

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

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BUREAU OF AIR REGULATION

FLORIDA CHAPTER OF THE SIERRA )  
CLUB and SAVE OUR SUWANNEE, )  
INC., )

Petitioners, )

vs. )

Case No. 99-3096

SUWANNEE AMERICAN CEMENT )  
COMPANY, INC. and DEPARTMENT )  
OF ENVIRONMENTAL PROTECTION, )

Respondents. )

RECOMMENDED ORDER

Pursuant to notice, a formal hearing was held in this case before Larry J. Sartin, a duly-designated Administrative Law Judge of the Division of Administrative Hearings, in Gainesville, Florida, on February 14, 2000.

APPEARANCES

For Petitioners: Patrice Boyes, Esquire  
Boyes & Associates, P.A.  
Post Office Box 1424  
Gainesville, Florida 32602

and

Peter B. Belmont, Esquire  
102 Fareham Place North  
St. Petersburg, Florida 33701

For Respondent, Department of Environmental Protection:

Jack B. Chisolm, Jr., Esquire  
Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

For Respondent, Suwannee American Cement Company, Inc.:

W. Robert Vezina, III, Esquire  
Mary M. Piccard, Esquire  
Vezina, Lawrence & Piscitelli, P.A.  
318 North Calhoun Street  
Tallahassee, Florida 32301

and

Lawrence E. Sellers, Jr., Esquire  
Larry Curtain, Esquire  
Holland & Knight  
Post Office Box 810  
315 South Calhoun Street, Suite 600  
Tallahassee, Florida 32302-0810

STATEMENT OF THE ISSUE

The issue in this case is whether Respondent, Suwannee American Cement Company, Inc., should be issued an air construction permit for the construction of a portland cement manufacturing plant.

PRELIMINARY STATEMENT

On November 30, 1998, Suwannee American Cement Company, Inc., submitted an application to the Department of Environmental Protection for an air construction permit authorizing the construction and operation of a portland cement manufacturing plant to be located near Branford, Suwannee County, Florida. Additional information to support the application was requested by the Department of Environmental Protection and was provided by Suwannee American Cement Company, Inc.

On June 22, 1999, the Department of Environmental Protection issued a Notice of Permit Denial indicating its intent to deny the permit sought by Suwannee American Cement Company, Inc. The permit application was denied because of a determination that Suwannee American Cement Company, Inc., had failed to provide

assurances that it would comply with all applicable regulations as evidenced by the alleged compliance history of companies related to Suwannee American Cement Company, Inc.

Suwannee American Cement Company, Inc., filed a Petition challenging the proposed denial of its permit application. On July 6, 1999, Petitioners in this case filed a Petition suggesting additional grounds for denying the permit application.

The Petitions were filed with the Division of Administrative Hearings on or about July 21, 1999. Respondent Suwannee American Cement Company, Inc.'s Petition was designated Case No. 99-3095. Petitioners' Petition was designated Case No. 99-3096. Both cases were assigned to Administrative Law Judge Suzanne F. Hood. Judge Hood entered an order consolidating the cases August 17, 1999. A third case was also consolidated with Case Nos. 99-3095 and 99-3096. That case was subsequently dismissed.

On October 21, 1999, Judge Hood entered a Recommended Order of Dismissal in this case. Judge Hood found that Petitioners' Petition failed to include allegations of any cognizable issues. Petitioners had alleged that the permit application should be denied because of rules designed to prevent pollution of Florida's waters. Judge Hood recommended that the Department of Environmental Protection dismiss the Petition because the water quality regulations upon which Petitioners had relied did not apply to the type of permit sought by Suwannee American Cement Company, Inc.

On November 18, 1999, Suwannee American Cement Company, Inc., and the Department of Environmental Protection entered into

a settlement agreement resolving the issues raised in Case No. 99-3095. As a result of this agreement, the Department of Environmental Protection caused notice of its intent to grant the permit to be published. The settlement agreement was filed with the Division of Administrative Hearings on November 19, 1999. Consequently, Case No. 99-3095 was closed.

On November 30, 1999, without ruling on the merits of Judge Hood's Recommended Order, the Department of Environmental Protection entered an Order remanding Case No. 99-3096 to the Division of Administrative Hearings. The Department of Environmental Protection remanded this case with directions to conduct a final hearing. By Order entered December 6, 1999, Judge Hood accepted the remand, reopened this case, and scheduled a final hearing for February 14 through 17, 2000.

On December 17, 1999, Judge Hood entered an Order Granting Motion to Disqualify, recusing herself from further participation in this case. The case was reassigned to the undersigned.

On January 17, 2000, Petitioners moved to amend their Petition. By Joint Prehearing Stipulation, Petitioners abandoned all but one allegation of their amended petition. The only issue raised by Petitioners in this case, therefore, is whether Suwannee American Cement Company, Inc., has failed to give reasonable assurances that its proposed portland cement manufacturing plant will not violate the applicable requirements of Florida Statutes and the rules of the Department of Environmental Protection as they relate to the prevention of significant degradation of Outstanding Florida Waters, the

maintenance of the designated use of surface waters, and certain minimum criteria for surface waters. In particular, Petitioners alleged that Suwannee American Cement Company, Inc., failed to give reasonable assurances concerning the impact on Florida waters from mercury emitted from the proposed plant.

The Joint Prehearing Stipulation filed by the parties contains undisputed findings of fact and undisputed conclusions of law which have been included in this Recommended Order to the extent relevant. The Joint Prehearing Stipulation also contains stipulated issues of fact and law which remain to be decided in this case.

At the final hearing Suwannee American Cement Company, Inc., presented the testimony of Fred W. Koester, John B. Koogler, Ph.D., Joseph H. Kahn, Donald F. Elias, and Christopher M. Teaf, Ph.D. Suwannee American Cement Company, Inc., also offered twenty exhibits. All were accepted into evidence.

The Department of Environmental Protection adopted the testimony of Mr. Kahn. No additional witnesses were called and no exhibits were offered by the Department of Environmental Protection.

Petitioners presented the testimony of Thomas D. Atkeson, Ph.D., and Curtis D. Pollman, Ph.D. Petitioners also offered Exhibits 1-5, 7-8, 10-13, 15 and 17. All were accepted into evidence.

At the conclusion of the hearing, public comment was heard.

A transcript of the hearing was ordered. The Transcript was filed February 21, 2000. Proposed orders were, therefore,

required to be filed on or before March 2, 2000. Proposed Recommended Orders were filed by Petitioners and both Respondents on March 2, 2000.

Petitioners filed a Motion For Leave to Exceed Page Number with its Proposed Recommended Order. It was represented in the Motion that Respondents have no objection to the Motion. The Motion is hereby granted.

The Proposed Recommended Orders filed by the parties have been fully considered in entering this Recommended Order.

#### FINDINGS OF FACT

##### A. The Parties.

1. Petitioner, Florida Chapter of the Sierra Club (hereinafter referred to as "Sierra Club"), is a California corporation. Sierra Club's corporate purposes include the exploration and enjoyment of wild places of the State of Florida and the protection and restoration of the quality of the natural and human environment.

2. A number of Sierra Club's members use the Sante Fe, Suwannee, and Ichetucknee Rivers for recreation and enjoyment. Activities include swimming, fishing, and boating.

3. Petitioner, Save Our Suwannee, Inc. (hereinafter referred to as "SOS"), is a Florida corporation. SOS is, therefore, a "citizen" of the State of Florida for purposes of Section 403.412(5), Florida Statutes. SOS timely filed a verified Petition for Administrative Hearing pursuant to Section 403.412(5), Florida Statutes, initiating this proceeding.

4. Respondent, Department of Environmental Protection (hereinafter referred to as the "Department"), is an agency of the State of Florida. The Department is charged with the authority to, among other things, issue air construction permits and provide protection of the waters of the State, including Outstanding Florida Waters (hereinafter referred to as "OFWs").

5. Respondent, Suwannee American Cement Company, Inc. (hereinafter referred to as "Suwannee American"), is a corporation which plans to construct and operate a portland cement manufacturing plant in Suwannee County, Florida.

B. Suwannee American's Proposed Project.

6. Suwannee American plans to build and operate a dry process preheater/precalciner type portland cement manufacturing plant (hereinafter referred to as the "Proposed Plant") on property located near Branford, Suwannee County, Florida. Portland cement is a dry powder product which is normally used to make cement when it is mixed with water and other components.

7. The Proposed Plant will be located on over 800 acres of land (hereinafter referred to as the "Proposed Site") located on U.S. Highway 27 at County Road 49. The Proposed Site is located approximately four miles to the west of the Ichetucknee River's intersection with U.S. Highway 27, approximately three miles north of the Sante Fe River, and approximately 3.4 miles to the east of the Suwannee River.

8. The Proposed Plant will have the capacity to produce 150 tons per hour and 1,191,360 tons per year of portland cement.

9. The Proposed Plant has been designed by Krupp Polysius, a world-wide designer and builder of cement plants. General engineering for the Proposed Plant will be provided by Agra Simons, a nationwide engineering firm. It is anticipated that the Proposed Plant will cost in excess of \$1,000,000.00 to build.

10. The primary components in portland cement are limestone and sand. A limerock quarry is located on the Proposed Site. The quarry has been operated since the 1930s. The quarry will be used as a source of limestone and sand for the Proposed Plant.

11. The limestone and sand are stored in bins located on the Proposed Site. Alumina, iron, and gypsum are added to the limestone and sand. The mixture, which is referred to as the "feeder material," is measured and placed on a roller mill where it is finely ground. The ground feeder material is transferred from the roller mill to a storage and homogenizing silo. From the silo the material is measured again and fed into a preheater/precalciner for processing (including heating) and then transferred to a rotary kiln. The material is heated further in the rotary kiln. The feeder material is ultimately burned at temperatures of 2700 to 2900 degrees Fahrenheit.

12. The burning of the material causes a chemical change in the feeder material. This chemical change results in the production of what is referred to as "clinker." The Proposed Plant will have a capacity to produce approximately 750,000 tons of clinker per year. After the clinker is produced it is dropped into an air quenching cooler and, after it is cooled, it is stored in silos at the Proposed Site.



13. The clinker is subsequently ground into a fine powder to produce the final product, portland cement. The cement is stored on site until it is shipped from the Proposed Site by truck.

14. More than one and a half tons of feeder material are required to produce one ton of clinker. Therefore, siting the Proposed Plant at a site with a quarry will reduce the cost of operating the Proposed Plant.

15. The process of producing the cement will cause the emission of pollutants into the atmosphere at two major points in the Proposed Plant: (a) the preheater and kiln; and (b) the cooler. A "baghouse" will be employed at the preheater and kiln to collect some of the pollutants in the emissions prior to release into the atmosphere. Mercury is not one of the pollutants which the baghouse is intended to reduce.

C. Suwannee American's Permit Application, the Department's Proposed Decision, and Challenges to the Department's Proposed Decision.

16. Because of the expected emissions of pollutants into the air from the Proposed Plant Suwannee American is required to obtain an air construction permit from the Department. Rule 62-212.400, Florida Administrative Code.

17. On November 30, 1998, Suwannee American filed an application for an air construction permit for the construction of the Proposed Plant. The application was subsequently reviewed by the Department for compliance with the rules governing the issuance of air construction permits. The Department did not review the application for compliance with water quality impacts.

18. On June 22, 1999, the Department issued a Notice of Intent indicating that Suwannee American's permit application was denied. The Notice was published on July 2, 1999.

19. Suwannee American timely filed a Petition for Administrative Hearing challenging the Department's decision to deny the permit application.

20. Sierra Club and SOS also timely filed a Petition for Administrative Hearing asserting additional grounds for denial of Suwannee American's permit application. Sierra Club and SOS asserted that discharges from the Proposed Plant would result in violations of Florida water quality standards.

21. On October 21, 1999, a Recommended Order of Dismissal was entered recommending that the Petition filed by Sierra Club and SOS be dismissed for failure to raise any cognizable issue.

22. On November 18, 1999, the Department and Suwannee American entered into a Settlement Agreement pursuant to which the Department agreed to issue an air construction permit to Suwannee American. A draft permit was attached as Exhibit B to the settlement agreement (hereinafter referred to as the "Draft Permit").

23. On December 1, 1999, without ruling on the substance of the Recommended Order of Dismissal, the Department remanded this case to the Division of Administrative Hearings with instructions to conduct a formal administrative hearing.

D. Emissions Expected from the Proposed Plant Requiring Compliance with Applicable "Prevention of Significant Deterioration" Permitting Program Standards.

24. The Department has established a "prevention of significant deterioration" or "PSD" permitting program in an effort to protect air quality in the State. The PSD program includes standards which must be met by applicants for air construction permits if the potential rate of expected emissions of certain designated air pollutants from a proposed facility meet or exceed certain levels. Rule 62-212.400, Florida Administrative Code.

25. The expected emissions from the Proposed Plant that are subject to PSD review relevant to this case include the following: (a) more than 100 tons per year of sulfur dioxide, nitrogen oxides, carbon monoxide, and particulate matter; and (b) in excess of 40 tons of volatile organic compounds per year. For each of these expected pollutants, PSD program compliance requires a determination of whether the Proposed Plant will: (a) meet "Best Available Control Technology" standards (hereinafter referred to as "BACT"), for the expected pollutants; (b) violate ambient air quality standards will for those expected pollutants; and (c) allow PSD increments for the expected pollutants to be exceeded.

26. Ambient air quality standards are the levels of air pollutants that the Environmental Protection Agency (hereinafter referred to as the "EPA") has determined will not cause adverse impacts to human health or the environment. These standards have

been adopted by the Department. Allowable PSD increments are the incremental increases in air pollutant concentrations that have been established as acceptable without being considered to significantly degraded air quality.

27. The parties stipulated, and the evidence demonstrated, that the Proposed Plant, as approved by the Department and limited by the Draft Permit, will achieve BACT, will not cause a violation of any ambient air quality standard, and will not exceed any applicable PSD increment.

28. The evidence also proved that impacts on air quality from the Proposed Plant on soils and vegetation will not be adverse, and that impacts on visibility will not be significant.

29. Based upon the foregoing, it is concluded that Suwannee American's Proposed Plant complies with the permitting requirements for the "construction or modification of any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standard."

Rule 62-212.400(1)(a), Florida Administrative Code. Suwannee American is, therefore, entitled to the issuance of an air construction permit for the Proposed Plant unless it fails to meet water quality standards, to the extent determined applicable to Suwannee American's proposed project.

E. Atmospheric Mercury Emissions.

30. In addition to the emission of air pollutants from the Proposed Plant which triggered PSD review, the Proposed Plant will also emit mercury into the atmosphere. Mercury is a metal that occurs naturally in the environment. The levels of mercury

expected from the Proposed Plant are not, however, high enough to require PSD review with regard to the expected mercury emissions or to authorize the Department to deny an air construction permit based upon the levels of mercury determined by the Department and EPA to be permissible.

31. Mercury can pose a serious danger to the public health, safety, and welfare. Mercury, in the form of methyl mercury, acts as a neurotoxin when consumed. The consumption of fish containing mercury can result in human exposure to mercury which is potentially significant. An indicator of the potential harm to humans from mercury may, therefore, be determined through measuring the mercury level in fish. Measuring the amount of mercury within the water column is not, however, determinative of the potential harm to humans of mercury in the water.

32. Mercury is emitted into the air in an inorganic form. To constitute an immediate danger to humans, the mercury must be converted to methyl mercury, a form of organic mercury, and must be processed through the food chain. This process is referred to as biomagnification. The creation of methyl mercury and the process of biomagnification in water involves a complex interaction of physical, chemical, and biological factors. Numerous factors impact this process, including levels of nutrients, sulfates, dissolved organic carbon, dissolved oxygen, and chloride.

33. The conversion of inorganic mercury to methyl mercury typically begins with the consumption of the inorganic mercury by sulfate-reducing bacteria, the release of methyl mercury into the

water, and the ultimate bioaccumulation of the mercury in fish. Once consumed by single-cell organisms, the mercury moves up the food chain until it ultimately reaches predator fish, such as large-mouth bass, where the concentrations of mercury are ultimately highest. The predator fish are then consumed by humans.

34. Sulfate-reducing bacteria are found in areas with a dissolved organic carbon source to feed on. Wetlands are typically a high source of organic carbon.

35. Because of the complex chemical process involved in the production of methyl mercury, some water bodies are more sensitive to the effects of mercury deposition or the disposition of inorganic mercury from its production source. This finding is supported by the fact that, even though the deposition of atmospheric mercury over South Florida is generally constant, water bodies in the area have responded differently. For example, the Everglades has relatively high levels of mercury while Lake Okeechobee does not.

36. Among the significant factors that impact the conversion of mercury released from a high temperature combustion source to methyl mercury is the form in which mercury is released into the atmosphere.

37. Until approximately ten years ago it was believed that mercury emitted into the atmosphere from a high temperature combustion source was emitted in the form of elemental mercury. Elemental mercury has a longer residence time in the atmosphere.

As a result, elemental mercury has a much smaller impact in the area near the source of its release into the atmosphere and less impact on waters close to the source of the emission.

38. More recent research has proved that mercury is released into the atmosphere in various forms, including particulate mercury and reactive gaseous mercury. Particulate mercury and reactive gaseous mercury have a shorter residence time in the atmosphere than elemental mercury. Particulate mercury and reactive gaseous mercury will, therefore, tend to deposit closer to their source and can have a greater impact on water resources close to the source of the emission. The emission of mercury in different forms into the atmosphere is referred to as "speciation."

39. The precise speciation rate of mercury from a portland cement plant such as the Proposed Plant is not well understood. Suwannee American's experts relied upon speciation rates ranging from 10 to 20 percent particulate and reactive gaseous mercury.

40. Testing data from cement plants concerning the speciation of mercury has been limited. One cement plant was tested on three occasions in a study referred to as the South Florida Atmospheric Mercury Monitoring Study (hereinafter referred to as "SoFAMMS"). The SoFAMMS reported a speciation rate for non-elemental mercury of between 21 and 29 percent.

41. Mercury speciation was also considered in a 1997 EPA Mercury Study Report to Congress. According to the EPA Mercury Study Report, a speciation rate of 80 percent elemental mercury, 10 percent particulate, and 10 percent reactive gaseous mercury

was found. Little relevant evidence concerning the basis for these findings was provided at hearing.

42. Another significant factor in the conversion of mercury released from a high temperature combustion source to methyl mercury is the deposition of the mercury to land or water surfaces after it is released into the air.

43. The deposition of pollutants to land or water surfaces takes place by either dry deposition or wet deposition. Dry deposition takes place through the diffusion of the pollutant in the atmosphere until it contacts a surface to which it adheres. Wet deposition takes place when the pollutant is either incorporated into droplets as rain forms which then fall, or the pollutant gets washed out as droplets of rain falls through the atmosphere.

F. Suwannee American's Estimates of Mercury Emissions.

44. Mercury emitted from the Proposed Plant will come from feeder material and the fuel used to heat the feeder material during the operation of the Proposed Plant.

45. The amount of mercury created and emitted from the Proposed Plant, regardless of its speciation or deposition rates, based upon the laws of physics, will not exceed the amount of mercury going into the Proposed Plant through feeder materials and fuel used to heat the feeder material.

46. In its initial application Suwannee American estimated that mercury emissions from the Proposed Plant would be limited to 20 pounds per year. This estimate was based upon a document, "AP-42," issued by the EPA. AP-42 deals with cement plant



facilities utilizing baghouses for the control of emissions, which Suwannee American had proposed with its initial application.

47. AP-42 emission factors were not based upon site-specific data and no background information is contained in AP-42 concerning the characteristics of the sources from which the factors were derived. AP-42 does rate the reliability of the emission factors for various sources referenced in AP-42, including portland cement plants, taking into account the different types of air pollution control technology used by the sources. The emission factors are rated for reliability from "A" to "E," with "A" being the most reliable and "E" being the least reliable. The emission factors for the results of portland cement plants reported in AP-42 were rated "D." The emission rate of mercury from cement kilns with baghouses reported in AP-42 was 20 pounds per year.

48. After review of Suwannee American's initial application, the Department questioned Suwannee American's estimated mercury emission and requested additional information to support its projection.

49. In response to the Department's request for additional information, Suwannee American eliminated the proposed use of a baghouse and submitted new calculations concerning mercury emissions for its newly configured Proposed Plant. Suwannee American's new estimate was that mercury emissions would not exceed 184 pounds per year.

50. Suwannee American's projection was based upon estimates of mercury emissions determined by three different methods of calculating emissions used by Suwannee America's environmental consultant:

a. First, the mercury content of the feeder material and fuel to be used at the Proposed Plant was estimated. Based upon this estimate, it was concluded that mercury emissions would be approximately 120 pounds per year;

b. Secondly, emissions from 12 to 15 operating cement plant facilities in the United States were reviewed. The average mercury emission from these plants was calculated and applied to the estimated production rate of the Proposed Plant. Based upon this analysis, Suwannee American estimated that mercury emissions would be approximately 140 pounds per year; and

c. Finally, AP-42 emission factors for cement plants utilizing electrostatic precipitators were considered. Based upon this analysis, Suwannee American estimated that mercury emissions would be approximately 184 pounds per year. It was this estimate that was accepted by the Department and added as a limitation in the Draft Permit.

51. Suwannee American's estimate of mercury emissions was based upon a "worst case scenario."

G. The Draft Permit Limitation on Mercury Emissions.

52. The Department accepted Suwannee American's estimate of mercury emissions from the Proposed Plant. The Draft Permit expresses the limitation on the amount of mercury that may be emitted by limiting the amount of mercury that may be introduced

into processing at the Proposed Plant to 184 pounds per consecutive 12-month period. This limitation applies to the total combined amount of mercury introduced in the form of feed materials and fuel.

53. At the final hearing Suwannee American agreed to a further limitation on the amount of allowed mercury in Draft Permit condition 13 that may be introduced into processing at the Proposed Plant to 97 pounds per consecutive 12 month period. This estimate was based upon a more detailed analysis of expected mercury emissions performed by Suwannee American after Sierra Club and SOS questioned the impact of mercury emissions from the Proposed Plant.

54. The EPA recommended in a letter to the Department dated December 23, 1999, that mercury emissions from the Proposed Plant be limited to 20 pounds per year.

55. Suwannee American proved that its estimate of the amount of mercury of 97 pounds per year that will be emitted from the Proposed Plant is reasonable.

56. Although mercury is subject to PSD review, no PSD review of Suwannee American's mercury emissions was performed nor required because it has projected that its emission of mercury will not exceed 200 pounds per year.

#### H. Air Emissions Monitoring.

57. The Draft Permit requires continuous monitoring of stack emissions for a number of pollutants which are expected to be emitted from the Proposed Plant, including sulfur dioxide,

nitrogen dioxide, opacity, and volatile organic compounds. Stack gas flow rate is also required to be monitored continuously.

58. Continuous monitoring for mercury is not required. Instead, the Draft Permit only requires an initial stack test for mercury to determine compliance with the limitation on the amount of mercury emissions from the Proposed Plant. This test will only determine the amount of mercury emitted during the limited period of the test.

59. Continuous monitoring of compliance with the limitation on mercury introduced into processing at the Proposed Plant is to be accomplished through testing of the "input" materials. For this purpose, "input" materials are deemed to consist of the feeder material and fuel used in the manufacturing process at the Proposed Plant.

60. A schedule for testing input materials is included in the Draft Permit in Specific Condition 27. The Draft Permit provides for the following schedule of testing:

a. During the first quarter of operation of the Proposed Plant, testing of input materials for mercury content is to be based upon daily samples of feed materials and fuel for each month. A sample from the composite of the daily samples for each of the months during the quarter is to be analyzed;

b. For the next three quarters of operation, daily samples for one month during each quarter are to be taken and a sample from the composite of the daily samples for that month is to be analyzed for mercury levels;

c. For each year after the first year of operation of the Proposed Plant, daily samples are to be taken during one month during the year and a sample from the composite of the daily samples for that month is to be analyzed for mercury levels, except as follows:

(1) If there is a change in feed material or fuels, the frequency of testing is to revert to b. for the next three quarters; or

(2) If the monthly composite shows a total monthly mercury throughput of greater than 7.7 pounds per month, the frequency of testing is to revert to b. for the next three quarters or until the monthly throughput is less than or equal to 7.7 pounds per month, whichever is longer.

61. The Draft Permit also provides that the Department may require special compliance tests if it has good reason to believe that emission standards are being violated.

62. No other monitoring of mercury emissions from the Proposed Plant is required by the Draft Permit to ensure that the limitation of the amount mercury in the feeder materials and fuel will be met. Nor is there any requirement in the Draft Permit to determine the speciation rate of mercury emitted from the Proposed Plant.

63. By limiting the amount of mercury that goes into the manufacturing process to the amount of mercury allowed by the Draft Permit, the amount of mercury emitted from the Proposed Plant should not exceed the amount of mercury emissions projected by Suwannee American.

64. The monitoring requirements of the Draft Permit are reasonable, effective, and enforceable.

I. Fuel Proposed for the Proposed Plant's Operation.

65. Fuel is required to heat the feeder material in the preheater/precalciner and the rotary kiln. Suwannee American has been authorized by the Department to burn Appalachian coal, petroleum-coke, natural gas, and up to 40 percent tires as fuel in its operation of the Proposed Plant. Suwannee American has proposed to initially burn Appalachian coal, which has been determined to be available in the quantities necessary to operate the Proposed Plant.

66. Mercury levels in coal can amount to a high percentage of mercury emissions from a portland cement plant. The type of coal used by Suwannee American, therefore, will play a significant role in determining whether the projected mercury emissions from the Proposed Plant can be achieved.

67. Suwannee American has estimated that coal used by it at the Proposed Plant will contain 143 parts per billion of mercury. This level of mercury in coal will result in approximately 35 pounds of mercury emissions per year from the Proposed Plant.

68. Mercury content of coal used as fuel in the Proposed Plant can vary widely. The average and median mercury content for all Appalachian coal is high: 466 parts per billion and 566 parts per billion, respectively.

69. Although Suwannee American had not entered into a contract or a letter of intent for the purchase of coal-containing levels of mercury consistent with its estimated

emissions at the time of the formal hearing of this case, coal which will meet those estimates is commercially available in amounts necessary to meet permit conditions concerning mercury emissions and Suwannee American is committed to acquiring coal of the necessary grade.

70. The evidence proved that Suwannee American can purchase coal necessary for the operation of the Proposed Plant which will ensure compliance with the conditions of the Draft Permit concerning mercury emissions.

71. The evidence also proved that the conditions of the Draft Permit concerning mercury emissions can be enforced regardless of the difficulty that may be encountered by Suwannee American in finding coal with low enough mercury content for use at the Proposed Plant.

J. Mercury Deposition.

72. Obviously, since the Proposed Plant is not yet operational, it is not possible to accurately determine where mercury emitted from the Proposed Plant will be deposited or the "deposition" of mercury emitted. Air quality dispersion modeling, however, can facilitate estimates of the expected impacts of the Proposed Plant on air quality and on the surrounding area.

73. Computer programs are used to facilitate air dispersion modeling. These programs simulate the behavior of pollutants released into the atmosphere. The programs take into consideration meteorological data, such as wind speed and

direction, and information concerning the amount of pollutant to be reduced and its rate of speciation.

74. A number of variables used in air dispersion modeling can affect modeling outcomes. The accuracy of assumptions concerning those variables can impact the reliability of the modeling outcomes. Significant variables include emission rates, speciation rates, and deposition. To the extent that any or all of these variables are uncertain, there will be an equivalent uncertainty in the modeling results concerning concentrations and ultimate deposition rates of pollutants released into the atmosphere.

75. At the request of the Department, Suwannee American performed modeling to determine the likely deposition of mercury emissions from the Proposed Plant. The modeling was performed to determine the impact of mercury emissions on Class I PSD areas, such as St. Marks and Bradwell Bay, and the area within five miles of the Proposed Plant. A five-mile radius takes into account the location of the Ichetucknee, Sante Fe, and Suwannee Rivers (hereinafter jointly referred to as the "Three Rivers").

76. Initial modeling was performed using the most conservative assumptions: (a) that 100 percent of the mercury emitted would be emitted in the form of particulate matter or reactive gaseous mercury; and (b) that approximately one-third of the mercury emitted would be deposited in the vicinity of the Proposed Plant.

77. Suwannee American's initial modeling resulted in an estimate that, based upon its preliminary estimate that 184



pounds of mercury would be emitted per year from the Proposed Plant, 20 to 50 micrograms per meter squared per year of mercury will be deposited near the confluence of the Sante Fe and Ichnetucknee Rivers.

78. Suwannee American's initial modeling estimates, based upon its estimate that 184 pounds of mercury would be emitted per year from the Proposed Plant, also indicated that one-third of the mercury emitted from the Proposed Plant would be deposited within the 1,384 square miles of the Sante Fe River basin. The amount of mercury deposited at the confluence of the Sante Fe and Ichetucknee Rivers was estimated to be 15 micrograms per square meter per year. The assumptions that went into this modeling were unreasonably conservative.

79. Subsequent to Suwannee American's initial modeling, additional modeling was performed by Suwannee America to determine the deposition rate of mercury in the area of the Three Rivers at the request of the Department. Based upon the additional modeling, Suwannee American developed "isopleths" or contour lines depicting where the maximum annual concentrations of mercury would be expected to be found. Isopleths were also developed to depict the quantity and location of maximum annual mercury deposition. Suwannee American's isopleths could be off by as much as a kilometer, underestimating the concentrations of mercury in the area of the Ichthnetucknee and Sante Fe Rivers.

80. In its subsequent modeling Suwannee American made the same assumptions concerning the amount of mercury emitted and the speciation of the emitted mercury it made in its initial

modeling: (a) that 184 pounds of mercury would be emitted per year; and (b) that 100 percent of the mercury would be emitted in the form of particulate matter or reactive gaseous mercury.

81. A month before the formal hearing of this case, Suwannee American performed a third round of modeling of mercury deposition. The additional modeling was based upon the emission of 97 pounds of mercury per year and the following speciation rate: (a) 80 percent elemental mercury; (b) 10 percent particulate matter; and (c) 10 percent reactive gaseous mercury. Two modeling tests were performed for Suwannee American using these assumptions.

82. The first modeling test used the original dispersion modeling prepared for Suwannee American with a 10 percent correction for the emission rate. The second modeling test used dispersion parameters contained in an 1997 EPA Mercury Study Report to Congress.

83. The modeling performed by Suwannee American was reasonable and professionally performed. The results of the modeling are, therefore, reliable.

84. Suwannee American's modeling just prior to the formal hearing estimated, based upon the assumption that 97 pounds of mercury would be emitted per year from the Proposed Plant, a deposition rate of mercury in the vicinity of the Sante Fe River of 3.5 micrograms per square meter per year based upon the first modeling and 1.6 to 2.6 micrograms per square meter per year within a five-mile radius from the Proposed Plant based upon the second modeling. These projections indicate that mercury

emissions from the Proposed Plant will result in the deposition of less than 10 percent of the amount of mercury already existing in the natural background.

85. Background mercury, or mercury normally found in the natural background, is estimated to be 25 micrograms per square meter per year. A 10 percent increase in background mercury would not be detectable.

86. The estimated deposition of mercury from the Proposed Plant suggested by Suwannee American's modeling is supported by the weight of the evidence in this case. Petitioners performed no modeling to refute Suwannee American's estimates. The testimony of Petitioners' experts to the contrary was not persuasive and has been rejected.

K. The Current State of Mercury in the Three Rivers.

87. The Three Rivers have all been declared OFWs. Rule 62-302.700, Florida Administrative Code.

88. The Three Rivers have also been declared Class III waters and, therefore, have a designated use of recreation, and the propagation and maintenance of a healthy, well-balanced population of fish and wildlife. Rule 62-302.400, Florida Administrative Code.

89. An OFW designation is made to recognize exceptional recreational and/or ecological significance of a water body. See Section 403.061(27), Florida Statutes, and Rule 62-4.245, Florida Administrative Code.

90. After elevated levels of mercury were found in the tissue of fish taken from the Everglades of South Florida, the

State undertook testing of fish in fresh and coastal waters throughout the state. Based upon its findings, the State established two levels of advisories concerning mercury levels in fish tissue.

91. One level of mercury level advisory established by the States is a "limited consumption" advisory. This advisory is issued when the mercury levels in fish taken from a water body are found to range from 0.5 parts per million to 1.5 parts per million. "Limited consumption" advisories are issued by the State's Health Officer to protect public consumption of excessive amounts of mercury.

92. The second and highest level of advisory concerning mercury levels in fish tissue is a "no consumption" fish advisory. This advisory is issued when mercury levels are found to exceed 1.5 parts per million. When issued, the public is warned not to eat issue fish at all from waters to which the advisory applies. Only one "no consumption" fish advisory is currently in effect in Florida.

93. On May 19, 1989, the State issued a "limited consumption" advisory for the Suwannee River and its tributaries recommending the limited consumption of large mouth bass taken from the Three Rivers. This advisory has not been withdrawn.

94. The last testing of fish from the Sante Fe River was performed in 1989. The levels of mercury found from those tests ranged from 0.55 to 1.27 parts per million.

95. Sampling of fish from the Suwannee River has been performed annually, except during 1997, since 1989. In 1999, mercury levels ranged from 0.44 to 1.57 parts per million.

96. Mercury levels throughout the State indicate a slight declining trend in the amount of mercury found in fish.

97. Despite the advisory concerning the level of mercury in large mouth bass taken from the Three Rivers, mercury levels in the Three Rivers are within acceptable water quality standards for mercury established by the Department's rules. No Department rule prohibits the issuance of a permit which otherwise meets all the requirements concerning the levels of mercury emissions into the air or water specified in the Department's rules because of an outstanding mercury level in fish advisory.

L. The Impact of Mercury Emissions from the Proposed Plant on the Three Rivers.

98. No one disputes that some amount of mercury emitted from the Proposed Plant will find its way into the Three Rivers. At issue is whether the amount of mercury that makes its way into the Three Rivers will be adverse to the public health, safety, and welfare. Suwannee American has given reasonable assurances that it will not.

99. Using Suwannee American's projections concerning the amount of mercury to be emitted from the Proposed Plant (97 pounds per year), the speciation rate of the mercury (80, 10, 10), and the deposition of mercury from the Proposed Plant, Suwannee American caused the potential effects of mercury on the Three Rivers to be analyzed using modeling and algorithms or

equations contained in the Health Risk Assessment Protocol for Combustion Facilities prepared by the EPA. The impact of mercury on water quality, sediments, and the tissue of fish in the Three Rivers was projected by Suwannee American. The projections were made by Dr. Christopher Teaf.

100. The assumptions used by Dr. Teaf were conservative and reasonable.

101. Dr. Teaf predicted that surface water mercury concentrations from the Proposed Plant in the Three Rivers will be less than 0.0000000006 milligrams per liter over a 100 year period. Department surface water quality standards allow .000012 milligrams per liter of mercury. Therefore, the level of mercury allowed by the Department's rules is approximately 200,000 times higher than that expected from the Proposed Plant.

102. The projected surface water mercury concentrations for the Proposed Plant are between 50,000 and 100,000 times below detectable amounts of mercury in surface water samples.

103. Dr. Teaf also predicted that mercury concentrations in sediment of the Three Rivers as a result of operation of the Proposed Plant will be 0.0000003 milligrams per kilogram. This amounts to approximately 500,000 times less than the Department's Threshold Effects Level for mercury in sediment of 0.13 milligrams per liter.

104. Projected sediment concentrations of mercury are between 10,000 and 100,000 times less than a detectable or measurable quantity.

105. Finally, Dr. Teaf predicted that methyl mercury concentrations in fish tissue from the Three Rivers as a result of the Proposed Plant will be 0.0002 milligrams per kilogram. The level of mercury in fish tissue considered to cause concern is 0.5 milligrams per liter, which is 2,500 to 3,000 times lower than the rate considered to be too high.

106. The projected levels of mercury in fish tissue are 100 times lower than detectable limits for mercury in fish tissue and would have no impact on current health advisories.

107. Dr. Teaf's predicted mercury levels from the Proposed Plant may be somewhat low to the extent that they rely upon a speciation rate of 80 percent elemental mercury. Even if a 0 percent elemental mercury speciation rate is assumed to be more appropriate, however, the mercury which reasonably can be expected to be found in the water column, sediments, and the tissue of fish in the Three Rivers will still be below acceptable standards and detectable amounts.

108. Mercury in the Three Rivers attributable to the Proposed Plant will not be detectable or measurable. Therefore, Suwannee American has provided reasonable assurances that the Proposed Plant will have no impact on the Three Rivers or their use, will not pose a danger to the public health, safety, or welfare, and will comply with all applicable statutes and all Department rules.

M. Ultimate Findings of Fact.

109. Suwannee American has provided reasonable assurances that the construction and operation of the Proposed Plant will not violate any air pollution permitting requirements.

110. Suwannee American has also provided reasonable assurances that mercury emissions from the Proposed Plant will not violate any water quality standard, will not significantly degrade any OFWs, impair the designated use of the Three Rivers, or pose a serious danger to the public health, safety, or welfare.

CONCLUSIONS OF LAW

A. Jurisdiction.

111. The Division of Administrative Hearings has jurisdiction of the parties to, and the subject matter of, this proceeding. Section 120.57, Florida Statutes (1997).

B. Burden of Proof.

112. The burden of proof, absent a statutory directive to the contrary, is on the party asserting the affirmative of the proceeding. Antel v. Department of Professional Regulation, 522 So. 2d 1056 (Fla. 5th DCA 1988); Department of Transportation v. J.W.C. Co., Inc., 396 So. 2d 778 (Fla. 1st DCA 1981); and Balino v. Department of Health and Rehabilitative Services, 348 So. 2d 249 (Fla. 1st DCA 1977).

113. In this proceeding, it is Suwannee American that is asserting the affirmative: that the Department should issue an air construction permit. Suwannee American, therefore, had the ultimate burden of proof. Suwannee American was required to meet



its burden by the preponderance of the evidence. J.W.C. Co.,  
supra.

114. In order for Suwannee American to meet its burden of proof, it was required to present a prima facie showing of entitlement to the air construction permit taking into account the objections raised by Petitioners. Suwannee American met its burden.

115. Following the presentation of Suwannee American's prima facie case, Petitioners had the burden of proving the allegations of their Petition as modified by the stipulated issues of law contained in the Joint Prehearing Stipulation. The evidence presented by Petitioners in support of their Petition was required to be of at least equivalent quality to the evidence presented by Suwannee American. See Hoffert v. St. Joe Paper Company, 12 F.A.L.R. 4972 (Fla. Dept. of Env. Reg. 1990). Ultimately, Suwannee American was required to prove that it was entitled to the permit which it has applied for. Suwannee American met its burden.

C. Standing.

116. SOS has argued that it has standing to institute this proceeding pursuant to Section 403.412(5), Florida Statutes:

In any administrative . . . proceedings authorized by law for the protection of the air, water, or other natural resources of the state from pollution, impairment, or destruction . . . a citizen of the state shall have standing to intervene as a party on the filing of a verified pleading asserting that the activity, conduct, or product to be licensed or permitted has or will have the effect of impairing,

polluting, or otherwise injuring the air, water, or other natural resources of the state.

117. SOS is a citizen of the State and it filed a verified Petition in this matter. SOS, therefore, has standing to participate in this matter. Suwannee American's assertion that SOS's participation is limited to that of an Intervenor too narrowly construes Section 403.412(5), Florida Statutes.

118. Sierra Club is not a citizen of the State and, therefore, has not relied upon Section 403.412(5), Florida Statutes, to support its standing in this matter. Instead, Sierra Club has asserted that it is a "substantially affected" person as those terms are used in Section 120.57, Florida Statutes, and interpreted in Agrico Chemical Company v. Department of Environmental Regulation, 406 So. 2d 478 (Fla. 2d DCA 1981).

119. The substantial effect alleged by Sierra Club is the impact on its members who use the Three Rivers for recreation and enjoyment, including swimming, fishing, and boating. The alleged adverse impacts are sufficient to support Sierra Club's standing to participate in this proceeding.

D. Petitioners' Challenge.

120. In the Joint Prehearing Stipulation filed by the parties, Petitioners stipulated to "Disputed Issues of Fact and Law" which must be addressed in this proceeding. The disputed issues of fact and law, other than issues concerning Petitioners' standing, agreed to by the parties are as follows:

1. Whether the Applicant must establish that certain surface water quality standards (listed below) will not be violated.

2. If the Applicant must establish in this proceeding that water quality standards will not be violated, whether the Applicant has provided reasonable assurances that the emissions of mercury from the proposed facility will not violate the following specific water quality standards related to Outstanding Florida Waters, the classification of surface waters and the minimum criteria for surface waters.

a. Rule 62-4.242(2)(a), Fla. Adm. Code, "Antidegradation Permitting Requirements; Outstanding Florida Waters" and rule 62-302.700, "Special Protections, Outstanding Florida Waters." Specifically, whether the emissions of mercury from the proposed facility will "significantly degrade" any of the following OFWs: the Sante Fe River, the Suwannee River, and the Ichetucknee River.

b. Rule 62-302.400(1), Fla. Adm. Code, "Classification of Surface Waters" (describing the designated use of Class III waters as "recreation, propagation and maintenance of a healthy, well-balanced population of fish and wildlife"). Specifically, Petitioners contend that emissions of mercury from the proposed facility will impair the designated use of the waters identified in Para 2.a. above as Class III waters and as otherwise prohibited in rules 62-302.300(14), (15), (16) and (17), Fla. Adm. Code.

c. Rule 62-302.500(1)(a)6, Fla. Adm. Code, "Surface Waters, Minimum Criteria".

\* \* \*

121. These issues have all been addressed and disposed of in this Recommended Order. To the extent that Petitioners asserted any additional issues in their Proposed Recommended Order, those issues have been rejected. The Joint Prehearing

Stipulation signed by Petitioners defined the scope of the issues appropriately considered in this matter.

E. The Department's Broad Authority to Protect the Air and Waters of the State Through Permitting.

122. The Department has been charged with broad responsibilities and given broad powers to protect the air and waters of the State of Florida. Chapter 403, Florida Statutes, the "Florida Air and Water Pollution Control Act" (hereinafter referred to as the "Act").

123. The Department's broad powers and duties are generally described in Section 403.061 of the Act. Those powers and duties include, in part, the following:

The department shall have the power and the duty to control and prohibit pollution of air and water in accordance with the law and rules adopted and promulgated by it and, for this purpose, to:

. . . . .

(6) Exercise general supervision of the administration and enforcement of the laws, rules, and regulations pertaining to air and water pollution.

(7) Adopt, modify, and repeal rules and regulations to carry out the intent and purposes of this act. . . . .

\* \* \*

(9) Adopt a comprehensive program for the prevention, control, and abatement of pollution of the air and waters of the state . . . . .

(10) Develop a comprehensive program for the prevention, abatement, and control of the pollution of the waters of the state.

In order to effect this purpose, a grouping of the waters into classes may be made in accordance with the present and future most beneficial uses. . . .

(11) Establish ambient air quality and water quality standards for the state as a whole or any part thereof . . . .

\* \* \*

(14) Establish a permit system whereby a permit may be required for the operation, construction, or expansion of any installation that may be a source of air or water pollution and provide for the issuance and revocation of such permits and for the posting of an appropriate bond to operate.

\* \* \*

(27) Establish rules which provide for a special category of water bodies within the state, to be referred to as "Outstanding Florida Waters," which water bodies shall be worthy of special protection because of their natural attributes. Nothing in this subsection shall affect any existing rule of the department.

124. The Act includes specific guidance for the general issuance or denial of permits for any "stationary installation" that is reasonably expected to be a source of air or water pollution. Section 403.087 of the Act provides the following:

(1) A stationary installation that is reasonably expected to be a source of air or water pollution must not be operated, maintained, constructed, expanded, or modified without an appropriate and currently valid permit issued by the department, unless exempted by department rule. . . .

125. The term "installation" is defined in Section 403.031(4), of the Act as:

any structure, equipment, or facility, or appurtenances thereto, or operation which

may emit air or water containments in quantities prohibited by rules of the department.

See also Rule 62-4.020(6), Florida Administrative Code.

126. In order to qualify for issuance of a permit authorized by Section 403.087 of the Act the applicant for the permit must show, if its installation "may reasonably be expected to be a source of pollution," that the "installation is provided or equipped with pollution control facilities that will abate or prevent pollution to the degree that will comply with the standards or rules adopted by the department . . . ."

127. The Department is required to provide for the issuance, denial, modification, and revocation of permits required by Section 403.087(1) of the Act for stationary installations through duly promulgated rules. Section 403.087(2) of the Act. It is, therefore, reasonable for applicants for permits from the Department to assume that the rules of the Department contain all the requirements for the issuance of permits.

128. Section 403.087(5) of the Act provides, in part, the following concerning the issuance of permits:

(5) The department shall issue permits to construct, operate, maintain, expand, or modify an installation which may reasonably be expected to be a source of pollution only when it determines that the installation is provided or equipped with pollution control facilities that will abate or prevent pollution to the degree that will comply with the standards or rules adopted by the department . . . ."

Again, it is contemplated that rules adopted by the Department establish the standards with which an applicant must comply in order to obtain any permit required by the Act.

129. In addition to the broad responsibilities and powers concerning pollution of the air and waters given the Department pursuant to the Act, the Department is authorized to impose stricter permitting and enforcement provisions for OFWs. Section 403.061(34) of the Act. Those stricter permitting and enforcement provisions are, however, also required to be imposed by the adoption of rules by the Department.

130. The authority of the Department to protect the air and waters of the State is clearly broad enough to authorize the Department to control or prohibit the direct or indirect discharge of pollutants into the air or the waters of the state. The Act, however, just as clearly contemplates that the Department will exercise its authority and responsibility through the adoption of rules.

F. The Department's Rules.

131. The Department has in fact promulgated a broad array of rules governing the issuance of permits authorized by the Act:

- a. Chapter 62-4, Florida Administrative Code, provides rules governing the issuance of permits generally;
- b. Department rules beginning at Chapter 62-204, Florida Administrative Code, deal with air quality in the State; and
- c. Department rules beginning at Chapter 62-301, Florida Administrative Code, govern the protection of the waters of the State.

132. The purpose and scope of Part I, Chapter 62-4, Florida Administrative Code, includes, in part, the following:

This Part sets forth procedures on how to obtain a permit from the State of Florida Department of Environmental Protection. This Part also provides requirements and procedures for the issuance, denial, renewal, extension, transfer, modification, suspension, and revocation of any permit required by the Department of Environmental Protection. . . .

Rule 62-4.001, Florida Administrative Code.

133. Part I, Chapter 62-4, Florida Administrative Code, provides: definitions; exemptions from permitting; general procedures, including processing fees, applicable to all permits; procedures for processing permits once received by the Department; and other rules dealing with permitting in general.

134. The purpose and scope of Part II, Chapter 62-4, Florida Administrative Code, includes, in part, the following:

This Part sets forth additional requirements for Department permits, exemptions from permitting, requirements for mixing zones and zones of discharge, and related requirements. . . .

Rule 62-4.200, Florida Administrative Code.

135. Part II, Chapter 62-4, Florida Administrative Code, provides general requirements for specific types of permits. Rules are provided for construction permits and operating permits.

136. Rule 62-4.210, Florida Administrative Code, provides guidance concerning permits to construct any installation or facility "which will reasonably be expected to be a source or air or water pollution . . . ." Rule 62-4.220, Florida



Administrative Code, provides guidance concerning operating permits.

137. Rule 62-4.242, Florida Administrative Code, provides "antidegradation permitting requirements" for OFWs. Rule 62-4.242(2), Florida Administrative Code, provides, in part:

(2) Standards Applying to Outstanding Florida Waters.

(a) No Department permit or water quality certification shall be issued for any proposed activity or discharge within an Outstanding Florida Waters, or which significantly degrades, either alone or in combination with other stationary installations, any Outstanding Florida Waters, unless the applicant affirmatively demonstrates that:

\* \* \*

2. The proposed activity or discharge is clearly in the public interest, and either

a. A Department permit for the activity has been issued or an application for such permit was complete on the effective date of the Outstanding Water designation; or

b. The existing ambient water quality within Outstanding Florida Waters will not be lowered as a result of the proposed activity or discharge, except on a temporary basis during construction for a period of not to exceed thirty days; lowered water quality would occur only within a restricted mixing zone approved by the Department; and, water quality criteria would not be violated outside the restricted mixing zone. . . .

\* \* \*

(c) For the purpose of this section the term "existing ambient water quality" shall mean (based on the best scientific information available) the better water quality of either (1) that which could reasonably be expected to have existed for the baseline year of an Outstanding Florida Water designation or (2) that which existed

during the year prior to the date of a permit application. It shall include daily, seasonal, and other cyclic fluctuations, taking into consideration the effects of allowable discharges for which Department permits were issued or applications for such permits were filed and complete on the effective date of designation.

\* \* \*

138. When considered in isolation, Rule 62-4.242, Florida Administrative Code, could be interpreted to support a conclusion that all permit applications, whether they be for permits involving the emission of pollutants into the atmosphere or the discharge of pollutants into OFWs or other activities within OFWs, must comply with the conditions for the issuance of a permit quoted in Conclusion of Law 137. Reading Rule 62-4.242, Florida Administrative Code, and the other chapters of rules found in Chapter 62, Florida Administrative Code, together, however, does not support such an interpretation.

139. Considering all of the Department's rules together, while Chapter 62-4, Florida Administrative Code, provides general requirements governing the application for, and the issuance of, all types of permits the Department has authority to issue, the specific requirements which must be complied with depend upon whether a permit is being sought for a proposed facility that will emit pollutants into the atmosphere or a proposed facility that will discharge pollutants into the waters of the State. Nothing in the Department's rules supports a conclusion that a facility seeking a permit for one activity must also comply with the requirements for another activity.

140. If the Department had intended that an applicant for a permit authorizing the emission of pollutants into the atmosphere must comply with the specific requirements for a permit authorizing a discharge of pollutants into the waters of the State, the Department could have easily provided in Chapter 62-4, Florida Administrative Code, that all applicants for permits must meet both the requirements for air emission permits and water discharge permits. The fact that the Department has not adopted such a rule supports a conclusion that there is no such requirement imposed on applicants.

G. The Rules Governing Permits to Emit Pollutants Into the Atmosphere.

141. The rules governing proposed facilities that will emit pollutants into the atmosphere begin at Chapter 62-204, Florida Administrative Code:

(1) This chapter establishes maximum allowable levels of pollutants in the ambient air, or ambient air quality standards, necessary to protect human health and public welfare. This chapter also establishes maximum allowable increases in ambient concentrations for subject pollutants to prevent significant deterioration of air quality in areas where ambient air quality standards are being met. It further specifies approved air quality monitoring and modeling methods.

Rule 62-204.100(1), Florida Administrative Code.

142. General requirements for stationary sources of air pollution are provided in Chapter 62-210, Florida Administrative Code:

The Department of Environmental Protection adopts this chapter to establish general requirements for stationary sources of air

pollutant emissions. This chapter provides criteria for determining the need to obtain an air construction or air operation permit. It establishes public notice requirements, reporting requirements, and requirements relating to estimating emission rates and using air quality models. This chapter also sets forth special provisions related to compliance monitoring, stack heights, circumvention of pollution control equipment, and excess emissions.

Rule 62-210.100, Florida Administrative Code.

143. Chapter 62-212, Florida Administrative Code, provides rules governing the preconstruction review of stationary sources of air pollution:

The Department of Environmental Protection adopts this chapter to establish the preconstruction review requirements for proposed new emissions units or facilities, and proposed modifications. The requirements of this chapter apply to those proposed pursuant to Chapter 62-210, F.A.C. This chapter includes general preconstruction review requirements and specific requirements for emissions units subject to prevention of significant deterioration (PSD) and nonattainment-area preconstruction review . . . .

Rule 62-212.100, Florida Administrative Code.

144. Reading the rules governing emission of pollutants into the air as a whole, it is clear that the Department did not intend to also require compliance of the rules governing discharges into the waters. This conclusion is consistent with the Department's review of the permit application in this case and the Department's prior practices in reviewing permit applications.

H. The Rules Governing Permits to Discharge Pollutants Into the Waters.

145. The rules governing the protection of Florida's waters begin at Chapter 62-301, Florida Administrative Code. Chapter 62-301, Florida Administrative Code, defines the "surface waters of the state." Chapter 62-302, Florida Statutes, establishes "surface water quality standards" that apply to the surface waters of the state. Those rules deal with facilities that will "discharge" pollutants into the waters of the state.

146. Reading the rules governing water quality as a whole, it is clear that the Department did not intend to apply the rules governing discharges into the waters of the state to facilities that will emit pollutants into the atmosphere which will eventually end up in the waters of the state. This conclusion is consistent with the Department's review of the permit application in this case and the Department's prior practices in reviewing permit applications.

I. The Permit Sought By Suwannee American; Suwannee American's Compliance with Air Emission Standards.

147. Suwannee American's Proposed Plant will emit pollutants into the atmosphere. Therefore, Suwannee American was required to obtain an air construction permit.

148. The issuance of air construction permits is governed by Rule 62-212.400, Florida Administrative Code, which provides, in part:

62-212.400 Prevention of Significant Deterioration (PSD).

The provisions of this rule generally apply to the construction or modification of air pollutant emitting facilities in those parts of the state in which the state ambient air quality standards are being met.

The provisions of this rule also establish various requirements for existing emissions units and facilities in such areas, including specific construction/operation permit requirements.

(1) General Prohibitions.

(a) Except as provided in Rule 62-212.500, F.A.C., the Department shall not permit the construction or modification any emissions unit or facility that would cause or contribute to a violation of any ambient air quality standard.

\* \* \*

(2) Applicability. This subsection establishes the criteria for determining whether or not a proposed new facility or modification to a facility is subject to the preconstruction review requirements of this rule, either in whole or in part. The preconstruction review requirements of this rule include the applicable provisions of: Rules 62-212.400(4), F.A.C., General Provisions; 62-212.400(5), F.A.C., Preconstruction Review Requirements; 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and 62-212.400(7), F.A.C., Construction/Operation Permit Requirements; all as modified by the applicable provisions of Rule 62-212.400(3), F.A.C., Exemptions and Exclusions. A proposed new facility or modification that is not subject to the preconstruction review requirements of this rule, either in whole or in part, may be subject to review requirements under other rules of this chapter.

\* \* \*

149. The parties stipulated and the evidence in this case supported the following conclusion of law:

. . . [Suwannee American] has provided reasonable assurance that the proposed facility will comply with all applicable requirements including all applicable air quality rules, except as to those requirements related to water quality standards . . . .

J. Suwannee American was not Required to Comply with Rules Governing the Discharge of Pollutants into the Waters of the State.

150. In light of the specific direction of the Act that the Department adopt by rule all requirements which an applicant must meet in order to obtain a permit to pollute the air or waters of the State and, more importantly, the manner in which the Department has adopted and applied those rules, Suwannee American was not required to comply with any rule governing the pollution of the waters in this case.

151. While the Department may have the statutory authority to impose such a requirement, it must do so by rule or by a policy of the Department fully explained and supported at hearing. See Section 120.57(1)(e), Florida Statutes. The Department has done neither. When the Department initially reviewed Suwannee American's application in this case, the policy now argued by counsel for the Department was not followed. That policy was not even asserted as the position of the Department until raised by Petitioners in their challenge to the Department's proposed agency action. Therefore, rather than formulating agency policy and applying it in this case, the Department is asserting a policy which a citizen, the Petitioners, has insisted should be the policy of the Department.

152. The Department's rules, when read as a whole, indicate that an applicant for a permit to construct facilities which will emit pollutants into the atmosphere must only comply with those rules governing such emissions and any other provision of the Act or rules that specifically deal with such activities. The Departments' rules also indicate, when read as a whole, that an applicant for a permit to construct facilities which will discharge pollutants into the waters must only comply with those rules governing such discharges.

153. The Conclusions of Law reached by Judge Hood in the Recommended Order of Dismissal previously entered in this case and not ruled upon by the Department are hereby accepted and incorporated into this Recommended Order by reference.

154. Based upon the conclusion that Suwannee American is only required to comply with the rules governing air quality standards, Suwannee American has proved that it is entitled to the issuance of the air construction permit at issue in this case.

155. Despite the foregoing conclusion, in light of the position take by counsel for the Department in this proceeding, Petitioners' assertion that the Draft Permit should not be issued because mercury emissions from the Proposed Plant will violate water quality standards will be addressed. Petitioners' assertions will be addressed even though it may be within the authority of this forum to make the ultimate decision on this issue. See Section 120.57(1), Florida Statutes.



K. Impacts of Mercury Emissions on OFWs.

156. Petitioners have argued that the Proposed Plant will violate Rule 62-4.242(2)(a), Florida Administrative Code:

(a) No Department permit or water quality certification shall be issued for any proposed activity or discharge within an Outstanding Florida Waters, or which significantly degrades, either alone or in combination with other stationary installations, any Outstanding Florida Waters, unless the applicant affirmatively demonstrates that:

. . . . .

2. The proposed activity or discharge is clearly in the public interest, and either

a. A Department permit for the activity has been issued or an application for such permit was complete on the effective date of the Outstanding Water designation; or

b. The existing ambient water quality within Outstanding Florida Waters will not be lowered as a result of the proposed activity or discharge, except on a temporary basis during construction for a period of not to exceed thirty days; lowered water quality would occur only within a restricted mixing zone approved by the Department; and, water quality criteria would not be violated outside the restricted mixing zone. . . .

157. The evidence in this case proved that no permit to discharge within an OFW is being sought in this case and that projected emissions from the Proposed Plant will not "significantly degrade" any OFW. See Environmental Confederation of Southwest Florida v. Cape Cave Corp., DOAH Case No. 83-2567. Therefore, Rule 62-4.242(2)(a)2, Florida Administrative Code, does not apply to this matter even if Suwannee American is required to comply with the Department's water quality rules.

158. If the Department rejects the foregoing conclusion, then Suwannee American was required to prove that the operation of the Proposed Plant will be "clearly in the public interest . . . " and that its permit application is either grandfathered or "existing ambient water quality" within the Three Rivers will not be lowered. Rule 62-4.242(2)(a)2.a. and b., Florida Administrative Code.

159. Suwannee American's application is not grandfathered because it was not filed before the designation of the Three Rivers as OFWs.

160. Rule 62-4.232(2)(c), Florida Administrative Code, defines the terms "existing ambient water quality" as follows:

(c) For the purpose of this section the term "existing ambient water quality" shall mean (based on the best scientific information available) the better water quality of either (1) that which could reasonably be expected to have existed for the baseline year of an Outstanding Florida Water designation or (2) that which existed during the year prior to the date of a permit application. It shall include daily, seasonal, and other cyclic fluctuations, taking into consideration the effects of allowable discharges for which Department permits were issued or applications for such permits were filed and complete on the effective date of designation.

161. Suwannee American proved that its Proposed Plant will not lower the existing ambient water quality of the Three Rivers.

162. Suwannee American, however, failed to prove that the Proposed Plant will be clearly in the public interest.

163. Petitioners have also asserted that the Proposed Plant will violate Rule 62-302.700, Florida Administrative Code:

(1) It shall be the Department policy to afford the highest protection to Outstanding Florida Waters and Outstanding National Resource Waters. No degradation of water quality, other than that allowed in Rule 62-4.242(2) and (3), F.A.C., is to be permitted in Outstanding Florida Waters and Outstanding National Resource Waters, respectively, notwithstanding any other Department rules that allow water quality lowering.

164. As concluded, supra, the Proposed Plant will not violate Rule 62-4.242, Florida Administrative Code. Therefore, the Proposed Plant will not violate Rule 62-302.700, Florida Administrative Code.

L. Impacts of Mercury Emissions on the Designated Use of Class III Florida Waters.

165. The Three Rivers are classified as Class III waters. The designated use for Class III waters is established by Rule 62-302.400(1), Florida Administrative Code:

Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife.

See also Rule 62-302.400(10), Florida Administrative Code.

166. Rule 62-302.300(14), Florida Administrative Code, provides the following concerning the protection of water bodies:

(14) Existing uses and the level of water quality necessary to protect the existing uses shall be fully maintained and protected. Such uses may be different or more extensive than the designated use.

167. The evidence in this case proved that the existing uses of the Three Rivers and the level of water quality necessary to protect those uses will be maintained and protected even if the Proposed Plant is permitted.

168. Rule 62-302.300(15), Florida Administrative Code, provides the following concerning the protection of water bodies:

(15) Pollution which causes or contributes to new violations of water quality standards or to continuation of existing violations is harmful to the waters of this State and shall not be allowed. Waters having water quality below the criteria established for them shall be protected and enhanced. However, the Department shall not strive to abate natural conditions.

169. The evidence proved that the Proposed Plant will not cause or contribute to a new violation of water quality standards applicable to the Three Rivers. The evidence also proved that there is no existing violation of water quality standards applicable to the Three Rivers. Therefore, the Proposed Plant will not cause a continuation of an existing violation.

170. Rule 62-302.300(16), Florida Administrative Code, provides the following concerning the protection of water bodies:

(16) If the Department finds that a new or existing discharge will reduce the quality of the receiving waters below the classification established for them or violate any Department rule or standard, it shall refuse to permit the discharge.

171. The evidence proved that there will be no "discharge" from the Proposed Plant. Furthermore, the evidence proved that the Proposed Plant will do nothing to reduce the quality of the Three Rivers below their Class III classification.

172. The evidence in this case proved that the emissions of mercury from the Proposed Plant will not be detectable. As a consequence, Suwannee American has given reasonable assurance that the Proposed Plant will not violate the surface water classification of the Three Rivers.

M. Impacts of Mercury Emissions on Minimum Criteria for Surface Waters; Will Mercury Emissions Pose a Serious Danger to the Public Health, Safety, and Welfare.

173. The parties have stipulated that Suwannee American has provided "reasonable assurances that the proposed facility will not cause any violation of the numeric water quality standard for mercury in Rule 62-302.530(42), Fla. Admin. Code."

174. Petitioners have argued, however, that mercury emissions will violate Rule 62-302.500(1)(a)6, Florida Administrative Code, which provides:

(1) Minimum Criteria. All surface waters of the States shall at all places and at all times be free from:

(a) Domestic, industrial, agricultural, or other man-induced non-thermal components of discharges which, alone or in combination with other substances or in combination with other components of discharges (whether thermal or non-thermal):

. . . . .

6. Pose a serious danger to the public health, safety, or welfare.

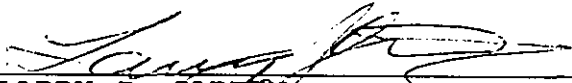
175. The evidence proved that the amount of mercury emitted from the Proposed Plant that will impact the waters of the State will not be detectable. Therefore, Suwannee American has given reasonable assurances that the Proposed Plant will not pose a serious danger to the public health, safety, or welfare.

RECOMMENDATION

Based on the foregoing Findings of Fact, and Conclusions of Law, it is

RECOMMENDED that a final order be entered by the Department of Environmental Protection granting Suwannee American Cement Company, Inc.'s application for an air construction permit subject to the terms and conditions of the Draft Permit, amended to reflect the applicant's agreement that mercury emissions from the Proposed Plant will be limited to 97 pounds per consecutive 10-month period.

DONE AND ENTERED this 5th day of April, 2000, in Tallahassee, Leon County, Florida.

  
LARRY J. MARTIN  
Administrative Law Judge  
Division of Administrative Hearings  
The DeSoto Building  
1230 Apalachee Parkway  
Tallahassee, Florida 32399-3060  
(850) 488-9675 SUNCOM 278-9675  
Fax Filing (850) 921-6847  
www.doah.state.fl.us

Filed with the Clerk of the  
Division of Administrative Hearings  
this 5th day of April, 2000.

COPIES FURNISHED:

Patrice Boyes, Esquire  
Boyes & Associates, P.A.  
Post Office Box 1424  
Gainesville, Florida 32602

Peter B. Belmont, Esquire  
102 Fareham Place North  
St. Petersburg, Florida 33701

Kenneth G. Oertel, Esquire  
M. Christopher Bryant, Esquire  
C. Anthony Cleveland, Esquire  
Segundo J. Fernandez, Esquire  
Oertel, Hoffman, Fernandez  
& Cole, P.A.  
Post Office Box 1110  
Tallahassee, Florida 32302-1110

George T. Reeves, Esquire  
Suwannee American Cement Company, Inc.  
Post Office Box 1829  
Lake City, Florida 32056

W. Robert Vezina, III, Esquire  
Mary M. Piccard, Esquire  
Vezina, Lawrence & Piscitelli, P.A.  
318 North Calhoun Street  
Tallahassee, Florida 32301

Lawrence E. Sellers, Jr., Esquire  
Larry Curtain, Esquire  
Holland & Knight  
Post Office Box 810  
315 South Calhoun Street, Suite 600  
Tallahassee, Florida 32302-0810

Jack B. Chisolm, Jr., Esquire  
Thomas M. Beason, Esquire  
Jonathan H. Alden, Esquire  
W. Douglas Beason, Esquire  
Larry R. Morgan, Esquire  
Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

Kathy Carter, Agency Clerk  
Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

Teri Donaldson, General Counsel  
Department of Environmental Protection  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

David B. Struhs, Secretary  
Department of Environmental Protection  
Douglas Building  
3900 Commonwealth Boulevard  
Mail Station 35  
Tallahassee, Florida 32399-3000

NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this recommended order. Any exceptions to this recommended order should be filed with the agency that will issue the final order in this case.