring wells is one either, although so treated by the Agency (see also R. 103). Frink's finds it "particularly bizarre" that it had applied for permission to install additional wells at the Agency's suggestion and in its suggested locations in October, 1982 in

the context of its operating permit reapplication, that the Agency did not suggest that the operating vs. development application procedure was improper, or otherwise respond to the request, throughout multiple communications, and then denied the operating permit on the basis that the wells which could not be installed without a permit had not been installed.

The Board agrees that Chapter 7 by its terms does not apply to the Frink's facility, although the permit requirements imposed by Sections 21(d)-(e) of the Environmental Protection Act of course do. The need to revise Chapter 7 has been acknowledged by both the Agency and the Board, but the process has been delayed for the reasons stated in the Order in R82-21, 22, June 16, 1983. In the interim, use of the procedures contained in Chapter 7 for the permitting of waste facilities not covered by that Chapter is imminently reasonable. The Board will not however agree with the Agency's position that Chapter 7 precludes it from issuing permits to operate a portion of a facility which has obtained a development permit. The Board will not determine whether installation of groundwater monitoring wells is, in every case, more appropriately the subject of a development permit or an operating permit. In this case, however, the Board finds it impermissible to deny an operating permit on the grounds that no wells had been installed where wells could not be installed without a permit. This leaves for resolution then the question of whether the monitoring program outlined would have been adequate had the wells been installed, as well as the questions relating to the cause and source of groundwater contamination at Frink's.

Groundwater monitoring plan

Concerning adequacy of the groundwater plan, the Agency argues that the plan is inadequate to monitor either the 4.8 acre site or the four-tank site. As to adequacy of the plan to monitor the 4.8 acre site, testimony at hearing was that the plan for well location was deficient. The asserted deficiency was that it was not based on the results of test borings, but instead relied on the locations suggested by the Agency (after its consultation with the State Geological Survey). Test borings would have provided information on actual water table levels and would have allowed verification of the direction and flow of groundwater movement. (R. 77-80, 89). The Agency testified that it "usually" is presented with such data (R.79) but the record does not indicate that data was ever requested by the Agency after its receipt of Frink's proposal to install three additional monitoring wells. The Agency's denial letter indicates that the installation of the proposed monitoring wells would have provided much the same information as would have the never-requested test borings.

The Agency's four-tank site argument is that a program admitted to be adequate for the site as a whole had the wells been installed, is inadequate to monitor a four-tank site because a monitoring well should have been located closer to the tank

building. Frink's reply is that the proposed well 7 (being 100 feet from the pump building as measured on Pet. Ex. 1) is as close as is practicable to the building, in that the space between proposed Well 7 and the building is occupied by a road, a berm, a pumphouse and all the piping which connects the pumphouse to Tanks 1-4.

The Board finds that the groundwater monitoring plan submitted by Frink's is adequate, for purposes of permit issuance, to monitor both the 4.8 acre site and the tank building within that site. The Board notes that in issuing permits of various types for various media, the Agency has historically reserved the right to require further and additional monitoring. The monitoring of groundwater is as yet an inexact science (or art), and the Board believes that "[i]nitially, refinement is less important than comprehensive coverage, no matter how preliminary or approximate ..." (IEPA. Ex. 119, p.2). Frink's proposed plan provides such comprehensive coverage. The well location is based on the judgment -- even if preliminary, or approximate -- of one of the nation's most respected state geological surveys.

Integrity of Tanks 1-4

The Agency's position is that the inspection report and certificate of the integrity of Tanks 1-4 provided by Frink's engineer Erwin Tocber in August, 1982 was inadequate to justify issuance of a land division operating permit for the tanks, although it had found them sufficient for the purpose of issuing "short-term land division supplemental waste stream permits to authorize acceptance of particular wastes and their "treatment" in the tanks as authorized by the air division operating permits expiring February 5, 1983.)* Arguments in support of this are several. The first is that the report does not contain details concerning the manner in which the inspection was made, beyond the report that the tanks were drained and entered for inspection (see R.72-73). Frink's rejoinder is that no details were ever requested, either before or after Agency supplemental permit issuance, and that the Agency could have been, but elected not to be, present during the inspection (R. 84,86).

The Agency argues that another deficiency is that the certificate was "only a statement as to the [then] present condition of the tanks. No representation was made that the tanks would remain structurally sound throughout the life of the site"

* The parties each accept the fact that the air operating permits provided sufficient authorization to operate the tanks even after expiration of the land division experimental permits and continued denial of land division operating permits. The Board does not question the assumption that the tanks were operated pursuant to a permit, but points the matter out as another example of the pragmatic, but "seat-of-the-pants" operational mode which the Chapter 7 deficiencies have created.

(Agency Br. at 9). Frink's understandably histrionic reply, reduced to its essentials, is that no professional engineer could actually certify to anything other than the condition of a tank at the time of inspection.

A corollary to each of the preceding arguments is essentially, that Frink's should have known that the level of proof necessary to allow Agency issuance of a long-term permit would be different than that for a short-term one, and should have known to provide additional information. Frink's notes that as of January 14, 1983, the Agency's Mr. Theios had stated that the information as to the integrity of Tanks 1-4 was adequate; [the permit was denied January 19 (R. 51-53)].

The Board cannot accept any of the Agency's arguments. The construction plans for the tanks called for pouring of a PVC waterstop over the tanks to prevent leakage through cracks in the concrete. Frink's engineer certified the tanks as sound, which certification was accepted by the Agency. While "life of site" information is appropriate for consideration of a landfill permit, it is obviously inappropriate for predicting tank integrity. No guarantee of "life of site" tank integrity could ever be supplied. Frink's notes its submitted plans for routine cleaning and inspection of tanks (which would be incorporated into any permit) are intended to supply this sort of information as time goes by.

Groundwater Contamination

Based on the foregoing, it is the opinion of the Board that Tanks 1-4 have been compellingly eliminated as a source of groundwater contamination. The Board need not make a finding as to the cause or source of the groundwater contamination which occurred at the Frink's site. The Board need not so find, because this is not an enforcement action.

The record in this action is an affront to the Environmental Protection Act on a number of levels. The permit history concerning this site reflects the sort of confused, bureaucratic jungle which frustrates permittees and lessens public confidence in the review system. The permit denial smacks of enforcement by other, impermissible means. Whether or not the lagoon excavation as conducted caused the groundwater contamination, and whether or not the details of the operation were agreed to by Frink's and the Agency or prescribed by the Agency over Frink's objection, hindsight has certainly proven the event to have been fraught with judgmental errors. Those errors have been only compounded by the fingerpointing with which this record is riddled.

The Agency's June 28, 1983 submittal to the Board of the results of the Agency's January 13 lab analysis of the water from the December 28 test boring deserves independent mention. The Board is at a loss to know why 1) the Agency lab did not "report" the results of its January 13, 1983 test before "early in May",

even if it did wish to perform a reanalysis and 2) test results of which counsel for the Agency "first become aware of during the week of June 13, 1983" (IEPA. Ex. 164, p.2) did not reach the Board until June 28, two days before the Board's decision date.

Frink's voluntary closure of all its underground tanks should at least eliminate these tanks as a possible future pollution source; whether it will pinpoint the source of past pollution is of course unknown. If the groundwater has not been purged of contaminants as of the writing of this Opinion, the Board expects the Agency as well as Frink's to expeditiously take all remedial actions necessary to effectuate a clean-up. Any disputes concerning financial or other liabilities should be brought before an appropriate decisionmaking forum.

In summary, the Board finds that the Agency's denial of an operating permit for Tanks 1-4 was in error. The permit to be issued in response to this Opinion and Order shall include conditions requiring installation of the proposed additional monitoring wells, and regular maintenance and inspection of Tanks 1-4. In order to prevent problems which have arisen in certain other hotly contested permit denial appeals, the Agency will be ordered to issue said permit within 45 days of the date of this Order.


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

ORDER

The Agency's January 19, 1983 denial to Frink's Industrial Waste, Inc. of a permit to operate Tanks 1-4 is reversed. The Agency shall issue a permit consistent with this Opinion within 45 days of the date of this Order.

IT IS SO ORDERED.

I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify that the above Opinion and Order was adopted on the 30th day of June, 1983 by a vote of 4-0.


 Christian L. Moffett, Clerk
 Illinois Pollution Control Board

AS-BUILT NOTES

- ① MONITORING WELL W-3 INSTALLED, WELLS W-4, 5, & 6 NOT INSTALLED 1/20/82. WELLS W-4, 5, & 6 INSTALLED AS OF 6/25/82
- ② NOT INSTALLED 1/20/82

KEY:



EXISTING BUILDING



PROP. MONITORING WELL, NOW EXIST 6/25/82



EXISTING WELL

W-1

WELL IDENTIFICATION



ADDITIONAL PROP. MONITORING WELL, 10/19/82



TEMPORARY TEST BORING

*Petitioner Hearing Et 1
RBB 83-10*

3/3/83 de

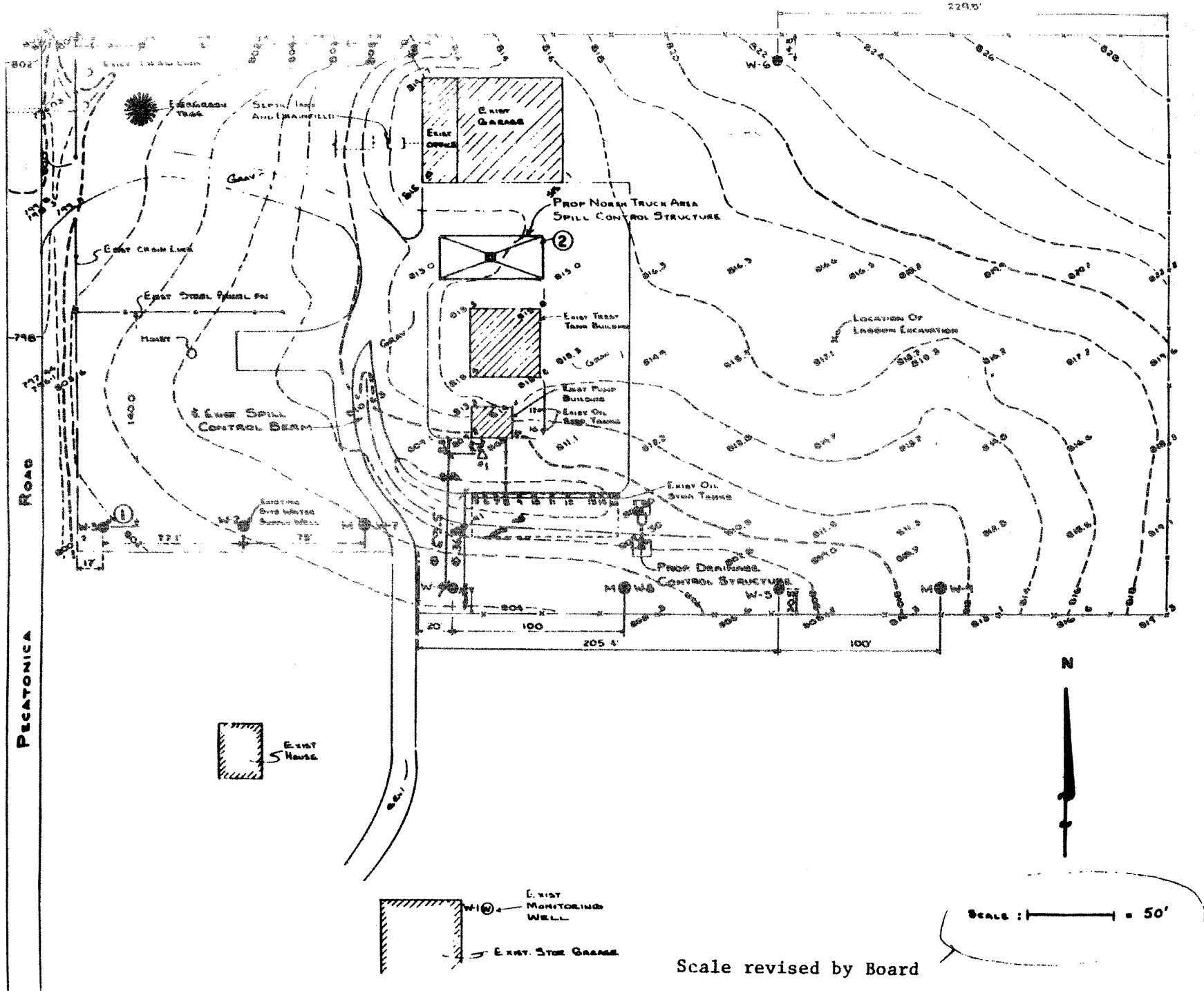
**FRINK'S INDUSTRIAL WASTE, INC.
SPILL CONTROL STRUCTURES**

SITE PLAN

REVISED 8/20/81, AS-BUILT 1/20/82
REVISED 10/19/82, AS-BUILT 6/25/82
REVISED 3/29/83, REVISED 3/3/83 *Justin H. Dan*

Drwn G.B.	Ched EDT		FEHR, GRAHAM & ASSOCIATES CONSULTING ENGINEERS 660 W. STEPHENSON ST., FREEPORT, ILLINOIS 815/235-7643	Job No 21186
Date 4/14/81				Sheet No 1 of 3

APPENDIX A



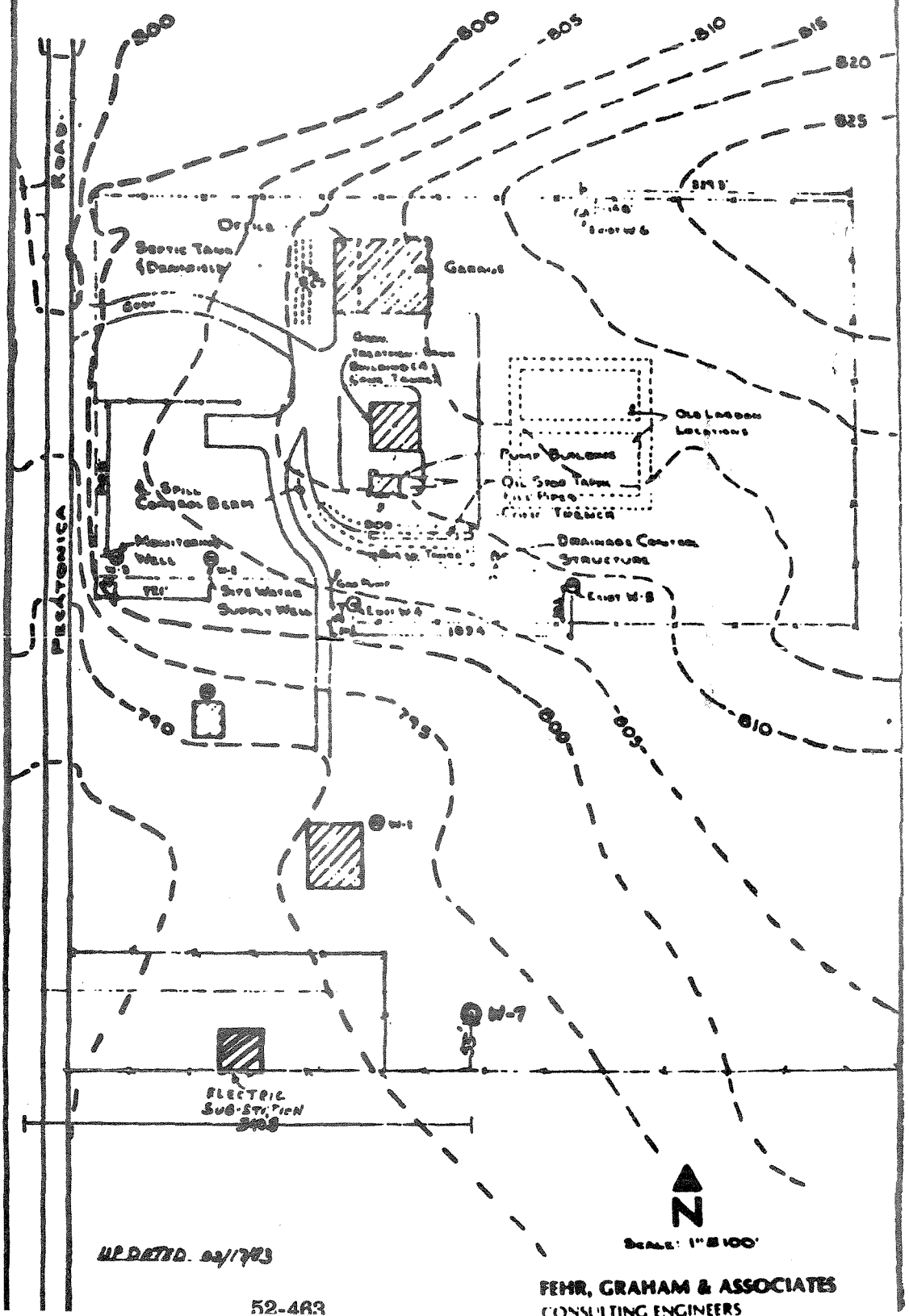
52-462

Planning Office Group
2/3

3/3/83

SITE PLAN FRINK'S INDUSTRIAL WASTE, INC.

PECATONICA, ILLINOIS
JANUARY 31, 1983



UPDATED. 02/17/83

52-483

FEHR, GRAHAM & ASSOCIATES
CONSULTING ENGINEERS