

GROUNDWATER AND HAZARDOUS WASTE LANDFILLS DO NOT MIX

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I. INTRODUCTION

We have hundreds of thousands of tons of hazardous wastes to dispose of - wastes that come from the creation of material we all use, materials that improve our quality of life, materials no one wants to do without. Industry has to keep manufacturing; the wastes have to go somewhere. Let's make sure they are managed safely in state-of-the-art facilities.¹

Louisiana has long been considered a polluter's dream.²

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1. David Sarokin, *Going to the Source, the Real Solution to the Toxic Waste Crisis*, 12 GREENPEACE 16 (1987).

2. See James O'Byrne, *License to Pollute: Hazardous Waste in Oil Company*, TIMES-PICAYUNE (New Orleans), Oct. 16-18, 1989, at § A; Oliver A. Houck, *This Side of Heresy: Conditioning Louisiana's Ten Year Industrial Tax Exemption Upon Compliance with Environmental Laws*, 61 TUL. L. REV. 289, 290 (1986); *Prosperity in Paradise? Louisiana's Chemical Legacy*, MORNING ADVOCATE (Baton Rouge), Apr. 25, 1985, supp. at 8; Bob

Over the last few years, however, Louisianans have begun to take notice that they have been risking their health for jobs and job security. It is not surprising, therefore, that considering public health interests over industry interests,³ the Secretary of the Louisiana Department of Environmental Quality (DEQ)⁴ denied an operating permit to CECOS International, Inc. (CECOS),⁵ the operator of a hazardous waste⁶ landfill in Livingston Parish, Louisiana. What is surprising to some, is that the Louisiana First Circuit Court of Appeal affirmed the decision and the Louisiana Supreme Court denied certiorari, effectively shutting down the landfill.⁷ CECOS employed approximately 130 people, had an annual payroll of over 3.5 million dollars and a ten million dollar annual operating budget.⁸ This case is likely to have significant effects on the granting of permits to hazardous waste

Anderson, *Pollution Costly to Baton Rouge, Study Shows*, MORNING ADVOCATE (Baton Rouge), Mar. 13, 1985, at B1.

3. Cancer is one of the most serious health problems in Louisiana. Every day approximately 21 Louisiana residents die of cancer, and 41 new cases are diagnosed. See Houck, *supra* note 2, at 310 n.120 (citing GOVERNOR'S TASK FORCE ON ENVTL. HEALTH, ENV'T. AND HEALTH IN LA: THE CANCER PROBLEM 1 (1984)). But see *Industry, Cancer Unproved*, MORNING ADVOCATE (Baton Rouge), Apr. 25, 1985, supp. at 8 (Fred Loy of the Louisiana Chemical Association says that there is no evidence linking the chemical industry to Louisiana's lung cancer problem).

4. Letter from Dr. Paul H. Templet, Secretary of the Department of Environmental Quality, to CECOS International, Inc. (May 8, 1990) (on file with the *Tulane Environmental Law Journal*) (denial of permit application based on the adjudicatory hearing record).

5. CECOS' 382 acre Livingston Facility "is a major commercial hazardous waste disposal facility" located approximately 2 miles south of the town of Livingston and about 30 miles east of Baton Rouge. HAZARDOUS GROUND-WATER TASK FORCE, U.S. EPA AND LA. DEQ, Evaluation Of CECOS International, Inc. 13 (1986) [hereinafter CECOS EVALUATION] (on file with the *Tulane Environmental Law Journal*). CECOS' operations included "solidification of liquids, sludges and solids containing free liquids, containerized waste processing and secure landfill disposal of solid materials." *Id.*; see also In the Matter of CECOS Int'l (Livingston), Adjudicatory Hearing on Notice to Deny Hazardous Waste Permit Application: LAD000618298, Finding of Fact, ¶ 2 (Oct. 15, 1989) [hereinafter Hearing Report] (on file with the *Tulane Environmental Law Journal*).

6. The term "hazardous waste" means the solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may:

- (a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or
- (b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

42 U.S.C. § 6903(5) (1988).

7. *In re CECOS Int'l, Inc.*, 574 So. 2d 385 (La. Ct. App. 1990), writ denied, 576 So. 2d 18 (La. 1991).

8. See Dowty, *The Two Faces of CECOS*, DENHAM SPRINGS-LIVINGSTON PARISH NEWS, Oct. 31, 1988, at 2.

facility operators and will provide a legal test for other courts addressing the issue of potential groundwater contamination.⁹

Groundwater is subsurface water, below the water table,¹⁰ located in saturated soils or rocks known as aquifers.¹¹ In Louisiana more than 570,000 residents, comprising one hundred percent of the rural population, derive all their drinking water from private wells supplied by groundwater.¹² Additionally, a substantial number of other communities acquire at least a portion of their drinking water from groundwater. Using figures on the location of wells, groundwater flows, and statistics on pesticide and fertilizer use supplied by the United States Department of Agriculture, Renew America estimates that 688,000 Louisiana residents face a risk of using water from contaminated wells.¹³

Concern over groundwater pollution has increased significantly.¹⁴ In recent years, "much of the emphasis in groundwater investigations in industrialized countries has shifted from problems of groundwater supply to considerations of groundwater quality."¹⁵ Two commentators recently pointed out that

9. In addition, where regulation of hazardous waste management is concerned, state law requires the promulgation of regulations that "will assure safe treatment, storage and disposal [of hazardous wastes] without substantial risk to the environment." *Save Ourselves, Inc. v. Louisiana Env'tl. Control Comm'n*, 452 So. 2d 1152, 1157 (La. 1984). In *Save Ourselves*, the Louisiana Supreme Court held that to determine whether an adverse environmental effect has been fully minimized, the DEQ must undertake a cost-benefit analysis. *Id.* at 1160. This analysis must carefully consider the environmental costs and benefits together with economic and social factors. In response to the decision, DEQ formulated an "IT" report, an exhaustive and detailed document, to be completed by any permit applicant. The contents of this report have been amended from time to time. See, e.g., Memorandum from Paul H. Templet, Secretary, Louisiana Department of Environmental Quality to the Assistant Secretaries of DEQ (Dec. 1, 1988) (implementation of the *Save Ourselves* Decision) (on file with the *Tulane Environmental Law Journal*).

10. The water table is the boundary between the soils surface and the aquifer.

11. R. FREEZE & J. CHERRY, *GROUNDWATER* 2 (1979).

12. Albert J. Fritsch, *Communities at Risk: Environmental Dangers in Rural America*, RENEW AMERICA (Renew America, Wash., D.C.), 1989 at 7. Renew America is a nonprofit educational organization whose goal is working towards a sustainable future by promoting a safe and healthy environment.

13. *Id.*

14. *Id.*; see generally Bob Anderson, *Contaminated Groundwater List Growing*, MORNING ADVOCATE (Baton Rouge), Oct. 16, 1988, (Sunday Edition) at 10A; Note, *The Protection of Groundwater and Public Drinking Supplies, Recent Trends in Litigation and Legislation*, 42 VAND. L. REV. 1649 (1989); Mary C. Wood, *Regulating Discharges into Groundwater: The Crucial Link in Pollution Control under the Clean Water Act*, 12 HARV. ENV'T L. REV. 569 (1988); E. NEILSEN & L. LEE, U.S. DEP'T OF AGRIC., *THE MAGNITUDE AND COSTS OF GROUNDWATER CONTAMINATION FROM AGRICULTURAL CHEMICALS: A NATIONAL PERSPECTIVE* 324-364 (1987).

15. FREEZE & CHERRY, *supra* note 11, at 384.

"the vast subsurface reservoir of fresh water, which a few decades ago, was relatively unblemished by man's activities, is gradually becoming degraded."¹⁶ The problem of water quality degradation in rivers and lakes has been evident for numerous years.¹⁷ Yet, efforts to hold or abate ground water degradation have been lacking. Although solutions to surface water degradation have been found in the implementation of federal and state legislation, there is no separate provision in either type of legislation, concerning groundwater protection.¹⁸ The growing concern over groundwater contamination has, however, led to the establishment of offices of groundwater protection at both federal and state environmental protection agencies.

Accordingly, the *CECOS* decision, though only one of a number of environmental cases reviewed and decided by the Louisiana courts in 1990,¹⁹ is particularly significant because the court held that the DEQ has an affirmative duty of environmental protection and a duty to protect the state's groundwater resources mandated by the 1974 Louisiana Constitution.²⁰ Thus, the court affirmed the principle set out in the landmark case of *Save Ourselves, Inc. v. Louisiana Environmental Control Commission*.²¹

In light of the significance of the *CECOS* decision, this article will examine the background of that case emphasizing both the groundwater and administrative law aspects.

16. *Id.*

17. *Id.*

18. See, e.g., Note, *A Drastic Approach to Controlling Groundwater Pollution*, 98 YALE L.J. 773, 778-89 (1989); Thomas D. Marks, *Toward A National Groundwater Act: Current Contamination and Future Courses of Action*, FLA. BAR J., April 1987, at 11.

19. See, e.g., *In re Marine Shale Processors, Inc.*, 566 So. 2d 994, 1000 (La. Ct. App. 1990), writ denied, 568 So. 2d 1055 (La. 1990) (holding the DEQ's denial of Marine Shale's variance request from their air emissions permit was not contrary to law or an abuse of discretion); *In re Woodrow Wilson Const., Co.* 563 So. 2d 385, 389 (La. Ct. App. 1990) (reversing DEQ's civil penalty assessment on Woodrow Wilson Construction Co. for failure to give timely notice of intent to demolish a building containing friable asbestos material).

20. The principle that the Louisiana administrative agencies have an affirmative constitutional duty to protect the environment was set out in *Save Ourselves, Inc. v. Louisiana Envtl. Control Comm'n*, 452 So. 2d 1152 (La. 1984).

21. *Id.*; see also *infra* part IV; *CECOS EVALUATION*, *supra* note 5, at 13.

II. BACKGROUND OF THE CECOS CASE

A. The Landfill

CECOS' facility covers 382 acres²² of land and contains nine pre-Resource Conservation and Recovery Act²³ (RCRA) waste-disposal cells, all of which were closed between 1979 and 1981. Since 1983, with DEQ approval, six cells were constructed at the site: 12, 12L, 14, 15, 16, and the "monofill."²⁴ The majority of these cells were located in the northern half of the site.²⁵ In 1986, it was projected that twenty-nine new cells would be developed in the southeastern and western parts of the property.²⁶ However, the DEQ denied additional construction on the site,²⁷ and by 1989 only site 14, which opened in August 1988, was active.

B. Site History

In May 1977, seven months after Congress enacted RCRA,²⁸ Southwest Environmental Company (SWECO) began operating a hazardous waste disposal facility at the current site of the CECOS landfill.²⁹ Because the United States Environmental Protection Agency (EPA) would not be implementing

22. Gary Perilloux, *Forty-Six Testify at Hearing Over CECOS*, DENHAM SPRINGS-LIVINGSTON PARISH NEWS, Oct. 31, 1988, at 1.

23. 42 U.S.C. §§ 6901-6992(k). Congress passed RCRA to provide "cradle to grave" regulation of the generation, transportation, storage, treatment, and disposal of hazardous wastes. 45 Fed. Reg. 33066 (1980).

24. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 14.

25. The size of the 18 individual cells are not noted. However, a predecessor of CECOS described 3 cells as "approximately 200 feet by 250 feet in plain view" and up to 25 feet deep. Likewise, another predecessor confirmed 1 cell as being roughly 200 by 250 feet in plain view at the top. "The depth and side slopes are currently unknown." CECOS EVALUATION, *supra* note 5, at 16.

26. *Id.* at 14.

27. *Id.*

28. 42 U.S.C. § 6901. In 1978, the Louisiana Legislature followed Congress' lead and enacted the Louisiana Environmental Affairs Act and Hazardous Waste Control Law. LA. REV. STAT. ANN. §§ 30:2001-2206 (West 1989). In enacting the law, the Louisiana Legislature focused on the health and safe environment of the people of Louisiana, much more so than the U.S. Congress. *Id.* § 30:2002. This focus has been interpreted to grow out of the "Natural Resources article of the 1974 Louisiana Constitution [which] imposes a duty of environmental protection on all state agencies and officials, establishes a standard of environmental protection, and mandates the legislature to enact laws to implement fully this policy." *Save Ourselves, Inc. v. Louisiana Env'tl. Control Comm'n*, 452 So. 2d 1152, 1156 (La. 1984) (citing LA. CONST. art. IX, § 1). Pursuant to the legislature's mandate, the Department of Natural Resources promulgated the Hazardous Waste Management Plan (HWMP). 1978 La. Acts 334.

29. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 8.

hazardous waste regulations for another two years, SWECO initiated operations under the regulatory "eye" of the Louisiana Department of Health and Human Resources' Office of Health Services and Environmental Quality³⁰ (DHHR).

On May 19, 1978, SWECO sold the facility to Browning-Ferris Industries Chemical Services, Inc. (BFI).³¹ In 1980, the landfill came under the regulatory ambit of EPA through RCRA.³² BFI operated the landfill for over five years before transferring operational control to CECOS, a corporate affiliate, on October 1, 1983.³³ The original "hazardous waste disposal permit" previously issued to BFI was subsequently transferred to CECOS.³⁴ In 1984, CECOS was required by DEQ to submit a new hazardous waste permit application for a final permit under the RCRA program administered by DEQ.³⁵ CECOS submitted RCRA Part I and Part II applications on January 9, 1985;³⁶ the approval of this permit application was one of the bases of the *CECOS* litigation.

Throughout its operating history, the CECOS-Livingston landfill received frequent attention from state and federal environmental agencies. In response to complaints, compliance inspections and follow-up inspections for enforcement proceedings were conducted at the site.³⁷ In 1985 and 1986, EPA's

30. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 9.

31. *Id.*

32. CECOS EVALUATION, *supra* note 5, at 13.

33. *Id.*

34. The permit contained numerous compliance conditions and compliance schedules with subparts (e.g., condition 1(A) prohibited the storage and disposal of the following: radioactive wastes, PCB's, explosives, biological warfare agents, gases, and concentrated oxidizing or reducing agents). Condition 4.F.1 required a groundwater monitoring system for each facility. Hazardous Waste Disposal Permit No. GD-251-P (Jan. 10, 1983) (issued by the State of Louisiana, Dep't of Env't'l Resources, Office of Env't'l Affairs and Env't'l Control Commission) [hereinafter Permit] (on file with the *Tulane Environmental Law Journal*). Condition 4.F.7 mandated a cell by cell determination by the Department. *Id.* The specific language states "[p]rior to the start of construction of each landfill cell all geotechnical data gathered for the cell area, in particular the logs of borings on a 200 foot grid pattern, shall be submitted to the [ECC] staff." *Id.* (emphasis added). Schedule 4.Q required the submission of an annual report which was to provide data on site geology, groundwater flow, and verification of "adequacy of design and construction of the leachate collection system, clay liner, [and the] leachate monitoring system and slurry walls." *Id.*

35. *See, e.g.*, 42 U.S.C. § 6929.

36. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 17.

37. *Id.*; *see also* Perilloux, *supra* note 22, at 1 (citing Justin Wilson stating that the facility had "1,700 violations"; Police Juror Dewey Harrell, enumerating "violations including a three-day fire in a solidification basin and improperly maintained grid maps of waste disposal cells"; and State Representative Bernard Carrier stating that "[CECOS was] not worthy of receiving a permit to continue operation") *Id.* at 2.

National Environmental Investigations Center (NEIC)³⁸ conducted a comprehensive investigation that evaluated the CECOS site's "operations, stormwater management, surface water discharges, air controls and monitoring, operating and waste analysis records, preparedness and prevention, training, and closure/post-closure plans."³⁹ During that same period, an EPA Region VI and DEQ Hazardous Waste Groundwater Task Force (the Task Force) conducted their own groundwater evaluation.⁴⁰ As a result of the violations discovered during its investigation and evaluation, EPA filed suit against CECOS, and DEQ later intervened⁴¹ in the suit. This initial action resulted in two consent decrees. The first consent decree, between DEQ and CECOS, was entered by the court on March 18, 1988; the second decree, between the United States and CECOS, was entered by the court on July 29, 1988.⁴²

After the DEQ staff received CECOS' 1988 hazardous waste permit application, and conducted the agency's required compliance and technical review of the application, it issued, over several years, notices of deficiency (NODs) and requested

38. NEIC is the technical investigative arm of EPA's Office of Enforcement and Compliance Monitoring (OECM). NEIC's primary function is to undertake laboratory and other technical investigations to monitor compliance with federal environmental regulations. See, e.g., Carroll G. Wills, *EPA's National Environmental Enforcement Investigations Center*, NAT'L ENVTL. ENFORCEMENT J., Sept. 1987, at 3; *Enforcement Today: An Interview with Thomas L. Adams, Jr.*, EPA J., March 1987, at 5.

39. CECOS EVALUATION, *supra* note 5, at 5.

The purpose of the Task Force's evaluation was:

to determine the adequacy of ground-water monitoring programs at land disposal facilities in regard to applicable State and Federal ground-water monitoring requirements. The evaluation focused on: (1) determining if the facility was in compliance with applicable regulatory requirements and policy, and (2) determining if hazardous constituents were present in the groundwater beyond the known plume of contamination.

Id. at i (emphasis added).

40. *Id.*

41. *In re CECOS Int'l, Inc.*, 574 So. 2d 385, 387 (La. Ct. App. 1990), writ denied, 576 So. 2d 18 (La. 1991).

42. *Id.* The State's consent decree governed DEQ's "allegations and claims for injunctive relief against defendants [BFI-CSI and CECOS] pertaining to various groundwater and monitoring issues, which Consent Decree requires Defendants to take various actions in accordance with schedules set forth therein" *United States v. Browning-Ferris Indus.*, 704 F. Supp. 1355, 1358 (M.D. La. 1988).

Defendants BFI-CSI and CECOS consented to various groundwater monitoring compliance and reporting schedules but also paid \$2.5 million in civil penalties, in the settlement of all claims and allegations by the United States and DEQ. The settlements were: \$1.1 million to the United States; \$900,000 to the State of Louisiana; and \$500,000 to the Louisiana State University Foundation. *Id.* at 1361.

updates, corrections, clarifications, and more detailed descriptions of the proposed operations and site conditions.⁴³ CECOS submitted an additional application to DEQ in 1988 to open a new disposal cell, Cell 18, as permitted by Section 4.F.7 of its 1983 permit.⁴⁴ Though this application was denied on November 7, 1988,⁴⁵ at some point in 1989, CECOS began construction of Cell 18.⁴⁶

On September 12, 1988, DEQ issued a Notice of Intent to Deny (NOID) CECOS the hazardous permit application it submitted in 1984.⁴⁷ The NOID listed six reasons for the denial of an operating permit including the following four, which were adjudicated:

- (1) The applicant has certified in accordance with LAC 33:V.517.T.3.a. that the ground and subsurface conditions at the site are acceptable for the planned purposes of the

43. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 18. This review process, in addition to the NODs, resulted in major revisions to, and supplementation of, the original permit application submitted by CECOS. *Id.*

44. The 1983 permit, provided:

Prior to the start of construction of each landfill cell, all geotechnical data gathered for the cell area, in particular the logs of borings on a 200 [foot] grid pattern, shall be submitted to the staff. Also included will be the depth of excavation recommended by the permittee or its consultant. Final determination of the depth of excavation of each landfill cell will only be made after staff concurrence.

Permit, *supra* note 34, § 4.F.7. CECOS argued that the language in § 4.F.7's did not warrant denial of cell 18's construction. CECOS reasoned that the section's language only required DEQ's concurrence of the cell's depth, not total rejection. *CECOS Int'l, Inc.*, 574 So. 2d at 388.

45. Letter from George H. Cramer, III, Administrator, DEQ Groundwater Protection Division, to Steve Jacobs, District Manager, CECOS International, Inc. (Nov. 7, 1988) ("Cell 18 Excavation Plan Denial") (on file with *Tulane Environmental Law Journal*); see also Letter from Steve Jacobs, District Manager, CECOS International, Inc., to George H. Cramer, III, Administrator, DEQ Groundwater Protection Division (July 1, 1989) (on file with the *Tulane Environmental Law Journal*); Letter from Timothy W. Hardy, DEQ Assistant Secretary of Solid and Hazardous Wastes, to Steve Jacobs, District Manager, CECOS International, Inc. (Dec. 21, 1989) (on file with the *Tulane Environmental Law Journal*); Letter from Vaughn Meiners, District Manager, CECOS International, Inc., to Timothy W. Hardy, DEQ Assistant Secretary of Solid and Hazardous Wastes (Jan. 31, 1990) (on file with the *Tulane Environmental Law Journal*).

46. Letter from Steve Jacobs, District Manager, CECOS International, Inc., to George Cramer, III, Administrator, DEQ Groundwater Protection Division (July 10, 1989) (on file with the *Tulane Environmental Law Journal*) ("when your division withheld specific authority to develop this cell because of its overall concern about the site's geological suitability, that decision was appealed In the interim, CECOS has continued with the excavation and construction for Secure Cell 18 pursuant to the specifications and the QA/QC [Quality Assurance/Quality Control] procedures utilized in the excavation and construction of previous cells at the site.")

47. *Id.* at Finding of Fact, ¶ 20.

facility. Based upon review of the geologic data submitted by the applicant, the department has determined that portions of the site are unsuitable. Geologic information indicates fully one half of the Phase II area is underlain by a sand channel. This channel also runs near closed cells which are leaking, underlies the mixing building and underlies the old land farm area at the site. It is the department's position that the certification is in error, and that this site does not adequately meet the requirements of LAC 33:V.517.T.3.a.

- (2) The applicant has not complied with its existing January 1983 permit issued by the Environmental Control Commission (ECC) under the 1980 Hazardous Waste Management Plant (HWMP) regulations. Specifically, the facility has not followed the Waste Analysis Plan (WAP) which was approved in its permit dated, January, 1983. There have been a series of WAP's which have been considered in use as opposed to the approved WAP which was considered "in effect." Applicant's action has violated the spirit, intent and letter of the regulations, specifically (HWMP 8.4.2) or (LAC 33:V.1519.B.).
- (3) Based upon the information submitted by the Applicant in response to the "IT" Decision questions and the Part II Application, the environmental costs exceed the economic benefits of the project. Also, *the hydrological isolation of the landfill does not provide an acceptable level of protection nor will it assure a safe storage of disposal of hazardous waste and that contamination and migration of groundwater offsite is inevitable.*
- (4) The applicant's method of landfilling waste loads and recordkeeping did not result in useful or accurate records. Specifically, daily records of each waste load were not maintained or recorded on the day the waste was landfilled within the cell. Therefore, the accuracy of this recordkeeping has not met the requirements of LAC 33:V.4499 and 2509.⁴⁸

Shortly after the issuance of the NOID, the Louisiana Attorney General and the Livingston Parish Police Jury, who strongly supported DEQ's proposal to deny the permit, intervened in the DEQ Proceedings.⁴⁹ Faced with the denial of its facility's operating permit and denial of regulatory approval to

48. *Id.* ¶ 21 (emphasis added).

49. *Id.* at Finding of Fact, ¶ 23; see also Clark, *Jurors Start Anti-CECOS Drive*, DENHAM SPRINGS-LIVINGSTON PARISH NEWS, July 21, 1988, at 1A.

open a new disposal cell, CECOS moved to consolidate these two matters.

The adjudicatory hearing covered twenty days of testimony between April 24, 1989 and June 16, 1989.⁵⁰ Finally, on October 15, 1989, the Hearing Officer recommended that the denial of Cell 18 be withdrawn and that the draft permit be issued to CECOS. The Hearing Officer found as a matter of fact that CECOS, or its predecessors, took approximately 450 soil borings across the landfill site in investigating the site.⁵¹ It was further determined that "the site is not located in or near an environmentally sensitive area such as heavily populated areas, wetlands, wildlife management areas, prime agricultural areas, or major aquifer recharge zones. . . ." and further, "[i]t is not in or near a hurricane storm surge area and is not subject to flooding, nor does the site impact any known historical or archeological sites."⁵² Furthermore, the Hearing Officer found that neither DEQ nor the intervenors offered any evidence showing air or surface water contamination as a result of the landfill operation.⁵³

Upon submission of his report, the Hearing Officer stated that "[o]verall the risk of environmental harm from continuing operations at the CECOS Facility under the protection proposed in the application are [sic] reasonable when balanced with the economic benefits."⁵⁴ In each of his nine recommendations, however, the Hearing Officer recommended "careful review of the application" to "ascertain that the engineered systems proposed incorporate all reasonable corrections to subsurface deficiencies and, therefore, protect the environment from groundwater contamination to the greatest possible extent."⁵⁵ The Hearing Officer also determined that DEQ and the intervenors did not offer evidence that the geology with the proposed improvements was not acceptable.⁵⁶ Rather the evidence revealed that although there were serious geological problems, the problems could be solved by appropriate geotechnical engi-

50. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 24.

51. *Id.* ¶ 28.

52. *Id.* ¶ 100 (citing DEQ exhibit 100).

53. *Id.* ¶ 102.

54. Bob Anderson, *CECOS Wins Battle Over Waste Site*, MORNING ADVOCATE (Baton Rouge), Nov. 3, 1989, at 1B.

55. Hearing Report, *supra* note 5, at Recommendations, ¶ 1.

56. *Id.*

neering applications.⁵⁷

After an exhaustive and thorough six-year process, CECOS appeared victorious in its attempt to gain an operating permit for its Livingston Parish landfill. However, CECOS' victory was shortlived. Six months later, the Hearing Officer's decision notwithstanding, the Secretary of DEQ denied CECOS both the hazardous waste operating permit and approval to open Cell 18.⁵⁸ In doing so, the Secretary cited three main reasons:

- (1) [T]he geology of the site was found to be inadequate;
- (2) [T]he [impermeable slurry wall] barriers [designed to augment the impermeable natural clay underlying the pits] were suspect and could not compensate for the flawed geology; and
- (3) [C]ontinued operation would subject the citizens of Louisiana to unnecessary risk.⁵⁹

CECOS appealed, assigning six specifications of error:

- (1) The secretary used the wrong standard of review and cannot reverse the hearing officer's findings of fact unless the officer committed manifest error.
- (2) The secretary's findings concerning the geology of the Livingston site are manifestly erroneous, an abuse of discretion, and legal error.
- (3) The secretary's findings concerning the facility's compliance history are manifestly erroneous and arbitrary. The findings were based improperly on the consent decree between CECOS and DEQ.
- (4) The secretary failed to conduct the risk benefit analysis required by *Save Ourselves, Inc. v. Louisiana Environmental Control Commission*, 452 So.2d 1152 (La. 1984). His findings concerning the risk to the environment and citizens of Livingston Parish were arbitrary, capricious, and constituted manifest error. The failure to articulate specifically his consideration of the economic benefits is in violation of constitutional and statutory provisions.
- (5) The secretary's findings and conclusions that the facility held an interim status permit violates state and regulatory provisions.
- (6) The secretary erred by not recusing himself from the

57. *Id.*

58. Letter from Paul H. Templet, Secretary, Department of Environmental Quality, to CECOS International, Inc. (May 8, 1990) (denial of permit application based on the adjudicatory hearing record) (on file with the *Tulane Environmental Law Journal*).

59. See *In re CECOS Int'l, Inc.*, 574 So. 2d 385, 387 (La. Ct. App. 1990), writ denied, 576 So. 2d 18 (La. 1991).

review of the hearing officer's decision, and he should be recused from any further proceeding in this matter.⁶⁰

Following this review of the CECOS site's history, a review of the site's geology is in order. That review would be incomplete, however, without the ensuing brief explanation of groundwater.

III. GEOLOGY 101: THE BASICS

A. *Groundwater, Aquifers, and Aquicludes*

The "[l]and disposal of liquids and highly mobile or persistent hazardous wastes can present significant long-term risks to ground and surface water because, eventually, the wastes or their constituents will leak or leach from the disposal unit."⁶¹ Additionally, in any situation where a landfill such as CECOS is involved, a major concern of both the surrounding community and the regulating agencies is whether the nature of the geological environment underlying the site is composed of unconsolidated or consolidated soils, bedrock, sandstone, or shales. This concern is founded on the type of geological environment underlying the landfill, as the site's geology dictates the physical and chemical variables involved. Two major physical variables are the porosity and permeability of the rocks underlying the facility.⁶² Porosity refers to the percentage of voids versus the solid part of a rock.⁶³ For example, a sponge is very porous because it has a high ratio of voids to solids, whereas clay is less porous because it has a low ratio of voids to solids. There are two types of porosity: primary and secondary.⁶⁴ Primary porosity is formed at the time of deposition or formation of the rock. Where the particles are of uniform size, the porosity will be greater than where the particles are of varying sizes. Secondary porosity is formed after the deposition or formation of the rock.⁶⁵ This type of porosity is usually an enhancer of primary porosity and manifests itself as fractures, caverns, or caves. Per-

60. *Id.* at 388.

61. William L. Rosbe & Robert L. Gulley, *The Hazardous and Solid Waste Amendments of 1984: A Dramatic Overhaul of the Way America Manages Its Hazardous Waste*, [1984] 14 *Env'tl L. Rep.* (Env'tl. L. Inst.) 10,458, 10,460 (Dec. 1984).

62. Ralph C. Heath, *Basic Groundwater Hydrology*, in UNITED STATES GEOL. SURVEY WATER SUPPLY PAPER 2220, at 2 (1985).

63. *Id.* at 2.

64. *Id.* at 2-3.

65. *Id.* at 3.

meability, on the other hand, refers to the ability of a rock to transmit fluids.⁶⁶

An aquifer is a saturated permeable rock layer that will provide water in a useable quantity for a well or spring.⁶⁷ It is in these aquifers that groundwater resides. Groundwater flows through either confined aquifers, which are overlain by other strata, or unconfined aquifers, which have no overburden above them.⁶⁸ A confining bed is a saturated rock unit that is incapable of transmitting significant quantities of water and restricts the movement of groundwater either in or out of adjacent aquifers.⁶⁹

B. Site Geology

The CECOS Livingston Landfill is located on the Middle Prairie Terrace in Louisiana.⁷⁰ The site underlying CECOS' Livingston Parish Hazardous Waste Facility has been found to contain both shallow and deep aquifers, all of which are confined. The shallow strata beneath the CECOS site has been measured to a depth of ninety to one hundred feet. The strata encountered consists primarily of clays, silty clays, and sands that extend from the surface to a depth of approximately seventy feet. This alternating strata lies on top of a prominent sand aquifer. The shallow clays generally contain interbeds of porous saturated sands and silty sands "the most pronounced and laterally consistent of which occurs between 5 and 25 feet below the land surface. Discontinuous sandy layers also occur between 20 and 40 feet BLS [below surface] The strata, however, typically display a variable thickness across the site."⁷¹ Although the stratigraphy of the site is quite variable, the geology is idealized by an upper silty sandy aquifer separated from a lower dense sand aquifer by a thick clay unit. These saturated zones are identifiable and are presently monitored by well clusters.⁷²

The DEQ Hazardous Waste Groundwater Task Force found that the CECOS landfill was located in an area with a high water table.⁷³ Extraction pumps and slurry walls were

66. WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 876 (1988).

67. Heath, *supra* note 62, at 6.

68. *Id.*

69. *Id.*

70. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 27.

71. CECOS EVALUATION, *supra* note 5, at 19-20.

72. *Id.*

73. *Id.* at 7.

required during the construction of new cells to keep the construction area water free. During the construction of Cell 15, task force personnel observed "substantial sand seams [which are waterbearing] 5 to 12 feet in thickness in the side wall of the cell. Because of the high water table, thick sand seams and past disposal practices, [the Task Force observed that] contamination of . . . this site . . . [would] probably be a continual problem."⁷⁴ A survey conducted as part of the 1984 permit application identified twenty-seven municipal and private water wells within a two-mile radius of the landfill.⁷⁵

During the December 1985 inspection, Task Force personnel collected samples from eighteen groundwater monitoring wells, two leachate collection sumps, and leachate detection systems from the site that had begun operating in July 1985. Their investigations showed that Monitor Well (MW) 21, completed in the shallower thirty-foot zone, contained a variety of chlorinated hydrocarbons, solvents, and herbicides.⁷⁶ Another monitor well, MW-20, completed in the deeper sixty-foot zone, also contained numerous chlorinated hydrocarbons and solvents, although herbicides were absent.⁷⁷ Some of the contaminants identified in MW-20 were identical to those found in MW-21, but exhibited decreasing concentration with depth. In addition to hazardous organic contamination, two other wells, MW-1 and Observation Well (OW) 1, contained toxic metal contamination in excess of the federal primary drinking water standards (FPDWS).⁷⁸ MW-1 contained heavy metals including barium, cadmium, and chromium; another well OW-1, contained elevated levels of the heavy metals cadmium, chromium, and lead. One additional monitor well, MW-29, contained chromium slightly in excess of the FPDWS. Each of these wells was generally less than one hundred feet in depth.

C. Site Hydrology

In its evaluation of the site's hydrology and geology, the Louisiana First Circuit Court of Appeal made careful mention

74. *Id.*

75. Hearing Report, *supra* note 5, at Finding of Fact, ¶ 110.

76. Compounds identified included 2,4-D 9,400 parts per billion (ppb); 1,2-Dichloroethane 77,000 ppb; and 2,4,5-T 630 ppb. CECOS EVALUATION, *supra* note 5, at 8.

77. Compounds identified include 1,2-Dichloroethane 7,600 ppb and 2-Chlorophenol 2,000 ppb. *Id.*

78. *Id.*

of DEQ's expert geologist determination "that the geology was *site specific* and very complex."⁷⁹ The CECOS Evaluation Team found that the various sand and clay members of the prairie formation "appear[ed] to be hydraulically and stratigraphically interconnected by such secondary permeability features as joints, slickensides,⁸⁰ and vertical silt seams The potential for vertical ground-water flow is downward. . . ."⁸¹ The court also noted that a porous sand channel intersects the various strata and that the groundwater and contaminants can migrate from one stratum to the next without impedance from any substantial clay layers.⁸² Slickensides are evidence of movement along either a fault or a joint plane; this movement can add to any migration that may be taking place. Neither the court's opinion nor the Hearing Officer's report suggested that CECOS' experts disagreed with this geological interpretation. Additionally, the apparent hydraulic and stratigraphic interconnection by the secondary permeability features, added greater credence to the Secretary's decision to deny the permit application. The court noted that, in reviewing the record, the Secretary "made his own findings of fact and concluded that the subsurface geology of the facility is fatally flawed."⁸³ Furthermore, the Secretary concluded that because of quality control and construction irregularities,⁸⁴ the engineered barriers were not effective safeguards and could not compensate for the inherently deficient geology of the site, nor guarantee the isolation of hazardous contaminants over time. It is not known whether the Secretary consulted other experts in his review. Yet, based on "DEQ's findings, reasons and exercise of discretion . . . clearly implied by the record,"⁸⁵ the Secretary would have likely abrogated his statutory

79. *In re CECOS Int'l, Inc.*, 574 So. 2d 385, 389 (La. Ct. App. 1990), *writ denied*, 576 So. 2d 18 (La. 1991) (emphasis added).

80. "A smooth often striated surface produced on rock by movement along a fault or a subsidiary fracture." WEBSTER'S NINTH NEW COLLEGIATE DICTIONARY 1109.

81. CECOS EVALUATION, *supra* note 5, at 22.

82. *Cecos Int'l*, 574 So. 2d at 390.

83. *Id.*

84. The Secretary found that

Ground-water flow within the shallow Zone 2 aquifer has been directly affected by the construction of a slurry wall which was emplaced along the perimeter of the site The net effect is to retard horizontal ground-water flow within the shallow aquifer The slurry walls, however, have no apparent effect on the deeper Zone 5 aquifer. Any contaminants moving vertically into the lower aquifer would be free to migrate laterally.

CECOS EVALUATION, *supra* note 5, at 22.

85. *Blackett v. Dep't of Env'tl. Quality*, 506 So. 2d 749, 756 (La. Ct. App. 1987).

and constitutional responsibility⁸⁶ had he not made this finding.

Thus, the geological aspects of the CECOS decision have been set forth. The focus shall now shift to the administrative law aspects of the decision.

IV. THE SCOPE OF JUDICIAL REVIEW UNDER THE LOUISIANA ADMINISTRATIVE PROCEDURE ACT

"To protect [the interests in life, health, and liberty] from administrative arbitrariness, it is necessary, but not sufficient, to insist on a strict judicial scrutiny of administrative action. For judicial review alone can correct only the most egregious abuses."⁸⁷

To afford parties constitutional guarantees of substantive and procedural due process, Congress enacted the Administrative Procedure Act (APA) in 1946.⁸⁸ Louisiana, like a majority of states, modeled the Louisiana Administrative Procedure Act (LAPA) after the federal statute but included additional modifications.⁸⁹ It is clear that the legislature, in enacting the LAPA, intended to replace the myriad of rules governing agency procedure with a comprehensive, uniform system which would apply to all agencies and which would also include procedural safeguards.⁹⁰ The Chairman of the Interim Joint Legislative Committee on Formulation of Administration Rules of Procedure stated that the purpose of the LAPA was "to establish a basic, streamlined system to replace the hundreds of rules and regulations in some 189 state agencies, commissions and boards"⁹¹ The LAPA did not replace all agency procedures; it merely replaced those procedures that fell below the minimum due process standards established in the statute.⁹² In the context of hazardous waste, the Louisiana Supreme Court has held that DEQ has a statutory duty "to establish rules and

86. To safeguard the health and welfare of the citizens of Louisiana and protect the environment.

87. *Environmental Defense Fund, Inc. v. Ruckelshaus*, 439 F.2d 584, 589 (D.C. Cir. 1971) (emphasis added).

88. 5 U.S.C. §§ 551-559 (1988). For a review of the historical development of administrative law, see K.C. DAVIS, *ADMINISTRATIVE LAW TREATISE* 24-34 (1958).

89. LA. REV. STAT. ANN. § 49:950; see Robert Force & Lawrence Griffith, *The Louisiana Administrative Procedure Act*, 42 LA. L. REV. 1227, 1227 n.1 (1982).

90. Note, *Louisiana's "New" Administrative Procedure Act*, 35 LA. L. REV. 629, 630 (1974).

91. *Id.* at 630 n.6.

92. *Id.*

regulations which set standards for hazardous waste handling, . . . to rule on hazardous waste handling permits and to insure that the statutory and regulatory standards are met."⁹³

In the seminal decision of *Save Ourselves, Inc. v. Louisiana Environment Control Commission*, the Louisiana Supreme Court was confronted with the potential for serious environmental consequences. The supreme court's conclusions were highlighted by an examination of the proper scope of judicial review under the LAPA.⁹⁴ In *Save Ourselves*, DEQ's predecessor, the Environmental Control Commission, had issued permits to the IT Corporation for the treatment of hazardous waste in connection with an eighty-four million dollar facility it proposed to build along the Mississippi River.⁹⁵ The court noted that the LAPA provides guidelines by which courts may reverse or modify an agency's decision where:

[An applicants substantial rights have been] prejudiced because the administrative findings, inferences, conclusions or decisions are:

- (1) [i]n violation of constitutional or statutory provisions;
- (2) [i]n excess of the statutory authority of the agency;
- (3) [m]ade upon unlawful procedure;
- (4) [e]ffected by other error of law;
- (5) [a]rbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion; or
- (6) [m]anifestly erroneous in view of the reliable, probative and substantial evidence on the whole record.⁹⁶

Based on the foregoing factors, the *Save Ourselves* court concluded that the arbitrariness test applied only to substantive aspects of the Commission's decisions.⁹⁷

After *Save Ourselves*, the issue facing Louisiana appellate courts is: What standard of review should they employ in evalu-

93. *Environmental Control Comm'n v. Browning-Ferris Indus.*, 450 So. 2d 1292, 1297 (La. 1984).

94. 452 So. 2d 1152, 1158-60 (La. 1984).

95. *Id.* at 1160.

96. LA. REV. STAT. ANN. § 49:964(G). "The manifest error test of § 964(G)(6) is used in reviewing the facts as found by the agency. The arbitrariness test is used in reviewing conclusions and exercises of agency discretion. Where there are no factual issues, the manifest error test is not used." *Save Ourselves*, 452 So. 2d at 1159 (citing *Insurance Serv. Office v. Comm'r of Ins.*, 381 So. 2d 515, 516 (La. Ct. App. 1979)); see also *Force & Griffith*, *supra* note 89, at 1285.

97. *Save Ourselves*, 452 So. 2d at 1159.

ating administrative decisions? In challenging the Secretary's decision, CECOS equated the Hearing Officer's finding of fact with that of a trial court judge and argued that the Secretary cannot undertake a de novo review but must give deference "to the Hearing Officer's factual determination and [thus] cannot overrule the Hearing Officer unless the Secretary finds manifest error."⁹⁸ The Louisiana First Circuit summarily dismissed CECOS' argument noting that Louisiana Revised Statute 30:2018(D) provides the standard of review that the Secretary is obliged to use when reviewing a Hearing Officer's decision.⁹⁹ The court found that under subsection (2)(b) of the statute, the Secretary can overrule the Hearing Officer's decision and "render a contrary decision or order based on the record developed by the hearing officer."¹⁰⁰ The court stated:

This authority . . . tempered only with the requirement that the reversal must be based on the record, . . . is expanded, however, by section 2018(D)(2)(c), which allows the secretary to gather additional evidence and hold a new hearing or hearings if he desires. The statute *does not require that the secretary give deference to the findings of fact of the hearing officer* as argued by CECOS. The secretary's decision can be supported by the record compiled by the hearing officer or a record compiled by the secretary, after new hearings or with additional evidence, or both.¹⁰¹

Furthermore, the court stated that unless an appellate court found "a fatal error of law, substantive or procedural, or [that] the agency ha[d] committed manifest error in its findings or

98. *In re CECOS Int'l, Inc.*, 574 So. 2d 385, 388 (La. Ct. App. 1990), *writ denied*, 576 So. 2d 18 (La. 1991).

99. LA. REV. STAT. ANN. § 30:2018(D) (West Supp. 1991) provides in part:

Upon receipt of the motion for review, the secretary *may*:

- (1) Deny the motion, at which time the order or decision shall become final; or
- (2) Grant the motion as to one or more of the grounds on which the review is requested and:
 - (a) Remand the matter with instructions to the hearing officer; or
 - (b) Overrule the decision or order of the hearing officer and render a contrary decision or order based on the record developed by the hearing officer; or
 - (c) Hold new hearings or collect additional evidence or both and render its own decision or issue its own order thereon.

Id. (emphasis added).

100. LA. REV. STAT. ANN. § 30:2018 (D)(2)(b).

101. *CECOS Int'l*, 574 So. 2d at 388 (emphasis added).

abuse[d] its discretion in exercising its authority,"¹⁰² it is precluded from reversing the trial court's decision. The CECOS court relied on the recent decision of *Sistler v. Liberty Mutual Insurance Co.*¹⁰³ to support its holding that the Secretary may conduct a de novo review of the facts.¹⁰⁴ In *Sistler*, the court held that "absent 'manifest error' or unless it is 'clearly wrong,' the jury or trial court's findings of fact may not be disturbed on appeal."¹⁰⁵ However, the CECOS court did not need to look further than its own holdings. Seven years earlier, in *Summers v. Sutton*, this same court held:

[T]he general principle governing judicial review of administrative decisions is that if the evidence as reasonably interpreted, supports the determination of an administrative agency, its orders are accorded great weight and will not be reversed or modified in the absence of a clear showing that the administrative action is arbitrary and capricious.¹⁰⁶

Thus, the court found the evidence supporting the Secretary's decision in CECOS' history of noncompliance.

V. COMPLIANCE HISTORY

The Louisiana First Circuit Court of Appeal found that, based on CECOS' previous compliance history, the Secretary was bound to reject the 1984 permit application.¹⁰⁷ CECOS objected to the Secretary's revival of its history of noncompliance. Specifically CECOS argued that DEQ's 1988 consent decree was res judicata on all issues resolved therein. The court dismissed this argument citing section 16 of the 1988 consent decree, which states:

102. *Id.* at 389.

103. 558 So. 2d 1106 (La. 1990).

104. *Id.* at 1111-12. This view is also clearly supported by LA. REV. STAT. ANN. § 30:2018(D)(2)(c) (West Supp. 1991).

105. *Sistler*, 558 So. 2d at 1111 (citing *Canter v. Koehring Co.*, 283 So. 2d 716, 724 (La. Ct. 1973)).

106. 428 So. 2d 1121 (La. Ct. App. 1983).

107. *Id.* The principle of deference to a federal agency's interpretation of scientific data has been long-standing. See, e.g., *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837, 844 (1984) (providing in part: "[w]e have long recognized that considerable weight should be accorded to . . . the principle of deference to administrative interpretations."); see also *Environmental Defense Fund v. EPA* 598 F.2d 62, 76-80 (D.C. Cir. 1978) (upholding EPA's regulations banning PCB'S); see also, e.g., *Land Reclamation, Ltd. v. Wisconsin Dept. of Nat. Resources*, 395 N.W.2d 831 (Wis. Ct. App. 1986), available in WESTLAW, WI-CS (unpublished opinion) (holding that under Wisconsin law a state court will defer to an agency's expertise and judgment).

[T]his consent decree shall not be construed as a waiver or limitation of any rights, remedies, powers and/or authorities which the United States, EPA, the State of Louisiana or [DEQ] has under RCRA, CERCLA, LEQA, or any other statutory, regulatory or common law enforcement authority.¹⁰⁸

The court noted with approval that "one of the requirements in the permitting process . . . is the review of the compliance history."¹⁰⁹ Because the consent decree did not bar the Secretary from reviewing the facility's compliance history, the court found that the Secretary was merely attempting to follow the mandate of the statute by reviewing the facility's compliance history.¹¹⁰ Further, the court held that because the record contained independent evidence regarding CECOS' noncompliance, and because CECOS did not take advantage of its opportunity to respond during the hearing, its due process had not been violated.¹¹¹ In his decision of May 8, 1990, the Secretary found that CECOS' compliance history indicated that the operator would not take measures that would be sufficient "to insure proper treatment, storage and disposal of hazardous waste."¹¹² In affirming the Secretary's decision, the court stated that "a history of substantial past problems, even if subsequently corrected, is a valid consideration in reviewing a permit application."¹¹³ Furthermore, the court noted that the proceedings here were different; the litigation was based on statutory violations while the immediate case revolved around an administrative hearing challenging the NOID, and therefore, *res judicata* did not apply.¹¹⁴

VI. RISK BENEFIT ANALYSIS

Much to the chagrin of corporate Louisiana, the CECOS court stated:

Harm to the environment cannot always be quantified as easily as the economic benefits derived from taxes and salaries. A

108. *In re CECOS Int'l, Inc.*, 574 So. 2d 385, 391. The court cited LA. REV. STAT. ANN. § 30:2014(A) which provides in part: "[P]rior to the grant of any permit . . . to any facility, each assistant secretary shall submit a report describing the history of violations and compliance for that facility. In considering the granting or denial of the permit . . . due consideration shall be given to the violation and compliance history of the facility."

109. *Id.* (citing LA. REV. STAT. ANN. § 30:2014(A)).

110. *Id.*

111. *Id.* See generally *Matthews v. Eldridge*, 424 U.S. 319 (1976).

112. *CECOS Int'l*, 574 So. 2d at 392 (citing Secretary Templet's decision, Finding of Fact, ¶ 12).

113. *Id.*

114. *Id.*

need for a hazardous waste management facility at this site *must be balanced against our future need for clean water resources and a possibility of contamination of these resources.*¹¹⁵

Thus, it may appear that the *CECOS* court changed the course of a river in midstream. In reality, however, the *CECOS* court merely amplified and broadened the *Save Ourselves* test. In *Save Ourselves*, the Louisiana Supreme Court held:

[T]he regulatory scheme provided by the constitution and statutes mandates a particular sort of careful and informed decision-making process and creates judicially enforceable duties. Reviewing courts should not reverse a substantive decision on its merits, *unless it be shown that the actual balance of costs and benefits that was struck was arbitrary or clearly gave insufficient weight to environmental protection.* However, if the decision was reached procedurally, without individualized consideration and balancing of environmental factors conducted fairly and in good faith, it is the courts' responsibility to reverse.¹¹⁶

The *CECOS* court agreed with *CECOS*' assertion that the state may need hazardous waste facilities and that the economic benefits to the state must be considered under the *Save Ourselves* analysis. But, in affirming the Secretary's rejection of the Hearing Officer's findings, the court paid particular deference to the Secretary's acceptance of conflicting expert testimony. The Secretary found that "a greater risk to the environment existed for . . . water recharge zones,"¹¹⁷ based on inadequate geology of the site as well as the testimony "concerning construction, tracking, and waste management lapses."¹¹⁸ The court reasoned that the DEQ Secretary made his decision after reviewing the record and balancing "societal benefits from the facility and the *risk of water contamination and harm to the environment.* The Secretary noted the problems and concluded the risk was not warranted or acceptable."¹¹⁹ The Secretary obviously attempted to answer the question of whether environmental issues outweigh the social and economic benefits by stating that "continuance of the hazardous waste disposal plant at the Livingston site would subject

115. *Id.* (emphasis added).

116. *Save Ourselves, Inc. v. Louisiana Envtl. Control Comm'n*, 452 So. 2d 1152, 1159 (La. 1984).

117. *CECOS Int'l*, 574 So. 2d at 392. A "recharge zone" is a geographic area which replenishes an aquifer.

118. *Id.*

119. *Id.* (emphasis added).

the citizens to undue risks; risk exceeding or violating the standards set by society."¹²⁰ Thus, based on its review of the record, the court found that the Secretary did not abuse his discretion in employing the *Save Ourselves* risk analysis scheme.¹²¹

VII. CONCLUSION

It is significant that the *CECOS* court reaffirmed and amplified the *Save Ourselves* analysis of environmental issues. Under this analysis, the inquiry does not end when an economic benefit is shown. Instead, economic benefit must be weighed against environmental risks. While this sort of analysis may be commonplace in other states, it is remarkable in Louisiana—the "polluter's paradise." Thus, the *CECOS* decision may reveal a new judicial trend that considers both environmental risks as well as the financial bottomline. Nonetheless, *CECOS* demonstrates that even the threat of groundwater contamination will be judicially analyzed within the strict framework courts have developed to review administrative decisions.

The Louisiana First Circuit Court of Appeal most likely upheld the Secretary's risk-benefit analysis because, in this case, DEQ was able to support its actions with voluminous site specific, and often independently obtained, data. It is unlikely that the court would have reached the same conclusion if the data was more general or if the DEQ did not have sufficient geological data of its own. Clearly agencies have their own agendas, some of which may accord with the public good and some of which not. Consequently, agencies, whether federal or state, should not be permitted to carry out a policy, no matter how altruistic or beneficial to the public, without both independent and specific data. In cases such as *CECOS*, however, where the data is overwhelming and the constitutional and legislative mandates are so strong, the courts must defer to agency expertise and discretion.

As for the future, growing public concern over environ-

120. *Id.* at 393. The Secretary stated:

Design in construction of the land disposal units cannot compensate for the *inherently deficient geology* of the site nor guarantee isolation of hazardous constituents over time. Allowing continued disposal of hazardous waste at this facility would . . . *subject the citizens of this state to undue risks.*

Secretary's May 8, 1990, Findings of Fact and Conclusions of Law (emphasis added) (on file with the *Tulane Environmental Law Journal*); see also *In re Marine Shale Processors, Inc.*, 566 So. 2d 994, 999 (La. Ct. App. 1990), writ denied, 568 So. 2d 1055 (La. 1990).

121. *CECOS Int'l*, 574 So. 2d at 393.

mental hazards will continue to be reflected in judicial opinions. Accordingly, Louisiana courts will continue to give deference to DEQ's decisions; however, the *CECOS* decision demonstrates that they will not do so blindly.

