

BEFORE THE ENVIRONMENTAL BOARD OF REVIEW

STATE OF OHIO

CECOS INTERNATIONAL, INC., ET AL. : Case No. EBR 132196 & 132198  
: :  
Appellant, : :  
: :  
v. : :  
: :  
RICHARD SHANK, DIRECTOR : :  
OF ENVIRONMENTAL PROTECTION, ET AL. : :  
: :  
Appellee. : Issued: April 24, 1991

ENVIRONMENTAL BOARD OF REVIEW  
APR 25 9 55 AM '91  
OHIO

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FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL ORDER

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Issued By:

THE ENVIRONMENTAL BOARD OF REVIEW  
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FINDINGS OF FACT  
AND FINAL ORDER  
Case No EBR 132196 & 132198  
Page 2

The present case is a consolidation of two appeals from the issuance by the Director of the Ohio EPA of a National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit to the applicant CECOS International Inc (CECOS). The first case, EBR 132196 was filed by Appellant CECOS. The second case, EBR 312198 was filed by Appellant Clermont County, by its Board of County Commissioners. The cases were consolidated for purposes of holding a de novo hearing before the Board.

Appellant CECOS International, Inc. was represented by Mr. Charles H. Waterman, III and Mr. Kirk N. Guy of Bricker & Eckler, Columbus, Ohio. Appellant Clermont County Commissioners were represented by Mr. Donald W. White, prosecuting Attorney, Clermont County, Ohio and by Mr. Stephen P. Samuels and Ms. Renee J. Houser, Special Assistant Prosecuting Attorneys, Stephen P. Samuels Co. LPA, Columbus, Ohio and the Director of the Ohio EPA was represented by Ms. Beverly Y. Pfeiffer and Ms. Lauren Angell, Assistant Attorneys General.

A de novo hearing was held before the Board on November 26, 1990 through November 29, 1990. Also, by agreement of the parties, additional evidence was submitted in the form of video tape and transcript deposition of certain witnesses which was taken on December 20, 1990 and submitted to the Board as part of the record herein. Based upon the evidence adduced at the de novo hearing and the supplemental testimony; the Certified Record filed with this Board by the Director pursuant to Ohio Revised Code section 3745.04 and the briefs and memoranda of the parties herein the Board makes the following Findings of Fact, Conclusions of Law and Final Order.

FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL ORDER

PROCEDURAL BACKGROUND

1. CECOS International, Inc. (CECOS) is the owner of a hazardous waste facility site located at 5092 Aber Road, Williamsburg, Ohio, which is situated in Clermont County, Ohio. At time of the hearing the facility no longer accepted hazardous waste for disposal and was going through the process of closure. (Transcript November 26, Testimony Hart, page 17)

2. On May 9, 1988, CECOS filed an application with the Ohio EPA requesting the issuance of a National Pollutant Discharge Elimination System (NPDES) permit for the facility. An NPDES permit is a wastewater discharge permit which authorizes discharges to the waters of the State of Ohio.

3. The permit was issued to CECOS by the Ohio EPA on April 30, 1990. The permit, a lengthy and complex document, contains a large number of terms and conditions. (Certified Record Document 2)

4. On May 29, 1990 the Board received the Notice of Appeal filed by Appellant CECOS which perfected the appeal in Case No. EBR 132196. On May 30, 1990 the Clermont County Board of Commissioners filed its Notice of Appeal perfecting the appeal in Case No. EBR 132198. In addition, on August 2, 1990 the Board granted the Motion of Clermont County to Intervene in Case No. EBR 132196.

5. In its Notice of Appeal, Appellant CECOS raised thirteen assignments of error. While too lengthy to include in this decision, the appeal generally questioned the reasonableness and lawfulness of several aspects of the NPDES

permit which will be discussed below. (EBR Case No. 132196, File Document A)

6. In its Notice of Appeal, the Clermont County Commissioners also alleged, in general, that the permit was unreasonable and unlawful in a number of regards. (EBR Case No. 132198, File Document A)

#### FACILITY BACKGROUND

7. The Aber road site, owned by CECOS at the times relevant to this proceeding, had been an active hazardous waste disposal facility for some period of time. While not specified precisely, the facility certainly predates the effective date of the first hazardous waste regulations of November 18, 1980 and CECOS's ownership by a number of years. (Transcript November 26, Testimony Hart, pp. 100-102)

8. As of the time of the hearing in this matter, it was estimated that there had been approximately two million tons of various hazardous materials and wastes buried at the CECOS facility. (Transcript November 28, Testimony Estenik, p. 197)

9. It was also estimated that during the period the facility had been in operation there had been approximately one "incident" per year at the CECOS facility. In this context, an incident included such things as leachate spills upon a road surface or an explosion of hazardous waste materials resulting from various chemical reactions in the buried solid waste cells. (Transcript November 28, Testimony Estenik, p. 199)

10. On November 26, 1984, CECOS had been issued Final Findings and Orders by the Director which, among other things, required CECOS to submit a surface

FINDINGS OF FACT  
AND FINAL ORDER  
Case No EBR 132196 & 132198  
Page 5

water management plan for the Aber Road facility. Among a number of other requirements, CECOS was to submit a plan to the Ohio EPA which would physically isolate and separate the active hazardous waste handling areas from other areas at the facility to insure that water which might have been contaminated with hazardous waste would not come into contact with uncontaminated water. (Certified Record Document 11)

11. In compliance with the Order, CECOS identified and isolated three types of water at the facility: waters which were contaminated, waters which were not contaminated and an area of the facility where runoff water had a "potential" for coming into contact with hazardous waste in a number of different ways. This potentially contaminated (PC) water was isolated and collected for separate discharge. It is in fact, this PC water which necessitated and led to the NPDES permit in question in this case. (Transcript November 26, 1990, Testimony John Hart, p. 14; Transcript November 27, Testimony James Stout)

12. At the time the permit was originally applied for, CECOS had plans to continue hazardous waste disposal operations at its facility. However, the NPDES permit was to provide for the discharge exclusively of those waters which were collected within the PC area. (Transcript November 26, 1990, Testimony Hart, pp. 14-17)

13. The PC area is designed, contoured and constructed in such a way that the precipitation runoff water that falls within the area is collected and conveyed by a sewer and drainage system to two large collection basins called the "PC ponds." The ponds each hold approximately 1.8 million gallons of PC water for storage until testing is completed and discharge is authorized. Each

pond was designed to hold the water generated on the PC area in a 25 year, 24 hour storm. (Transcript November 26, 1990, Testimony Hart p 64; Transcript November 27, 1990, Testimony Stout, p 95-96; Testimony Noss, p 136; CECOS Exhibits 13 A-L; County Exhibit 2)

14. Subsequent to the application for the NPDES permit being filed in May of 1988, CECOS determined that it would not operate the facility any longer and formal closure proceedings were begun. As a result of closing the facility and the cessation of disposal operations, the original purpose for the construction of the PC storm water management system has changed. (Transcript November 26, Testimony Hart, pp. 17, 158-159, 165-166)

15. The record demonstrates however, that in spite of the closure of the facility and in spite of the fact that there are no new wastes being accepted at the facility, the drainage of runoff water across the PC area as well as the ongoing closure operations present a realistic possibility of water contamination much as originally envisioned by the findings and orders which mandated the creation of the PC area. (Transcript November 28, Testimony Okerbloom, pp. 28-30, 32, 33-35; Transcript November 26, Testimony Hart, pp. 109-110)

#### NPDES PERMIT

16. The NPDES permit issued to CECOS in the present case is unusual if not unique in Ohio. In general, the permit authorizes the discharge of storm water runoff, collected in the PC area and held in the PC ponds, from a single discharge point or outfall referred to as number 001. This water is then discharged to its receiving stream, the East Branch of Pleasant Run Creek in

Clermont County. (Certified Record Documents 10 and 11)

17. Outfall 001 is located approximately one third of a mile upstream of the confluence of Pleasant Run and Pleasant Run Creek. Under the Ohio Water Quality Standards, the wastewater receiving stream, the East Branch of Pleasant Run, is designated as a "Nuisance Prevention" stream segment. This relatively low designation requires merely that, what are termed, acute criteria must be met in this stream segment. Pleasant Run however is designated as a "Warm Water Habitat" under the Ohio Water Quality Standards. As a result of this designation chronic criteria must be met in this particular stream segment. (Transcript November 28, Testimony Mount, pp. 135, 140; Certified Record Document 7)

18. Further downstream of outfall 001 is the East Fork of the Little Miami River. Under the Water Quality Standards the East Fork of the Little Miami River is designated an "Exceptional Warm Water Habitat" in addition to being designated a "Public Water Supply" and a "State Resource Water." Significantly, the drinking water supply intake for the City of Williamsburg, Ohio is located on the East Fork Little Miami River. It is found approximately eight miles downstream of the CECOS 001 discharge. At the Williamsburg supply intake, the stream must meet the "Human Health Two-Route" exposure criteria. (Transcript November 28, Testimony Mount, pp. 135, 140; Testimony Estenik, pp 197-198; Certified Record Document 7)

19. The wastewater discharge authorized in CECOS's NPDES permit is itself somewhat unusual, if not unique. The discharge authorized here is an intermittent one rather than a continuous one as is usually the case. When a discharge is authorized, the flow rate must not exceed 1.8 million gallons per

day (1.8 MGD). (Transcript November 29, Testimony Morrison, p 70; Certified Record Document 2)

20. Under the terms of the permit, the water from the PC area is collected in the PC ponds and stored for discharge. Prior to discharge an extensive sampling, analysis and biological testing program must be performed on the PC pond water by CECOS. Once the testing and analysis results have been completed and submitted to the Ohio EPA, written approval must be given to CECOS by the Ohio EPA before the discharge is authorized. (Certified Record Document 2)

21. Of significance to this appeal is the provision contained in Part II(F) of the NPDES permit. That section provides as follows:

CECOS shall submit a method for Bio-accumulation monitoring to the Ohio EPA, Central Office, Division of Water Quality Planning and Assessment, for approval within three months of the effective date of this permit. After the Ohio EPA has commented on CECOS's proposal, samples of CECOS's discharge water shall be collected and evaluated for the presence of bio-accumulative substances. A final report will be submitted prior to discharge each time monitoring is performed.

#### PERMIT CONDITIONS AND STANDARDS

22. Before deciding what NPDES permit standards to incorporate into this permit, the Ohio EPA considered the somewhat unusual and complicated history of the CECOS facility. The facility itself contains a number of unknown chemicals, compounds, materials and other unspecified hazardous wastes which were buried at various locations across the facility over the years. The vast amounts of unknown and uncharacterized waste at this facility make it extremely difficult, if not impossible, to predict with accuracy what chemicals and hazardous



compounds might be contained in any particular wastewater discharge. (Certified Record Document 7; Transcript November 28, Testimony Estenik, pp. 191-193, 197; Transcript November 26; Testimony Hart, pp. 109-110)

23. As a result of the indeterminate number of unknown chemicals and hazardous wastes buried at the facility, and the consequent difficulty in predicting whether or not any of these chemicals might be a component in CECOS's discharge and, in addition, as a result of the proximity of the discharge to a public drinking water intake, the OEPA recommended that all of the Priority Pollutants be monitored for and/or be given effluent limitations in the NPDES permit. It was decided to include all of the pollutants and chemicals listed in 40 CFR 264, Appendix IX (commonly referred to simply as the Appendix IX pollutants), regardless of whether or not a particular pollutant could be shown or had been shown to be present or absent from the CECOS effluent. (Transcript November 28, Testimony Estenik, pp. 191-193, 197, 201-206; Certified Record Document 2, 7)

24. In addition to the extensive monitoring requirements, it was recommended that the permit require Bioassay Toxicity tests; that Gas Chromatograph/Mass Spectrometry (GC/MS) analyses be done; and that a bio-accumulation monitoring program be designed, submitted and implemented by the Applicant. It was further recommended that stringent, human health, criteria be used to calculate NPDES permit limits for the stream use model developed for this discharge. (Transcript November 28, Testimony Estenik, pp.204-206, 220)

25. In establishing the human health criteria for this permit, the Ohio EPA used U.S.EPA pollution criteria documents. These documents contain the

guidelines to be followed in developing human health criteria for a number of The priority pollutants. Based upon these documents, the Ohio EPA utilized a concentration criteria of  $10^{-6}$  for establishing limits on carcinogenic materials. (Transcript November 28, Testimony Estenik, pp. 225-227, 249-253; Certified Record Document 9, pp 10-15)

26. The NPDES permit requirement calling for bioassay toxicity testing is a relatively standard requirement for dischargers of toxic materials. By analyzing the effect of pollutants on aquatic organisms, data is generated regarding the toxicity of the material which cannot necessarily be determined or discovered by standard chemical analysis techniques. (Transcript November 28, Testimony Estenik, pp.201-203)

27. The CECOS NPDES permit also requires that the wastewater discharge meet the more stringent chronic criteria of the Ohio Water Quality Standards at the discharge point, even though the receiving stream in this case is designated with the relatively "low" standard of Nuisance Prevention. However, because this receiving stream (East Branch of Pleasant Run) is a zero-flow segment, there is generally no dilution of the CECOS discharge at the point that it meets Pleasant Run approximately one-third of a mile down stream. Thus, in order to meet the Water Quality Standards use designation of warm water habitat in Pleasant Run, the CECOS discharge must meet the chronic criteria at its discharge point. (Transcript November 28, Testimony Mount, p. 140)

28. To determine and set the various effluent parameters for the permit, the Ohio EPA performed a wasteload allocation for the CECOS discharge. The allocation was developed utilizing the acute aquatic life criteria; human

FINDINGS OF FACT  
AND FINAL ORDER

Case No EBR 132196 & 132198

Page 11

health, single-route exposure criteria; and human health, public water supply standards. In effect, after applying all of the overlapping criteria involved in this complex situation, the wasteload allocation for the CECOS discharge was equal to the Ohio Water Quality Standards. In other words, the discharge itself was required to meet the Water Quality Standards. (Transcript November 28, 1990, Testimony Mount pp. 139-150; CECOS Exhibit 8; Transcript November 29, Testimony Morrison, p. 71)

29. The record in the present case demonstrates that the CECOS NPDES permit which grew and evolved through the Ohio EPA review and comment process is an extremely stringent one. In essence, the permit is an application of both the most stringent and the most conservative requirements and standards to the CECOS discharge.

BIO-ACCUMULATION TESTING

30. Bio-accumulation, as the term was used in this case, is the property by which chemical compounds can be taken up by lower organisms which can then, in turn, be taken up and assimilated by other, higher organisms and consequently work their way up and through the food chain web. It is, in effect, the process of concentration of compounds, over time, in various biological species, including humans. (Testimony Tabor, Transcript Dec. 21, 1990, p. 18)

31. No evidence was presented which demonstrated that any water, sediment or fish tissue analysis had in fact indicated the existence or the "accumulation" of any organic compounds in the area of the CECOS discharge or down stream from the facility. The permit condition requiring bio-accumulation

testing is thus not based upon a known, existing problem or condition in the receiving stream.

32. Bio-accumulation testing is an emerging monitoring technique which can provide data and information which might escape or elude standard and traditional chemical monitoring programs. For instance, traditional monitoring programs may reveal that certain chemicals or compounds are at or below the limit of analytical detectability in a particular wastewater. However, the properties of that compound may cause it to concentrate or bio-accumulate in living organisms. Thus, as the compound works its way through the food chain, it may be discovered, in detectable concentrations, in various organisms as a result of bio-accumulation testing even though it may not have been detectable by mere analytic testing. (Testimony Tabor, Transcript Dec. 21, 1990., pp 31-34)

33. The record in this case demonstrates that bio-accumulation testing is not a technique which leads to the establishment of wastewater effluent limitations nor is it useful in determining whether or not a particular permit discharge limitation has been violated. In effect, bio-accumulation monitoring serves as a warning technique, a "red flag", which can serve to alert the permit regulators to developing or emerging problems and then, presumably, to an investigation and resolution of the problem or its cause. (Testimony Estenik, Transcript Dec. 21, 1990, pp. 131-133; Testimony Stout, p. 211, 217)

34. As of the date of the hearing of this matter, there was no standard nor recommended bio-accumulation monitoring program in existence. The U.S.EPA is in the process of developing bio-accumulation methods and procedures. But

the record does not demonstrate that any final guidance has been promulgated by the U.S.EPA which would guide the development of individual bio-monitoring programs. (Testimony Estenik, Transcript Dec. 21, 1990, pp. 135-137)

35. In spite of the lack of a promulgated U.S.EPA guidance document or an existing, widely recognized or accepted program, the record demonstrates that there are a number of bio-accumulative screening procedures available which would apply and which could reasonably fit the situation presented by the CECOS facility and the wastewater discharge in question in this case. (Testimony Estenik, Transcript Dec. 21, 1990, pp. 142-151; Testimony Tabor, pp. 35-66)

36. The record demonstrates that the NPDES permit in question here does not make any provision for what action would or should be taken by CECOS in the event the bio-accumulation monitoring were to demonstrate or indicate that a potential problem existed. Likewise, the record demonstrates that the Ohio EPA employees who would be reviewing the bio-accumulation data, do not have any clear concept, plan or strategy with respect to what the Ohio EPA would do in the event that a bio-accumulating condition were to be indicated based upon the data generated by this monitoring. (Transcript, Dec. 21, 1990, Testimony Estenik, pp. 132-133; Certified Record Document 2)

37. Ohio Administrative Code section 3745-1-04, commonly known as the "five freedoms", provides in its entirety as follows:

Criteria Applicable to All Waters.

The following general water quality criteria shall apply to all surface waters of the State including mixing zones. To every extent practical and possible as determined by the Director, these waters shall be:

(A) Free from suspended solids or other substances that enter the waters as a result of human activity and

FINDINGS OF FACT  
AND FINAL ORDER

Case No EBR 132196 & 132198

Page 14

that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life;

(B) Free from floating debris, oil, scum and other floating materials entering the waters as a result of human activity in amounts sufficient to be unsightly or cause degradation;

(C) Free from materials entering the waters as a result of human activity producing color, odor or other conditions in such a degree as to create a nuisance;

(D) Free from substances entering the waters as a result of human activity in concentrations that are toxic or harmful to human, animal or aquatic life and/or are rapidly lethal in the mixing zone;

(E) Free from nutrients entering the waters as a result of human activity in concentrations that create nuisance growths or aquatic weeds and algae.

38. Section 3745-33-04(B)(1)(a)(i) provides, in relevant portion:

(a) . . . for each point source from which pollutants are discharged the Director shall determine and specify in the permit the maximum levels of pollutants that may be discharged to ensure compliance with  
(i) applicable water quality standards

39. Obviously, neither OAC section 3745-1-04 nor 3745-33-04 specifically mandates the establishment of the bio-accumulation testing called for in this permit. However, these sections likewise do not mandate nor require any of the monitoring provisions called for in the NPDES permit in question in this case. As the record demonstrates, bio-accumulation monitoring is simply an additional tool which enables the permit reviewers and regulators to monitor effects of wastewater discharges which might not otherwise be discovered, to insure that

the State is in compliance with these sections of the Administrative Code.  
(Transcript Nov. 28, 1990, Testimony Okerbloom, pp. 98-99, 120-121)

#### OTHER PERMIT CONDITIONS

##### TESTING LIST

40. The NPDES permit under appeal in the present case has an extensive list of parameters that require analytical testing for purposes of determining compliance with effluent limitations or for purposes of monitoring. The basis utilized by the Ohio EPA in assembling the parameter list is commonly known as the "Appendix IX" list. The list itself is found at 40 CFR 264, Appendix IX. (Transcript Nov. 28, 1990, Testimony Estenik, pp. 203-204; Transcript November 26, Testimony Hart, p. 36)

41. The specific NPDES permit section in question here, part II(J), contains a list which includes 32 parameters which are not contained in the Appendix IX list. However, the permit monitoring section was intended to incorporate the Appendix IX list by reference. The uncontested and unquestioned evidence presented regarding this point indicates that the 32 parameters listed under part II(J) of the NPDES permit which are not part of the Appendix IX list (also as listed in CECOS Exhibit 4) are parameters which are not appropriate to the permit; were incorrectly included and should be deleted from the permit. (Transcript Nov. 26, 1990, Testimony Hart, pp. 36, 39; Transcript Nov. 29, 1990, Testimony Estenik, p. 112)

##### TEST METHODS

42. For each Appendix IX parameter there is a corresponding analytical

test methodology specified in the permit. The permit as issued requires analysis pursuant to U.S.EPA methods commonly known as "624" and "625". However there are also analytical methodologies contained in U.S.EPA publication SW-846. The record in the present case indicates that while the SW-846 methods are very similar to the 624 and 625 methods, the more appropriate testing methods to utilize in the CECOS permit are the SW-846 methods. SW-846 are the preferred methods to be used for NPDES permits where the Appendix IX list is the basis for the parameters listed in the permit. The record indicates that, except for the first six parameters listed on the CECOS Exhibit 3, the permit should be modified to require SW-846 analytical methods. (Transcript, Nov. 27, 1990, Testimony Nebiolo, pp. 35-38; Transcript Nov. 29, 1990, Testimony Estenik, pp. 34-39; CECOS Exhibit 3)

SAMPLE COLLECTION CRITERIA

43. The record here also demonstrates that with respect to the sample collection criteria, certain language changes in the NPDES permit are appropriate to reflect the fact that the CECOS wastewater discharge in this matter is a batch discharge rather than a continuous flow as is the usual case with an NPDES permit. The uncontroverted and unquestioned evidence of the Ohio EPA technician responsible for the permit demonstrates that the language contained in CECOS Exhibit 5 should be substituted for the language currently contained in the permit. (Transcript Nov. 26, 1990, Testimony Hart, pp. 64-68; Transcript Nov. 29, 1990, Testimony Estenik, pp. 10-15; CECOS Exhibit 5 as amended)



BIO-MONITORING

44. With respect to the bio-monitoring requirements in Part II(I) of the permit, the record demonstrates that some clarification of the language contained in the permit is necessary and would provide a more specific definition and a more specific statement of the testing requirement. The record demonstrates that the proposed language modification, as provided in CECOS Exhibit 6 as amended at the de novo hearing, should be included and substituted for the language currently in the permit. (Transcript Nov. 26, 1990, Testimony Hart, pp. 68-71; Transcript Nov. 28, 1990, Testimony Estenik, pp. 237-242; CECOS Exhibit 6 as amended)

MISSPELLING ERRORS

45. The record also indicates that a number of chemical compounds contained in the CECOS permit have been misspelled. The record indicates that those misspellings should be corrected as set out in CECOS Exhibit 7. (Transcript Nov. 26, 1990, Testimony Hart, pp. 71-72; Transcript Nov. 28, 1990, Testimony Estenik, pp. 276-277; CECOS Exhibit 7)

ENDOSULFANE

46. The record indicates that with respect to the sampling and reporting of the compound commonly known as endosulfane, the NPDES permit in question in the present case does not clearly mandate the form in which the monitoring results should be reported to the Ohio EPA. Since endosulfane has two different isomers, the data could possibly be reported in several different fashions. The evidence indicates that the permit should specify the manner in which this compound is to be reported. (Transcript, Nov. 26, 1990, Testimony Hart, pp. 23-24)

CONCLUSIONS OF LAW

1. The statutory duty of review imposed upon the Board in a de novo hearing, as specified in section 3745.05 of the Ohio Revised Code, requires the Board to determine whether or not the action of the Director which is under appeal was unreasonable or unlawful.

2. Unlawful means that the action taken by the Director is not in accordance with the relevant, applicable law. Unreasonable means that the action is not in accordance with reason or that it has no factual foundation. Only where the Board can find from the certified record filed in the case and from the evidence which was produced at the de novo hearing that there is no valid factual foundation for the Director's action or that the action was not in accordance with law, can the action under appeal be found to be unreasonable or unlawful. [Citizens Committee to Preserve Lake Logan v. Williams, 56 Ohio App.2d 61 (1977)]

3. Where the record produced before the Board demonstrates that the action taken by the Director is reasonable and lawful the Board must affirm the action of the Director. The Board may not substitute its judgment for that of the Director. Citizens, supra.

4. The discharge of the wastewater involved in the present appeal is subject to the authority of the Director of the Ohio EPA and the NPDES permit system. Pursuant to Chapter 6111 of the Ohio Revised Code the Director is authorized to impose water quality related effluent limitations as conditions of an NPDES permit.

FINDINGS OF FACT  
AND FINAL ORDER  
Case No EBR 132196 & 132198  
Page 19

5. In addition, OAC section 3745-01-04 (the five freedoms) authorizes the Director to control the discharge of materials which are toxic or harmful to human health or aquatic life. Thus, even though the Water Quality Standards which were in effect when the permit was drafted did not include human health criteria, the Director had ample authority to utilize more stringent human health criteria when setting the limits contained in this permit.

6. Very clearly, the permit in the present case is a stringent, and a comprehensive one. It is designed to provide a high degree of protection from known and unknown and, possibly unanticipated waste materials. It is also designed to provide for comprehensive monitoring of the known or anticipated hazardous parameters, utilizing accepted analytical techniques as well bio-accumulation monitoring techniques which can provide valuable data which might otherwise be undetected by the standard and traditional chemical analytical methods.

7. While the bio-accumulation testing is a new and emerging analytical method, there are existing bio-accumulation techniques and methods which are appropriate and which can be developed, adopted and applied to the discharge from the CECOS facility. The requirement in the permit providing that Appellant submit a proposed bio-accumulation testing methodology for approval to the Ohio EPA rather than imposing a particular plan or program is a reasonable method for developing such a monitoring plan.

8. Where the record before the Board demonstrates that a new or unique testing or monitoring program called for in an NPDES permit is reasonably calculated to supplement or extend the normal monitoring data relating to the

effects or existence of compounds in a wastewater discharge, the monitoring program will not be invalidated simply because it is a new technique or because it is a unique application of an existing technique. Further, where the permit provides a method or procedure whereby a monitoring or testing method can be developed within the context of the permit itself, the program will not be invalidated simply because no specific program or protocol was mandated by the permit.

9. With respect to the utilization of the bio-accumulation monitoring as a permit condition, the action of the Director is reasonable and lawful and this aspect should be affirmed.

10. The PC pond design, while subject to debate, is adequate and reasonable. Where the adequacy of a design falls within a range of limits acceptable to qualified experts, the Board will defer to the decision of the Director.

11. The record in the present case did indicate that with respect to the matters and items discussed in paragraphs 40 through 46 of the Findings of Fact above, the action of the Director was unreasonable and should be modified.

12. Except for the items specified in paragraphs 40 through 46 above, the remainder of the NPDES permit issued to the Appellant CECOS is both reasonable and lawful and should be affirmed.

FINAL ORDER

With respect to the specific items listed in paragraphs 40 through 46 of the Conclusions of Law, the action of the Director issuing the NPDES permit in

question in this case is unreasonable and is hereby vacated. The matter is hereby remanded to the Director for further proceedings in conformance with this Order.

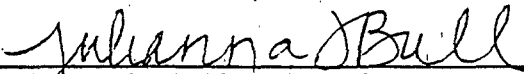
With respect to all other matters contained in the NPDES permit, the Board Orders that the action of the Director in issuing the permit is reasonable and lawful and is hereby affirmed.

The Board, in accordance with Section 3745.06 of the Revised Code and Ohio Administrative Code 3746-13-01, informs the parties that:

Any party adversely affected by an order of the Environmental Board of Review may appeal to the Court of Appeals of Franklin County, or, if the appeal arises from an alleged violation of a law or regulation to the court of appeals of the district in which the violation was alleged to have occurred. Any party desiring to so appeal shall file with the Board a Notice of Appeal designating the order appealed from. A copy of such notice shall also be filed by the Appellant with the court, and a copy shall be sent by certified mail to the Director of Environmental Protection. Such notices shall be filed and mailed within thirty days after the date upon which Appellant received notice from the Board by certified mail of the making of an order appealed from. No appeal bond shall be required to make an appeal effective.

THE ENVIRONMENTAL BOARD OF REVIEW

  
Peter A. Precario, Chairman

  
Julianna F. Bull, Vice-Chairwoman

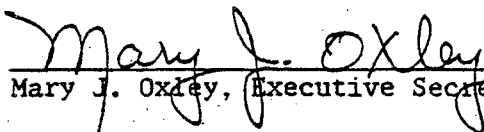
  
Jerry Hammond, Member

Entered in the Journal of  
the Board this 24<sup>th</sup>  
day of April, 1991.

FINDINGS OF FACT  
CONCLUSIONS OF LAW  
AND FINAL ORDER  
CASE NO. EBR 132196 & 132198

C E R T I F I C A T I O N

I hereby certify that the foregoing is a true and accurate copy of the FINDINGS OF FACT, CONCLUSIONS OF LAW AND FINAL ORDER in CECOS International, Inc. et al. v. Richard Shank, Director of Environmental Protection, et al, Case No. EBR 132196 & 132198 entered in the Journal of the Board this 24<sup>th</sup> day of April, 1991.

  
Mary J. Oxley, Executive Secretary

Dated this 24<sup>th</sup> day of  
April, 1991, at Columbus, Ohio.

FINDINGS OF FACT  
AND FINAL ORDER  
Case No EBR 132196 & 132198  
Page 22

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