

ILLINOIS POLLUTION CONTROL BOARD
March 11, 1993

IN THE MATTER OF:)
)
 PETITION OF PEORIA DISPOSAL CO.) AS 91-3
) (RCRA Delisting)
 FOR AN ADJUSTED STANDARD FROM) (Adjusted Standard)
 35 Ill. Adm. Code 721.Subpart D)

ROBIN R. LUNN AND MICHAEL O'NEIL OF KECK, MAHIN & CATE APPEARED
ON BEHALF OF PETITIONER, PEORIA DISPOSAL CO.

WILLIAM INGERSOLL AND MARK GURNIK OF THE DIVISION OF LEGAL
COUNSEL APPEARED ON BEHALF OF CO-PETITIONER ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY.

FRED C. PRILLAMAN AND STEPHEN F. HEDINGER OF MOHAN, ALEWELT,
PRILLAMAN & ADAMI APPEARED ON BEHALF OF INTERESTED PERSON
ENVIRITE CORP.

OPINION OF THE BOARD (by J. Anderson):

This matter is before the Board on the April 9, 1991
petition of Peoria Disposal Co. (PDC) for an adjusted standard.
The petition seeks an adjusted standard from 35 Ill. Adm. Code
721.Subpart D. The petition essentially seeks a hazardous waste
delisting for certain listed hazardous wastes generated by PDC at
its Peoria County facility. This opinion supports the Board's
order of February 4, 1993 granting an adjusted standard on a
joint motion for expedited decision, as explained below.

PROCEDURAL HISTORY

Peoria Disposal Co. (PDC) filed its initial petition on
April 9, 1991. A Board Order dated April 25, 1991 cited certain
deficiencies in the petition. PDC filed its certificate of
publication on April 29, 1991, and a response to the Board order
on May 15 and June 6, 1991. A Board order dated July 11, 1991
requested additional information. PDC filed a status report on
January 29, 1992, and the Agency filed one on February 3, 1992,
in response to a hearing officer order of January 9, 1992. PDC
filed an amended petition on March 2, 1992, in response to a
hearing officer order dated February 10, 1992. The Board
accepted the amended petition on March 11, 1992. PDC filed a
second amended petition for adjusted standard on May 29, 1992,
with the Agency as co-petitioner, which the Board accepted by its
order of June 4, 1992. PDC again amended its prayer for relief
in its post-hearing brief filed August 18, 1992.

The Board received a request for a public hearing from Mr.
Stephen Rone, of East Peoria, on May 13, 1991. Envirite Corp.
(Envirite), a competitor of PDC, filed an appearance and a motion

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to intervene on August 19 and September 3, 1991. PDC filed in opposition to intervention on August 23. The hearing officer denied intervention on September 11, 1991, but granted Envirite leave to participate at hearing as an interested person. On March 9, 1992, Envirite requested a public hearing.

The Board held a public hearing in Peoria on June 29, 1992. PDC, the Agency, and Envirite participated. Envirite filed a motion for extension of time to file its post-hearing brief on July 27 and its brief on August 3, 1992. PDC filed a motion for extension to file on August 4 and its post-hearing brief on August 18, 1992. The Board hereby grants both motions for extension of time and accepts both briefs.

PDC and the Agency filed a joint motion for expedited decision on January 14, 1993. Envirite responded on January 26. The Board granted the motion on January 21, 1993, and we granted the requested adjusted standard, with conditions, on February 4. This opinion supports the Board's order of February 4, 1993.

During the course of this proceeding, the Board docketed three public comments. The first public comment (PC 1), dated July 29, 1991, was from Stephen B. Smith, Vice President, Envirite. A letter, dated July 16, 1992 and given public comment number 3 (PC 3), was a copy of correspondence sent by Stephen Smith to Robert Kayser, Chief, Delisting Section, USEPA. Public comment number 2 (PC 2), dated July 27, 1992, was from Robert Kayser to the hearing officer.

The petition filed in April, 1991 originally sought an adjusted standard as to K061 and F006 wastes treated by PDC. The petition of March, 1992, the amended petition of May, 1992, and the amendment requested in the August, 1992 post-hearing brief each sought an adjusted standard as to F006 wastes. PDC has stated that it will seek relief as to K061 wastes at a later time and in a separate proceeding. (March 2, 1992 Amended Petition as 2.) The Board will therefore consider those portions of the record pertaining to F006 wastes.

FACTUAL BACKGROUND

PDC owns and operates a permitted hazardous waste treatment facility in a 7200 square foot building located on a 2-acre site near Peoria. It receives about 30,000 cubic yards (yd³) of F006 wastes into this Waste Stabilization Facility each year. This waste is sent from about 20 to 30 different platers, anodizers, chemical etching and milling, and circuit-board manufacturers. F006 waste is, by definition, wastewater treatment sludge from electroplating operations. (See 35 Ill. Adm. Code 721.131(a).) PDC has operated this facility since August, 1988.

PDC treats the F006 wastes it receives at this facility with proprietary reagents in order to stabilize them so that they do not leach their hazardous constituents into the environment. It has historically then landfilled the wastes in a hazardous waste landfill that it owns and operates. The incremental increased costs to PDC's customers is about \$65.00 per ton for disposal of the treated residue as a hazardous waste over what it would cost to dispose of this waste as a non-hazardous waste in an industrial landfill. This added cost and the desire to preserve its RCRA-permitted landfill capacity are the reasons PDC has sought to delist the treated residues pursuant to 35 Ill. Adm. Code 720.122 and 106.Subpart G.

PDC has established procedures for screening incoming wastes before accepting them and for verifying that treatment has indeed stabilized the wastes received. PDC has each prospective customer submit certain information about its waste and waste-generation. This includes a material safety data sheet; the results of treatability studies from PDC Laboratories, Inc.; and a certification (or analytical results) indicating that no pesticides or herbicides, PCBs, or dioxins are used in the production of the wastes, and that they do not appear in the wastes. After waste treatment and curing, PDC tests each treated batch of the wastes to assure that stabilization has in fact occurred. These tests for selected contaminants involve using the same RCRA TCLP procedure of 35 Ill. Adm. Code 721.124 that PDC uses to test the effectiveness of its treatability testing. If the treated waste residue is still hazardous, PDC either retreats the waste for further stabilization or disposes of the waste as hazardous waste in its RCRA-permitted landfill.

The adjusted standard granted with conditions by the Board on February 4, 1993 allows PDC to dispose of stabilized waste in its industrial landfill. The stabilized waste that meets the delisting conditions is no longer considered a hazardous waste.

PDC asserts that its compliance alternatives to an adjusted standard are limited. It asserts that the F006 waste cannot be recycled, reused, or treated to render it nonhazardous. The only alternative to the adjusted standard is the continued disposal of this waste in a RCRA-permitted facility. Additionally, PDC and the Agency assert by the joint motion for expedited decision of January 14, 1993 that the decision in Envirite Corp. v. IEPA (3d Dist. Jan. 8, 1993) (No. 3-92-0202), that each of PDC's customers must individually have separate Section 39(h) authorization for landfill disposal of hazardous wastes,¹ threatens to cause it to

¹ Section 39(h) provides in significant part as follows:

[A] hazardous waste stream may not be deposited in a permitted hazardous waste site unless specific

stop receiving the F006 wastes for RCRA-permitted disposal, which would leave PDC with a cessation of operations as the only alternative for compliance unless the Board granted the adjusted standard.

THE ADJUSTED STANDARD

The adjusted standard granted on February 4, 1993, effective as of that date, renders non-hazardous up to 50,000 tons of F006 waste treated by PDC using a mechanical mixer. The treated residues must meet certain verification and testing requirements to qualify. Those wastes that do qualify are subject to the non-hazardous solid waste disposal regulations of 35 Ill. Adm. Code 810 through 815, rather than the Illinois RCRA regulations of 35 Ill. Adm. Code 703 and 722 through 728.

The verification and testing condition requires PDC to perform certain tests, both before and after waste treatment. PDC must perform bench-scale treatability testing before accepting wastes for production-scale treatment. PDC must perform tests on the treated residue to verify treatment using the methods of SW-846 for certain specified inorganic and organic parameters on daily- and monthly-composited samples. PDC must periodically submit the results of the treatability tests and other information requested by the Agency together with a certification, and it must maintain its records of those tests open for state inspection for a minimum of three years.

PDC must test a daily composite sample composed of grab samples from each batch of the treated residue for certain TCLP inorganic parameters (cadmium, chromium, lead, nickel, and silver) and for total distilled-water-leachable cyanide before disposal. If the treatment residue exceeds any of the levels set

authorization is obtained from the Agency by the generator or the disposal site owner and operator for the deposit of that specific hazardous waste stream. The Agency may grant specific authorization for disposal of hazardous waste streams only after the generator has reasonably demonstrated that, considering technological feasibility and economic reasonableness, the hazardous waste cannot be reasonably recycled for reuse, nor incinerated or chemically, physically, or biologically treated so as to render it nonhazardous. . . .

415 ILCS 5/39(h) (1992) [Ill. Rev. Stat. 1991 ch. 111, par. 1039(h)].

for TCLP inorganics or total leachable cyanide², PDC must manage the treated residue as a RCRA hazardous waste.

PDC must also daily test a representative grab sample of each treated batch for certain TCLP organic parameters (acetone, bis-(2-ethylhexyl)phthalate, chloroform, ethylbenzene, naphthalene, N-nitrosodiphenylamine, styrene, and total xylenes). If the initial daily test for a specific treated batch for organics exceeds any of the levels set for TCLP organics³, PDC may analyze a second sample. If the second sample also exceeds any TCLP organic parameter, PDC must manage the batch as a RCRA hazardous waste.

A special note is in order to dispel possible confusion as to the meaning of the word "composite" as applied to organic parameter confirmation sampling, in paragraph 4(c) of the February 4, 1993 order. We wish to avoid an erroneous interpretation that "composite" refers to combining grab samples from more than one treated batch. (See PC 2 at 2-3 (USEPA comment).) This is not the Board's intent. Rather, we intend to allow PDC to composite grab samples from a single treated batch in order to allow it to assure that the confirmation sample taken is indeed representative of the treated batch.

In addition to the daily analyses, PDC must perform a more complete monthly analysis. PDC must take a grab sample from each daily sample and composite them for a single monthly TCLP test for all the 126 priority pollutants listed at 35 Ill. Adm. Code 423, App. A except the pesticides, PCBs, asbestos, and 2,3,7,8-TCDD (dioxin). PDC may reduce the testing frequency to semi-annually for any constituent found to be below the detection limit for six consecutive months. PDC must continue or resume monthly testing for any constituent that appears above the detection limit in any sample.

The adjusted standard granted is substantively very similar to that requested in the May 29, 1992 second amended petition, further amended by PDC's post-hearing brief. The post-hearing brief added the limitation to the use only of a mechanical mixer, thereby dispensing with the original request to allow mixing in a concrete-lined pit by a backhoe. The adjusted standard granted differs, however, in that the failure of a single repeat daily

² 0.066 mg/l for cadmium, 1.9 mg/l for chromium, 0.29 mg/l for lead, 0.32 mg/l for nickel, 0.072 mg/l for silver, or 3.8 mg/kg for cyanide.

³ 76 mg/l for acetone, 0.057 mg/l for bis-(2-ethylhexyl)-phthalate, 0.114 mg/l for chloroform, 13.3 mg/l for ethylbenzene, 1.9 mg/l for naphthalene, 0.133 mg/l for N-nitrosodiphenylamine, 1.9 mg/l for styrene, or 190 mg/l for total xylenes.

sample for TCLP organics triggers the need to manage the treated residue as a RCRA hazardous waste, and the second amended petition and the post-hearing brief requests that the failure of a second repeat sample (i.e., the failure of a third sample) triggers the need to manage the residue as hazardous. The post-hearing amendments more would clearly require a third failure

REGULATORY STANDARD FOR RELIEF

35 Ill. Adm. Code 720.122 (derived from 40 CFR 260.22) provides for delisting of hazardous wastes. Subsection (a) provides for delisting of Part 721, Subpart D (40 CFR 261, Subpart D) listed wastes from a particular facility if the generator demonstrates that the waste exhibits none of the criteria for which it was listed, and the Board determines that no additional factors warrant retaining the waste as hazardous. Subsection (b) provides for rendering inapplicable the "mixtures and derived-from" provisions of 35 Ill. Adm. Code 721.103-(a)(2)(B) and (a)(2)(C) (40 CFR 261.3(a)(2)(ii) and (a)(2)(iii)), which basically maintain that any mixture containing a Subpart D listed waste and any material derived from a Subpart D listed waste are hazardous wastes.

Since PDC treats the F006 wastes from multiple generating sources to produce a waste deemed a F006 hazardous waste by the "mixtures and derived-from rule", it appears that pursuit of either alternative of subsections (a) and (b) might have resulted in rendering the RCRA regulations inapplicable to the PDC-treated residue. PDC nowhere explicitly states that it approaches the Board under either subsection (a) or subsection (b). However, since PDC nowhere mentions either Section 721.103(a)(2) nor full characteristic testing pursuant to 35 Ill. Adm. Code 721.Subpart C, and the thrust of the petition is aimed at demonstrating that the treated residue no longer exhibits either the characteristic for which F006 was listed or any other characteristic warranting continued management as a hazardous waste, the Board infers that PDC submitted its petition pursuant to 35 Ill. Adm. Code 720.122(a).

Under subsection (a), PDC is viewed as the waste generator. For a grant of an adjusted standard delisting its waste, PDC must demonstrate that the F006 waste it generates does not exhibit the toxicity characteristic (cadmium, hexavalent chromium, nickel, or cyanide) for which USEPA listed F006 wastes, and the Board must determine that there is no reasonable basis other than that for which F006 was listed that warrants retaining the treated F006 residue as RCRA hazardous. (See 35 Ill. Adm. Code 720.122(a) and (d), 721.111(a)(3), 721.131, and 721.Appendix G.) Additionally, PDC must demonstrate that the waste will be generated or managed in Illinois (35 Ill. Adm. Code 720.122(p)), and the Board will not grant the delisting if it would render the state RCRA program

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less stringent than the federal program. (35 Ill. Adm. Code 720.122(q).)

DISCUSSION OF ISSUES RAISED

Envirite, PDC's competitor, by its participation throughout this proceeding, and USEPA by PC 2, raised a few issues relating to the requested adjusted standard. This resulted in the imposition of the second-failure trigger for dealing with the treated waste as hazardous based on the organic parameters. Several other arguments did not result in substantive amendment of the requested adjusted standard.

The easiest issue to dispose of is that relating to whether the waste will be generated or managed in Illinois. The facts indicate the PDC will both generate and manage the waste at its facility near Peoria. Neither Envirite nor USEPA challenged the petition on this basis. Therefore, the Board finds that the waste is both generated and managed in Illinois, as required by Section 721.122(p).

Before beginning the discussion of the issues, the Board wishes to take note of the Agency's joining as co-petitioner after discussion with the PDC and careful examination of details of the petition and supporting documents (see, e.g., Tr. 97-103, re sampling protocol, and 110-11, re analytical procedures). While ideally such scrutiny and the Agency's decision to join as a co-petitioner would take place before PDC initially filed its petition, the procedure used nevertheless provides welcome assistance to the review process. (See In re Petition of Keystone Steel and Wire Co. for Hazardous Waste Delisting, No. AS 91-1, (Feb. 6, 1992) at 9-10.)

Additionally, USEPA submitted comments on the proposed adjusted standard. (PC 2.) It is worthy of note that USEPA commented that PDC submitted ample data with its petition, with the reservation that it would have sought groundwater monitoring data. (PC 2 at 1.) USEPA did not comment adversely to the Board granting the requested adjusted standard. Rather, USEPA noted a small number of conditions it would impose. For example, USEPA would require more information before allowing use of backhoe mixing, USEPA would require PDC to manage batches of waste as hazardous until shown to meet the delisting criteria, and USEPA would add analyses for additional organic contaminants to the testing conditions. (PC 2 at 2-3.) We discuss these issues topically below.

The first contested issue relates to whether PDC has demonstrated that its treated F006 residue is stable over time. Envirite contended that PDC's analytical results (see March 2, 1992 Amended Petition at app. E, tables 33-51) indicate increased metals mobility with time, and a rapid drop in pH with time

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indicates that this trend will continue. Envirite cites the need to continue the testing to follow up on such a trend and cites USEPA method 1320 in support of this contention. (See Ex. 1 at 1-2 and App. B; Envirite post-hearing brief at 5 and 12-13.)

PDC responds that it properly applied the appropriate testing for the proper duration. PDC responds that it employed the TCLP (USEPA method 1311) procedure of 35 Ill. Adm. Code 721.124 and 40 CFR App. II to perform the tests. It argues that this TCLP test has supplanted the former EP toxicity test to which the multiple extraction procedure (MEP) of method 1320 applies, and the TCLP procedure is far more aggressive than the EP former toxic-MEP procedure because of the selection of acids and the repeated agitation of samples. PDC questioned the relevance of the aggressive TCLP procedure to the realities encountered by the waste disposed of in a landfill. (PDC post-hearing brief at 14-16; Tr. 117-21.)

USEPA did not question the trend in the analytical results. Rather, USEPA stated generally that "PDC appears to have provided an extensive set of analytical data to support its petition (PC 2 at 1), and "In general, the testing conditions included in the proposed delisting are consistent with the format that USEPA has used in past delistings." (PC 2 at 2.) However, we note that this is not an issue specifically raised in PC 3, the letter of July 16, 1992 that Envirite sent to USEPA.

Initially, the Board agrees with PDC's assertion that there are no fixed criteria for evaluating the MEP results using the TCLP procedure. In examining the results tabulated by PDC in the March 2, 1992 amended petition that also provide initial TCLP results (app. E, tables 33 through 48), we do not see any distinct trend or correlation between the slight drop in pH in subsequent days' testing (about 1 pH lower on day nine than at the start of testing) and the appearance of metals in the TCLP leachate. Of sixteen samples, only two that would have passed the TCLP test subsequently showed elevated metals concentrations at levels of regulatory concern, two showed elevated metals concentrations in the initial TCLP that diminished below levels of regulatory concern in subsequent days, and one showed an elevated metal concentration in the initial TCLP as well as in later tests. The Board does not see a distinct or significant trend in these data, as argued by Envirite.

Envirite next argues that some of the testing results contained in the petition indicate that some of the treated PDC residue contains hazardous constituents at levels above those of

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regulatory concern.⁴ PDC does not dispute this assertion. USEPA expresses concern that PDC manage no treated waste residue as non-hazardous until it is shown to meet the delisting criteria. (PC 2 at 2-3.)

The Board agrees that PDC failed to show that 13 of 18 samples of treated residue met the delisting criteria.⁵ The Board also agrees that PDC should handle no batch of treated F006 waste as non-hazardous until testing shows that the batch meets the delisting criteria. However, this is no basis to deny a delisting. The adjusted standard granted requires PDC to manage all treated F006 batches as RCRA hazardous waste until testing demonstrates that each batch meets the delisting criteria. When an individual treated batch is shown to meet the delisting criteria, PDC is free to dispose of that batch as a non-hazardous solid waste. This is despite whether the waste passes the test nearly immediately after treatment or PDC allows an extended cure time before it meets the delisting criteria. (See Tr. 181-83.)

Envirite next cites laboratory quality control deficiencies and sampling deficiencies in the PDC petition. After review of the petition and transcript, the Board agrees with USEPA. PDC has "provided an extensive set of analytical data to support its petition." (PC 2 at 1.) Further, as stated above, that PDC sampled over a limited time from random or selected receipts of waste is immaterial because this adjusted standard does not delist the waste stream. Rather, the adjusted standard granted applies only to those treated batches that meet the delisting criteria.

Another issue raised by Envirite, and noted by USEPA, relates to a lack of groundwater monitoring data in the petition. (Envirite post-hearing brief at 5; PC 2 at 1.) While the Board agrees that the provision of such data would have been useful under certain circumstances, those circumstances do not exist here. Although the permitted PDC RCRA hazardous waste landfill includes treated F006 residue in the fill, the record indicates

⁴ PDC employed USEPA's composite model for landfills (EPACML) in conjunction with the Agency to determine the levels of regulatory concern at the compliance point based on the hypothetical disposal of 50,000 tons of treated residue per year. (See March 2, 1992 Second Amended Petition at tab 2, pp. 3-5; Tr. 93-95.)

⁵ Two failed for cadmium, one for chromium, one for lead, one for nickel, three for acetone alone and one for acetone and ethyl benzene (although acetone appeared in all blanks), one for naphthalene, one for N-nitrosodiphenylamine and styrene and one for N-nitrosodiphenylamine alone, and one for *bis*-(2-ethylhexyl)-phthalate.

that this is in conjunction with other wastes. (Tr. 122-23.) Groundwater monitoring data would have included information relevant to the co-disposed wastes, and not wholly relevant to the treated F006 residues.

The final issue raised by Envirite, and noted by USEPA, relates to the adequacy of PDC's monitoring and verification program. (See Envirite post-hearing brief at 5-6; PC 2 at 2-4.) The Board believes that the adjusted standard granted adequately addresses these concerns.

We bear two things in mind in examining the testing and verification plan. These are the standard for issuance of a waste delisting and the fact that the Agency or PDC can petition the Board for modification of the adjusted standard if future information indicates that this is necessary.

The standard for delisting, cited above, is that the waste must show none of the criteria for which USEPA originally listed it, and there must be no other basis for determining that the petitioner should continue to manage the waste as hazardous. As noted, USEPA listed F006 waste as a "T" (toxicity) waste due to its cadmium, chromium, nickel, and cyanide content. (See 35 Ill. Adm. Code 721.App. G; 40 CFR 261, App. VII.) PDC must test each lot of treated waste for each of these contaminants. Further, partially in response to the Agency's suggestion (see Tr. 97-98.), PDC selected additional contaminants and tested its wastes for those, then selected the treatment parameters based on the results obtained.

The petition indicates that PDC tested its treated residues for a host of contaminants not included in the delisting criteria, and its untreated F006 wastes for a few more. (See March 2, 1992 Amended Petition at app. E, tables 21-32.) This indicates that PDC did not include all the hazardous constituents or TCLP parameters (see 35 Ill. Adm. Code 721.124 or 721.App. H; 40 CFR 261.24 or 261, App. VII) tested in the delisting criteria because either these did not appear at levels of concern, when considering a dilution and attenuation factor (DAF) of 19 (e.g., mercury, selenium, chlorobenzene, trichloroethylene, tetrachloroethylene), or because there was no reason to suspect that the wastes would contain the contaminants (pesticides, PCBs, and dioxin).

Finally, PDC must periodically test its treated residues for all the 126 priority pollutants (except the pesticides, PCBs, and dioxin) and submit those results as required by the Agency. The broader list of contaminants includes the two of concern to USEPA: trichloroethylene and tetrachloroethylene. (PC 2 at 3.) The Board is not unmindful that if the Agency later finds cause for concern because these constituents appear at levels of significance, it can then deal with the situation by filing an

appropriate petition for modification of the adjusted standard before the Board. The record includes nothing specific to indicate that the Board should add contaminants to either the delisting criteria or the periodic testing regime.

CONCLUSION

The Board examined the petition to determine its completeness in light of the factors of 35 Ill. Adm. Code 720.122(i). We have considered the arguments opposed to a grant of an adjusted standard and the public comments received. After review of the petition and the record, the Board has determined to grant the adjusted standard delisting PDC's treated F006 residues that meet the delisting criteria proposed by PDC and the Agency. The petition supports the delisting criteria proposed by PDC and the Agency. It adequately describes the PDC process for treating F006 waste and the methods and procedures PDC will use to accept and treat this waste and assure that the treated residue meets the delisting criteria. Further, the petition set forth an ongoing regime of testing that will have the effect of either confirming PDC's delisting criteria, procedures, and process, or it will ultimately highlight any inadequacies to the Agency and PDC.

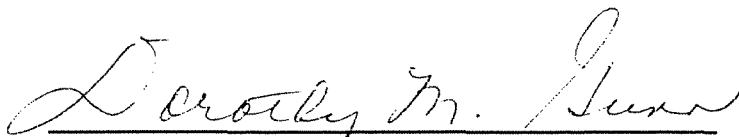
In granting this adjusted standard, the Board has made one substantive change in the adjusted standard as proposed by limiting the number of retests PDC may perform if any particular batch fails to meet the delisting criteria. We believe that PDC should be allowed to retest a failed batch, since sampling or analytical errors could occur. Further, additional curing time could result in a more stable waste residue. However, we believe also that PDC must either re-treat the waste or dispose of it as a RCRA hazardous waste if the second sample confirms the first.

In addition to this single substantive change, the Board has made a handful of minor stylistic revisions to the proposed language. None of these warrant individual discussion.

In short, PDC has met its burden under 35 Ill. Adm. Code 720.122 of showing that the adjusted standard granted assures 1) that PDC's treated F006 waste residue that meets the delisting criteria do not exhibit the characteristic for which USEPA listed F006 waste, and 2) that there is no other basis for retaining the waste as RCRA hazardous.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, do hereby certify that the above opinion was adopted on the 15th day of March, 1993, by a vote of 6-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board