

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS

HENRY ROSS,	)	
	)	
Petitioner,	)	
	)	
vs.	)	Case No. 10-3351
	)	
CITY OF TARPON SPRINGS AND	)	
DEPARTMENT OF ENVIRONMENTAL	)	
PROTECTION,	)	
	)	
Respondents.	)	
_____	)	

RECOMMENDED ORDER

The final hearing in this case was held on September 13 and 14, 2010, in Tarpon Springs, Florida, before Bram D. E. Canter, Administrative Law Judge of the Division of Administrative Hearings ("DOAH").

APPEARANCES

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For Respondent City of Tarpon Springs:

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STATEMENT OF THE ISSUE

The issue to be determined in this case is whether the City of Tarpon Springs ("City") is entitled to a industrial wastewater facility permit for its proposed discharge of demineralization concentrate into the Gulf of Mexico adjacent to Pasco County, Florida.

PRELIMINARY STATEMENT

On March 26, 2010, the Department of Environmental Protection ("Department") gave notice of its intent to issue an industrial wastewater facility permit to the City to discharge demineralization concentrate that would be produced by a new City water treatment plant ("WTP"). Petitioner, Henry Ross ("Ross"), filed a petition for hearing to challenge the permit. The Department referred the matter to DOAH to conduct an evidentiary hearing.

Ross requested and was granted leave to amend his petition. Before the final hearing, Ross moved to disqualify the City's attorney. The motion was denied for lack of good cause. At the beginning of the final hearing, Ross moved to disqualify the Administrative Law Judge ("ALJ"). That motion was also denied

because Ross failed to allege facts constituting good cause for the ALJ's disqualification. Ross moved for disqualification of the ALJ two more times during the course of the final hearing and each time his motion was denied for lack of good cause.

At the final hearing, the City presented the testimony of: Paul E. Smith; Bob Robertson; and C. Robert Reiss, accepted as an expert in reverse osmosis ("RO") water treatment and demineralization concentrate discharge. City Exhibits 1 through 18, 20 through 22, 27, 30, and 31 were received into evidence.

The Department presented the testimony of: Christopher Anastasiou, accepted as an expert marine science and oceanography; Jeffry S. Greenwell, accepted as an expert in environmental engineering; and Jan Mandrup-Poulsen, accepted as an expert in water quality assessments and mixing zones. Department Exhibits 1 through 42 were received into evidence.

Petitioner presented the testimony of: Joseph R. McCreary, Jr.; Michael T. Palmer; and Ann Ney, accepted as an expert in marine ecology. Petitioner offered no exhibits during the final hearing, but was allowed to file Petitioner Exhibit One (excerpts from the fourth edition of "Oceanography - an Invitation to Marine Science" by Tom Garrison) after the hearing, and it was admitted into evidence.

The four-volume Transcript of the final hearing was filed with DOAH. The parties filed proposed recommended orders that were carefully considered in the preparation of this Recommended Order.

### FINDINGS OF FACT

#### The Parties

1. Henry Ross is a resident of Tarpon Springs. In his petition for hearing, he alleges that he is a recreational fisherman and a "consumer of fish taken from the area" where the proposed wastewater discharge would occur. He presented no evidence at the final hearing to prove these allegations. Neither the City or the Department stipulated to facts that would establish Ross's standing.

2. The City of Tarpon Springs is a municipality in Pinellas County and the applicant for the industrial wastewater permit that is challenged by Ross.

3. The Department is the agency charged by law with the duty, and granted the power, to regulate the discharge of pollutants into waters of the State.

#### The Proposed Permit - General

4. Due to the cost of obtaining potable water from Pinellas County Utilities, the City decided to look for another source of drinking water. In February 2004, an alternative water supply plan was developed by the City's Office of Public

Services which analyzed potable water supply options. It determined that the withdrawal and treatment of brackish groundwater represented the best option for the City.

5. The proposed permit authorizes the City to discharge industrial wastewater into waters of the State. The wastewater is demineralization concentrate, which is produced when RO technology is used to remove salts from brackish water to convert it to potable water.

6. The wastewater would be produced in conjunction with the operation of a not-yet-constructed WTP that would supply public drinking water to the residents of the City. The City must also obtain a consumptive use permit from the Southwest Florida Water Management District for the proposed withdrawal of groundwater. Whether the Town is entitled to a consumptive use permit is not at issue in this proceeding.

7. The industrial wastewater permit would authorize a maximum daily discharge of 2.79 million gallons per day ("mgd") of RO concentrate. The initial operation of the WTP, however, is expected to discharge 1.05 mgd.

8. The RO concentrate would be transported via a force main from the WTP in the City to an outfall in Pasco County. The outfall would discharge the wastewater into a canal which is already being used for the discharge of cooling water from

Progress Energy Florida, Inc.'s Anclote Power Generation Facility.

9. The outfall would be 50 feet north of the point in the canal where Progress Energy is required to demonstrate compliance with its own permitting requirements, so as not to interfere with Progress Energy's ability to demonstrate compliance.

10. There is a floating barrier in the channel north of the proposed point of discharge, and a fence along the side of the canal, to prevent swimmers, boaters, and persons on foot from getting near the Progress Energy power plant. The floating barrier and fence would also prevent swimmers, boaters, or pedestrians from reaching the proposed discharge outfall and the area of the canal where the discharge will initially mix.

11. After being discharged into the canal, the wastewater would become diluted and flow northward, out of the canal and into the open waters of the Gulf. The prevailing currents in area would most often force the wastewater south toward Pinellas County and the mouth of the Anclote River.

12. To determine the characteristics of the wastewater, the City's consultants collected water from the three proposed well fields for the new WTP and ran the water through a small, pilot-scale RO unit to generate an RO concentrate that is representative of the proposed RO discharge.

13. It was determined that eight constituents of the wastewater would likely be present in concentrations that would exceed applicable state water quality standards: aluminum, copper, iron, gross alpha (a radioactivity measurement), total radium, selenium, nickel, and zinc.

#### The Mixing Zones

14. The Department may authorize mixing zones in which a wastewater discharge is allowed to mix with the receiving waters. See Fla. Admin. Code R. 62-4.244. Within the mixing zone, certain minimum water quality criteria must be met. At the outer boundary of the mixing zone, the applicable state water quality standards must be met. In this case, the water quality standards for Class III marine waters are applicable.

15. The City's consultants analyzed the wastewater, receiving waters, and other factors and used an analytical model to simulate a number of mixing scenarios. In cooperation with Department staff, a separate mixing zone was established for each of the eight constituents that are not expected to meet water quality standards at the outfall.

16. The largest mixing zone, for copper, is 1,483.9 square meters. The smallest mixing zone, for nickel, is 0.7 square meters. The mixing zones are conservatively large to assure sufficient mixing. Under most conditions, the mixing is expected to occur in a smaller area.

## Toxicity Analysis

17. Among the minimum criteria that must be met within a mixing zone is the requirement to avoid conditions that are acutely toxic. See Fla. Admin Code R. 62-302.500(1)(a). A wastewater discharge is tested for potential acute toxicity by exposing test organisms to the undiluted discharge and determining whether more than 50 percent of the organisms die within a specified time period.

18. The test organisms, mysid shrimp and silverside minnow, are sensitive species. Therefore, when a discharge is not acutely toxic to these organisms, it can be reasonably presumed that the discharge would not harm the native organisms in the receiving waters.

19. The acute toxicity test for the proposed RO concentrate indicated zero toxicity.

20. The Department requested that the City also analyze the potential chronic toxicity of the proposed discharge. A wastewater discharge shows chronic toxicity if exposure to the discharge adversely affects the growth and weight of the test organisms.

21. The tests performed on the representative discharge showed that the proposed discharge of RO concentrate would not create chronic toxicity in the mixing zones.

22. Petitioner's expert witness, Ann Ney, did not review the toxicity analyses or other water quality data that were submitted to the Department by the City. However, she expressed a general concern about a salty discharge that could create stratification in the canal with higher salinity at the bottom of the canal that might be hypoxic (little or no dissolved oxygen). The more persuasive evidence shows that salinity stratification, or a hypoxic condition, is unlikely to occur.

23. The proposed permit requires the City to conduct quarterly chronic toxicity tests. The permit also requires the City to periodically test the water and sediments for any unexpected cumulative effects of the discharge.

#### Evaluation of Disposal Options

24. Florida Administrative Code Rule 62-620.625(6) requires that an applicant for a permit to discharge demineralization concentrate must investigate disposal options potentially available in the project area. The City evaluated blending the discharge concentrate with the City's re-use water irrigation program or with the City's domestic wastewater discharge into the Anclote River. The RO concentrate was too salty for irrigation use and there was an inadequate volume of domestic wastewater available throughout the year. In addition, the Anclote River is an Outstanding Florida Water and, therefore, is afforded the highest water quality protection

under Department rules. See Fla. Admin. Code R. 62-4.242(2).

The City also looked at underground injection but that was economically unreasonable and there was concern about upward migration of the discharge. It was economically unreasonable to discharge the concentrate farther out into the Gulf.

#### Anti-degradation Analysis

25. For a proposed new discharge, a permit applicant must demonstrate that the use of another discharge location, land application, or recycling that would avoid the degradation of water quality is not economically and technologically reasonable. See Fla. Admin. Code R. 62-4.242(1)(d). As discussed above, the City investigated other disposal options, but they were not economically or technologically reasonable.

26. An applicant for a permit authorizing a new discharge must demonstrate that any degradation is desirable under federal standards and under circumstances that are clearly in the public interest. See Fla. Admin. Code R. 62-302.300(17). In determining whether a proposed discharge is desirable under federal standards and under circumstances that are clearly in the public interest, the Department is required by Rule 62-4.242(1)(b) to consider the following factors:

1. Whether the proposed project is important to and is beneficial to public health, safety or welfare (taking into account the policies set forth in Rule

62-302.300, F.A.C., and, if applicable, Rule 62-302.700, F.A.C.); and

2. Whether the proposed discharge will adversely affect conservation of fish and wildlife, including endangered or threatened species, or their habitats; and

3. Whether the proposed discharge will adversely affect the fishing or water-based recreational values or marine productivity in the vicinity of the proposed discharge; and

4. Whether the proposed discharge is consistent with any applicable Surface Water Improvement and Management Plan that has been adopted by a Water Management District and approved by the Department.

27. The proposed project is important to and is beneficial to public health, safety or welfare because it would provide drinking water for the public. In addition, the treatment and use of brackish groundwater converts otherwise unusable water into a valuable resource. The use of brackish water avoids the use of water in the surficial aquifer that is used by natural systems, such as wetlands.

28. The Florida Legislature has found that the demineralization of brackish water is in the public interest, as expressed in Section 403.0882, Florida Statutes (2010):

The legislature finds and declares that it is in the public interest to conserve and protect water resources, provide adequate supplies and provide for natural systems, and promote brackish water demineralization as an alternative to withdrawals of freshwater groundwater and surface water by

removing institutional barriers to demineralization and, through research, including demonstration projects, to advance water and water by-product treatment technology, sound waste by-product disposal methods, and regional solutions to water resources issues.

29. The proposed discharge would not adversely affect conservation of fish and wildlife. Because the discharge is not toxic to sensitive test organisms provides reasonable assurance that the native fish and other aquatic life would not be adversely affected by the discharge.

30. The only identified threatened or endangered species that frequents the canal waters is the endangered Florida Manatee. Manatees use the canal because of its relatively warm waters. Manatees come to the surface to breathe and they drink fresh water. There is no reason to expect that a manatee moving through the mixing zones would be adversely affected by the RO concentrate. The Florida Fish and Wildlife Conservation Commission, which has primary responsibility for the protection of endangered and threatened species, did not object to the proposed permit.

31. Manatees and many other aquatic species use seagrasses as food or habitat. There are no seagrasses in the area of the canal into which the RO concentrate would be discharged, but there are dense seagrass beds nearby. The proposed discharge would have no effect on the seagrasses in the area.

32. The proposed discharge would not adversely affect fishing or water-based recreational values or marine productivity in the vicinity of the proposed discharge.

33. Because the proposed discharge is non-toxic and would meet Class III water quality standards before reaching the closest areas where humans have access to the canal and Gulf waters, there is no reason to believe that the proposed discharge would be harmful to humans. The proposed discharge would not adversely affect recreational activities, such as swimming, boating, or fishing.

34. Petitioner presented the testimony of two fishermen about fishing resources and water flow in the area, but no evidence was presented to show how the proposed discharge would reduce marine productivity.

35. Petitioner contends that the proposed discharge would adversely affect the Pinellas County Aquatic Preserve. However, the aquatic preserve is two miles away. The proposed discharge would probably be undetectable at that distance. It would have no effect on the waters or other resources of the aquatic preserve.

36. With regard to the requirement that the proposed discharge be consistent with an adopted and approved Surface Water Improvement and Management Plan for the area, there is no such plan.

### CONCLUSIONS OF LAW

37. For standing to challenge a permit, a petitioner must show that he will suffer an injury in fact that is of sufficient immediacy to entitle him to a hearing, and his substantial injury is of the type or nature that the proceeding is designed to protect. See Agrico Chemical Co. v. Dep't of Env'tl. Reg., 406 So. 2d 478 (Fla. 2d DCA 1981).

38. Standing is an issue of subject matter jurisdiction and, therefore, the issue may be raised at any time. Dep't of Revenue v. Daystar Farms, Inc., 803 So. 2d 892, 896 (Fla. 5th DCA 2002).

39. Ross presented no evidence to show that his substantial interests would be affected by the proposed discharge. He failed to prove his standing to challenge the City's permit. However, because the evidentiary hearing was conducted and proposed recommended orders were filed addressing the factual issues raised in the petition for hearing, Findings and Fact and Conclusions of Law are presented in this Recommended Order.

40. A permit applicant bears the ultimate burden of providing reasonable assurance that all applicable permitting criteria and standards will be met. See Dep't of Transp. v. J.W.C. Co., Inc., 396 So. 2d 778, 789 (Fla. 1st DCA 1981).

41. "Reasonable assurance," in this context means a demonstration that there is a substantial likelihood of compliance with standards, or "a substantial likelihood that the project will be successfully implemented." Metropolitan Dade County v. Coscan Florida, Inc., 609 So. 2d 644, 648 (Fla. 3d DCA 1992). It does not mean absolute guarantees.

42. The applicant must prove the facts necessary to show his entitlement to the permit by a preponderance of the evidence. See § 120.57(1)(j), Fla. Stat. (2010).

43. Ross made numerous hearsay objections to the admission into evidence of various reports and data summaries that were part of the Department's permit file for the City's proposed discharge. However, Ross presented no evidence to show that any statements in the reports or data summaries were inaccurate or unreliable. The court in J.W.C. (at 789) stated:

[W]hen agency employees or officials having special knowledge or expertise in the field accept data and information supplied by the applicant, the same data and information, when properly identified and authenticated as accurate and reliable by agency or other witnesses, will be readily accepted by the [administrative law judge], in the absence of evidence showing its inaccuracy or unreliability.

\* \* \*

[T]his having been done, the [administrative law judge] would not be authorized to deny the permit unless contrary evidence of

equivalent quality is presented by the  
opponent of the permit.

Ross did not present contrary evidence of equivalent quality on  
any disputed factual issue.

44. The City provided reasonable assurance that the  
proposed discharge will meet all the antidegradation permitting  
requirements of Rule 62-4.242, including the requirement to  
demonstrate that the proposed discharge is necessary or  
desirable under federal standards and under circumstances which  
are clearly in the public interest.

45. The City provided reasonable assurance that the  
proposed discharge will meet all the requirements of Rule  
62-4.244 for the use of mixing zones.

46. The City provided reasonable assurance that, within  
the mixing zones, the proposed discharge will meet the minimum  
water quality criteria in Rule 62-302.500.

47. The City provided reasonable assurance that the  
proposed discharge will meet all the requirements applicable to  
industrial wastewater discharges, in general, and the specific  
requirements of Section 403.0882, Florida Statutes (2010), and  
Rule 62-620.625 applicable to discharges of demineralization  
concentrate.

48. In summary, the City demonstrated its entitlement to  
the industrial wastewater facility permit.

RECOMMENDATION

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

RECOMMENDED that the Department issue a final order determining that Petitioner lacks standing, and approving the issuance of the industrial wastewater facility permit to the City.

DONE AND ENTERED this 16th day of December, 2010, in Tallahassee, Leon County, Florida.



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BRAM D. E. CANTER  
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Filed with the Clerk of the  
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this 16th day of December, 2010.

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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.