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**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

Jul 25, 2014

MIKE LAUDICINA, DON DEMARIA,
CUDJOE GARDENS PROPERTY OWNERS ASSOCIATION, INC., and
SUGARLOAF SHORES PROPERTY OWNERS ASSOCIATION, INC.

**Dept. of Environmental Protection
Office of General Counsel**

Petitioners,

**DEP FILE NO.: FLA671932-003-DW1P
DEP PROPOSED PERMIT #: FLA671932-003-
DWIP;**

v.

DEP UIC PERMIT # 295404-020, 021, 022, 023;
(prior DEP No. FLA671932-001, 295404-005-
DWC/CM, 295404-001, 002,003, and 004;
0067347-003-SQ)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, and
FLORIDA KEYS AQUEDUCT AUTHORITY (Applicant)

Respondents.

_____ /

**VERIFIED PETITION FOR FORMAL ADMINISTRATIVE HEARING,
REQUEST FOR MEDIATION
&
MOTION TO INTERVENE**

Cudjoe Regional Wastewater Treatment Plant Shallow Injection Wells

Petitioners contend that the draft permit violates Florida law and DEP regulations based on two related main issues:

- I. The injection of the proposed quantities of partially treated sewage effluent into shallow injection wells on Cudjoe Key within 75 feet of Cudjoe Bay will result in effluent discharges to Outstanding Florida Waters (OFW) that will violate water quality standards, further degrade OFW waters, and will violate Florida Statutes and DEP regulations.
- II. The design capacity of the Plant is more than 1 million gallons per day (mgd) and therefore a deep well is required by Florida law, regardless of a showing of impairment of water quality¹. Florida Statute Section 403.086(10)(e)2, states “...if the design capacity of the facility is equal to or greater than 1 million gallons per day, each primary injection well must be cased to a minimum depth of 2,000 feet or to such greater depth as may be required by department rule.”

¹ The Legislature found that: “the discharge of inadequately treated and managed domestic wastewater ...in the Florida Keys compromises the quality of the coastal environment, including nearshore and off shore waters, and threatens the quality of life and local economies that depend on those resources.” F.S. 403.086 (10).

PETITION FOR FORMAL ADMINISTRATIVE HEARING

1. Individual Petitioners, *Mike Laudicina (Laudicina)* and *Don DeMaria (DeMaria)*, and association petitioners *Cudjoe Gardens Property Owners Association, Inc. (CGPOA)* and *Sugarloaf Shores Property Owners Association, Inc. (SSPOA)*, file this Petition for a Formal Administrative Hearing concerning the Notice of Intent to Issue Wastewater Treatment Permit(s): DEP PROPOSED PERMIT #: FLA671932-003-DWIP; DEP UIC PERMIT # 295404-020, 021, 022, and 023; (prior DEP FLA671932-001, 295404-005-DWC/CM, 295404-001, 002,003, and 004; 0067347-003-SQ) for the **Cudjoe Regional Wastewater Treatment Plant (“Plant”) [the Proposed Permit]** by the State of Florida Department of Environmental Protection (DEP), on July 14, 2014 on an Application for renewal and/or modification of the permits filed by Florida Keys Aqueduct Authority (FKAA).

PETITION TO INTERVENE

2. In an abundance of caution, individuals *Mike Laudicina (Laudicina)* and *Don DeMaria (DeMaria)*, and associations *Cudjoe Gardens Property Owners Association, Inc. (CGPOA)* and *Sugarloaf Shores Property Owners Association, Inc. (SSPOA)*, also file concurrent with this Petition, their Petition to Intervene under Chapter 120 Florida Statutes and Section 403.412 Florida Statutes in any and all proceedings requested by any and all other parties regarding the Notice of Intent to Issue Wastewater Treatment Permit #FLA671932-001 and UIC Permit(s): DEP PROPOSED PERMIT #: FLA671932-003-DWIP; DEP UIC PERMIT # 295404-020, 021, 022, and 023; (prior DEP FLA671932-001, 295404-005-DWC/CM, 295404-001, 002,003, and 004; 0067347-003-SQ) for the Cudjoe Regional Wastewater Treatment Plant (“Plant”) [the Proposed Permit] by the State of Florida Department of Environmental Protection (DEP), on July 14, 2014 on an Application for renewal and/or modification of the permits filed by Florida Keys Aqueduct Authority (FKAA).

NOTICE OF AGENCY ACTION

3. Notice of the agency action was uploaded by DEP on or about July 14, 2014. This Petition is filed within fourteen (14) days of the date of July 14, 2014.

PARTIES

4. Petitioners/Intervenors assert standing to bring or intervene in these proceedings pursuant to Chapter 120 Florida Statutes and Section 403.412 Florida Statutes.

5. Petitioners seek review of the proposed permit(s) for the wastewater treatment plant, including four (4) shallow injection wells, to be constructed and operated on Cudjoe Key in Monroe County, Florida.

6. Petitioners’ substantial interests are adversely affected because the activities being permitted by the Department upon application of Respondent FKAA are in violation of Florida Statutes and Department regulations and will impermissibly degrade and impair the nearshore waters of the lower Florida Keys, the Florida National Marine Sanctuary and part of Outstanding

Florida Waters, and will endanger the federally protected coral reefs and sea turtles, and protected sea grasses and other local fauna and will adversely affect the businesses and quality of life of Petitioners, including their economic interests, as well as the local economy, as set forth with specificity for each Petitioner/Intervenor below.

8. Individual Petitioner, **Mike Laudicina**, whose mailing address is P.O. Box 430411, Big Pine Key, FL 33043, is a resident of Big Pine Key, Florida within the area served and affected by the proposed agency action. Mike Laudicina will suffer injury in fact which is of sufficient immediacy to entitle him to a section 120.57 hearing, and his substantial injury is of a type or nature which the proceeding is designed to protect because:

a. Mike Laudicina will be adversely and immediately affected by the proposed agency action because he utilizes nearby surface waters and natural marine life resources for work and recreation that will suffer adverse effects from the large quantity and poor quality of effluent that would be disposed in the shallow injection well(s) because the effluent will rise to surface waters and adversely affect those surface waters due to the quantity, salinity and nutrients that are present in the effluent wells and will adversely affect water quality and natural marine life resources in waters of the state of Florida that he utilizes for work and recreation.

b. Mike Laudicina is a commercial fisherman who regularly harvests crab and lobster from the nearshore waters around the Plant.

c. Mike Laudicina dives and fishes the area for recreation.

d. Mike Laudicina frequently worked for, and collaborated with, numerous marine scientists to obtain samples and conducting research in the lower Florida Keys.

e. Mike Laudicina has lived in Monroe County for over 40 years.

f. Mike Laudicina has volunteered and served on the Florida Keys National Marine Sanctuary Advisory Council for nine years and the Gulf of Mexico Spiny Lobster Advisory Council for many years.

g. Mike Laudicina will be adversely affected by the impacts of the shallow injection wells on fishing and the recreational areas he utilizes which also are vital to the commercial fishing industry and the economy of the Keys.

Mike Laudicina is represented by undersigned Counsel Ralf Brookes Attorney, 1217 E Cape Coral Parkway #107 Cape Coral Florida 33904 phone (239) 910-5464 fax (866) 341-6086 eservice preferred and accepted at: RalfBrookes@Gmail.com .

9. Individual Petitioner, **Don DeMaria**, whose address is 369 Westshore Drive, P.O. Box 420975, Summerland Key, Florida lives within 5 miles of the Plant. Don DeMaria will suffer injury in fact which is of sufficient immediacy to entitle him to a section 120.57 hearing, and his substantial injury is of a type or nature which the proceeding is designed to protect because:

a. Don DeMaria will be adversely and immediately affected by the proposed agency action because he utilizes nearby surface waters and natural marine life resources for work and recreation that will suffer adverse effects from the large quantity and poor quality of effluent that would be disposed in the shallow injection well(s) because the effluent will rise to surface waters and adversely affect those surface waters due to the quantity, salinity and nutrients that are present in the effluent wells and will adversely affect water quality and natural marine life resources in waters of the state of Florida that he utilizes for work and recreation.

- b. Don DeMaria is a commercial fisherman and regularly works and recreates on the waters around Cudjoe Key.
- c. Don DeMaria is also actively assists in benthic surveys and coral transplantation projects (1978 to present)
- d. Don DeMaria is the owner of a business, Sea Samples, which is a commercial physical marine research company located in Summerland Key, Florida
- g. Don DeMaria's work in marine waters includes the collection and photographing of marine invertebrates for the National Cancer Institute (1992 to 2014), the Coral Reef Research Foundation, and the National Marine Fisheries Service, and universities.
- e. Don DeMaria activities in marine waters includes assisting organizations with fishery research projects including Florida Fish and Wildlife Research Institute, the National Marine Fisheries Service, Caribbean Marine Research Center, Teens4Oceans, and National Geographic Society.

Don DeMaria is represented by undersigned Counsel Ralf Brookes Attorney, 1217 E Cape Coral Parkway #107 Cape Coral Florida 33904 phone (239) 910-5464 fax (866) 341-6086 eservice preferred and accepted at: RalfBrookes@Gmail.com.

10. Association Petitioner, **Cudjoe Gardens Property Association, Inc. ("CGPOA")**, is a voluntary not for profit Florida corporation in good standing. Its mailing address is P. O. Box 420121, Cudjoe Key, FL 33042.
- a. CGPOA is an association of and for the property owners of a residential subdivision known as Cudjoe Gardens. CGPOA has been in existence for over 37 years and has over 150 members at this time. All members own property in Cudjoe Gardens, most reside there at some time of the year. For many, Cudjoe Gardens is their principal residence. CGPOA routinely represents its membership before the Monroe County Commission and others generally, including FCAA, on matters of interest to its property owners including, but not limited to, solid waste management contracts, road resurfacing, flood insurance matters, and sewer related issues. CGPOA looks after property values for its members, addressing unmaintained lots and providing canal water samples for testing by the University of Florida.
 - b. Larry Francisco is President of this voluntary property owners association and represents its interests. The subject matter of the challenged proposed activity is within the association's general scope of interest and activity. The relief requested in this petition is authorized and appropriate for the CGPOA to request and receive on behalf of its members.
 - c. Cudjoe Gardens is located on the western peninsula of Cudjoe Key, approximately 1 mile from the Plant and disposal wells. Developed in the 1970s, Cudjoe Gardens is a canal subdivision where every lot has canal frontage. Cudjoe Gardens is bordered by Bow Channel and the Cudjoe Garden canals lead directly to Bow Channel, providing unique direct and expeditious deep water access to the reef and Backcountry. This convenient access is a key feature of the subdivision and hence, the subdivision is valued by and attracts property owners who spend much time boating, fishing, snorkeling and diving, and otherwise recreating in the near shore waters and beyond of the Florida Keys National Marine Sanctuary (FKNMS).
 - d. The switch from individual septic tanks in Cudjoe Gardens, which is within the Cudjoe Regional Treatment plant service area, to a centralized wastewater treatment and disposal system will eliminate an estimated 8,000 non-point sources of nutrient and other pollution

from the FKNMS, an Outstanding Florida Water. It will accomplish this by converting these non-point sources currently spread over 16 miles of the Lower Keys to a single point source on Cudjoe Key in close proximity to Cudjoe Gardens. This very large volume of low salinity, nutrient carrying effluent will have an adverse impact on the shallow waters of the Lower Keys and beyond.

- e. CGPOA and its members will be adversely and immediately affected by the proposed agency action to permit effluent disposal in four shallow wells. CGPOA and its members will suffer from the adverse affects to the surface waters neighboring their properties and beyond caused by the quantity, salinity and nutrients present in the shallow well injected effluent. This degradation of water resources and marine life resources will affect the quality of life of CGPOA's members, as well as the value of their Cudjoe Gardens property.

CGPOA is represented by undersigned Counsel Ralf Brookes Attorney, 1217 E Cape Coral Parkway #107 Cape Coral Florida 33904 phone (239) 910-5464 fax (866) 341-6086 eservice preferred and accepted at: RalfBrookes@Gmail.com

11. Association Petitioner, **Sugarloaf Shores Property Owners Association, Inc.** (“SSPOA”), is a voluntary 501(c) (4), Florida corporation in good standing and has a mailing address at 17045 Overseas Highway, Box 9, Sugarloaf Shores FL 33042-3691.

- a. SSPOA is an association of property owners in a residential subdivision on Sugarloaf Key known as Sugarloaf Shores. It has been in existence since 1978 and currently has over 325 members. Many members reside there year-round.
- b. SSPOA monitors and engages local and state governmental agencies, including FCAA, on issues critically important to its community including, but not limited to, emergency services, utilities, sewers, taxes, flood and wind insurance, recycling, yard waste composting, and water quality. SSPOA also maintains common-area landscaping, encourages a neighborhood watch, and supports local charities and non-profit organizations.
- c. SSPOA volunteers have been collecting samples for testing the quality of the water surrounding Sugarloaf Shores since 1999, (as part of the University of Florida Lakewatch Water Quality Program), and test the water quality samples for nutrients such as Nitrogen and Phosphorus, Chlorophyll, Fecal Coloforms, Turbidity and Salinity.
- d. Sugarloaf Shores is located between the surface water bodies of Upper Sugarloaf Sound and Lower Sugarloaf Sound, approximately five miles from the Cudjoe Wastewater Treatment Plant. Almost all properties have canal frontage, many with boat ramps, lifts or davits, as the location provides access to the backcountry and the ocean. Bow Channel is an immediately adjacent fishing area. The area is renowned for its backcountry fishing. Several members are fishing guides in this area which has been a well-known fishing destination for years.
- e. Property owners spend much time boating, fishing, snorkeling and diving, and otherwise recreating in the near shore waters and beyond in the Florida Keys National Marine Sanctuary (FKNMS).
- f. Members of SSPOA will be adversely and immediately affected by the proposed agency action to permit effluent disposal in four shallow wells. Degradation of the surface waters caused by the quantity, salinity and nutrients present in the effluent will adversely affect water resources and marine life resources. This degradation will affect the quality of life of SSPOA members, as well as the value of their property.
- g. SSPOA President, Charles Licis, represents the interests of its member property owners. The subject matter of the challenged proposed activity is within the association's general scope of

interest and activity. The relief requested in this petition is authorized and appropriate for SSPOA to request and receive on behalf of its members.

SSPOA is represented by undersigned Counsel Ralf Brookes Attorney, 1217 E Cape Coral Parkway #107 Cape Coral Florida 33904 phone (239) 910-5464 fax (866) 341-6086 eservice preferred and accepted at: RalfBrookes@Gmail.com.

RESPONDENT

12. Respondent, **Florida Keys Aqueduct Authority (FKAA)**, is the Permit Applicant for the **Cudjoe Regional Wastewater Treatment Plant (CRWTP)**.

AGENCY

13. The agency affected by this Petition is the **Department of Environmental Protection (DEP)**. The DEP's agency headquarters and main address is Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399 and the DEP district office address is 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33901. The DEP's identification number for this matter is Wastewater Treatment Permit #FLA671932-001; **Permit(s): DEP PROPOSED PERMIT #: FLA671932-003-DWIP; DEP UIC PERMIT # 295404-020, 021, 022, and 023;** (prior DEP FLA671932-001, 295404-005-DWC/CM, 295404-001, 002,003, and 004; 0067347-003-SQ) The subject matter and activity is located on Cudjoe Key within Monroe County, Florida.

BACKGROUND FACTS

14. Cudjoe Regional Wastewater Treatment Plant's shallow injection wells are sited approximately 75 feet from Cudjoe Basin. Cudjoe Basin is within an area designated as an Outstanding Florida Waters (OFW) of the Florida Keys and within the boundary of the Florida Keys National Marine Sanctuary. OFW waters are subject to an anti-degradation water quality standard. See Rule 62-302.700 F.A.C.

“An Outstanding Florida Water (OFW) is a waterbody deemed worthy of special protection because of its natural attributes (e.g., excellent water quality, or exceptional ecological, social, educational, or recreational value)... Waters are designated OFW to prevent the lowering of existing water quality and to preserve the exceptional ecological and recreational significance of the waterbody.... OFWs are protected through more stringent requirements for activities requiring a permit from the Department of Environmental Protection (DEP)...” See. *DEP Fact Sheet, Outstanding Florida Waters*, DEP website.

15. The Cudjoe Regional Wastewater Treatment Plant is designed to service residential and non-residential structures including commercial establishments and uses in a chain of islands in the lower Florida Keys which are surrounded on all sides by Outstanding Florida Waters in The Florida Keys National Marine Sanctuary. The Plant is not yet operational. The original Application was filed April 23, 2009. Exhibit A. The original permit was issued September 21, 2009. FLA671932-001-DWIP Exhibit B. The permit Renewal Application was filed on March 20, 2014, Exhibit C; which was supplemented on May 7, 2014, including new well applications, Exhibit C1; and was modified on June 16, 2014, with new Form 2A submissions, Exhibit C2.

16. The Plant and its four shallow injection wells is not yet operational, but would become operational under the proposed permit. Exhibit D. The Plant is designed to service the geographical service area and the projected volume of wastewater in the service area until the design year of 2028, as twenty years projected from 2008 (the year of the original permit application) to 2028. A new or updated 20 year design year from the 2014 Application date would be 2034.

17. The Plant is located on a former Monroe County Landfill on Cudjoe Key in Monroe County, Florida.

MATERIAL FACTS AND ISSUES OF LAW IN DISPUTE

18. Recent water quality monitoring in the OFW backcountry near the Cudjoe Plant shows that total nitrogen (TN), total phosphorus (TP) and chlorophyll a concentrations are already near or have exceeded the numerical nutrient criteria (NNC) adopted by the state of Florida as Water Quality Standards Standards. Rule 62-302.532 F.A.C.

- a. Excess nutrients have resulted in extensive blooms of macroalgae occurring seasonally in sea grass and hard-bottom communities in the nearby backcountry habitats, resulting in habitat loss. Further, highly reactive forms of nitrogen (ammonium, nitrate) and phosphorus (soluble reactive phosphorus) will be discharged from the shallow injection wells.
- b. Nutrients in the proposed wastewater effluent will be above background levels in Cudjoe Basin and if allowed to reach surface waters will exacerbate macroalgae blooms, cause an imbalance of flora and fauna and cause or contribute to degradation of water quality in designated waters of the Florida Keys, designated under Rule 62-302.700, F.A.C (62-302.700 Special Protection, Outstanding Florida Waters, Special Waters) adopted under the authority of Florida Statute 403.061(27)³.

19. The saline nearshore waters around Cudjoe Key and Cudjoe Basin are shallow, marine ecosystems that are impacted by salinity and nutrients contained in the effluent including nitrogen, ammonium, nitrate and phosphorus. Even with Advanced Wastewater Treatment (AWT), the nutrients remain at levels which will cause exceedances of background levels in the nearshore waters of Cudjoe Key.

20. The geological composition of the disposal area is primarily porous limestone. Geotechnical cores collected for design of the wastewater treatment facility indicate the presence of permeable oolite rock layer on top of limestone strata.

³ Florida Statute Section 403.061 “Department; powers and duties. ... (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.”

THE PROPOSED ACTIVITY WILL VIOLATE GROUNDWATER RULE

21. The proposed agency action permitting the disposal of effluent into the four (4) shallow injection wells will violate state groundwater standards because the activity will impair the reasonable and beneficial use of adjacent waters in violation of 62-520.400, F.A.C., which provides in pertinent part:

Rule 62-520.400

(1) All ground water shall at all places and at all times be free from *domestic*, ... or other man-induced non-thermal components of discharges in concentrations which, alone or in combination with other substances, or components of discharges ...

(f) **Impair the reasonable and beneficial use of adjacent waters.** (emphasis supplied)

THE PROPOSED ACTIVITY WILL VIOLATE CLASS V INJECTION WELL RULE

22. The proposed agency action permitting the disposal of effluent into the four (4) shallow injection wells will violate Section 62-528.630 F.A.C., which provides in pertinent part:

Rule 62-528.630 (7) **All Class V Group 3 wells designed to inject domestic wastewater in Monroe County** shall be required as part of the operation permit application to provide reasonable assurance that operation of the well **will not cause or contribute to a violation of surface water standards as defined in Chapter 62-302, F.A.C.**

23. The FCAA has not provided reasonable assurance in its permit application that the proposed use of shallow injections wells will not cause or contribute to a violation of surface water standards. The proposed agency action permitting the disposal of effluent into the four (4) shallow injection wells in Cudjoe Key, Monroe County will violate Florida Statutes and DEP regulations because the discharge will impermissibly impair and degrade Outstanding Florida Waters, impair the reasonable and beneficial use of surface waters in the Florida Keys, and contribute to violations of water quality standards as set forth in this Petition below.

THE PROPOSED ACTIVITY WILL DISCHARGE TO SURFACE WATERS
AND
VIOLATE SURFACE WATER QUALITY STANDARDS

24. The groundwater gradients and flow in the area are heavily influenced by tides, salinity differences and recharge (rain or underground injection of water) and by the considerable porosity and permeability of the limestone strata.

25. At low tide, the gradient (slope) of the nearshore water table is from the land towards the surface water of Cudjoe Bay, and these groundwater gradients flow upward into surface water. The nearshore shallow surface waters around Cudjoe Plant and the lower Keys have numerous “seeps” where cooler water from below can be detected rising to surface waters.

26. Rainwater recharge creates a freshwater lens floating on the saline groundwater, which can affect gradients and flow towards surface water. The proposed injection of relatively low salinity (compared to seawater) wastewater will affect the salinity level near the injection wells and affect the gradient, increasing flow of the injected waste toward and into Cudjoe Bay.

27. The DEP draft renewal permit allows FKAA to inject 0.470 mgd of treated wastewater effluent per well into each of the four (4) shallow injection wells, a reduction from the original permit from 2009, but still having a maximum combined disposal for the four shallow wells of 1.88 mgd. The wells are located about 75 feet from the edge of Cudjoe Bay, and are 75 feet apart from each other. They are all drilled to 120 feet below ground surface in the porous limestone below, and are cased to 80 feet.

28. The injected low salinity effluent also contains nitrogen, ammonium, nitrate and phosphorus, which are nutrients.

29. Nutrients have been identified as causing or contributing to an imbalance of algal overgrowth and are causing or contributing to existing violations of water quality standards in Cudjoe Bay.

30. The subject four (4) shallow injection wells are located on, or near, the site of an unlined former landfill on Cudjoe Key and the impact of siting the injection wells in or on property with the potential to cause migration of contaminants from the former landfill use has not been adequately evaluated by DEP

31. Because of the hydrogeology of the porous limestone in the area, the large volume of low salinity partially treated effluent injected into shallow wells will quickly rise to the surface and adversely impact the marine surface waters and ecosystems.

32. The use of shallow wells for injection of partially treated sewage effluent in these Outstanding Florida Waters will violate existing water quality standards, further degrade the nearshore waters, interfere with their beneficial use, and will violate Florida Statutes and DEP regulations.

33. Cudjoe Basin, adjacent to the Plant, is designated as an Outstanding Florida Water and is part of the National Key Deer Refuge and Florida Keys National Marine Sanctuary and proximate to the Great White Heron National Wildlife Refuge. FAC 62-302.700⁴. The draft permit impermissibly allows degradation of the Outstanding Florida Water under Rule Rule 62-4.242⁵.

⁴ Rule 62-302.700 **Special Protection, Outstanding Florida Waters, Outstanding National Resource Waters.** “(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 subsections 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.”

⁵ Rule 62-4.242 **Antidegradation Permitting Requirements; Outstanding Florida Waters** (2) Standards Applying to Outstanding Florida Waters. (a) No Department permit or water quality

34. The FKAA must also show that “[u]se of other discharge locations, which would reduce adverse impacts on water quality” is not economically and technologically reasonable.” Rule 62-4.242(1) (c).

35. The application reflects no such showing. The shallow injection wells will significantly degrade the Outstanding Florida Waters in the Cudjoe Basin; will lower the ambient water quality. ; a deep injection well is another “discharge location” which is both technologically and economically feasible, as local, state and federal funds have been allocated for wastewater projects in the Florida Keys.

36. The impacts of the pollutant loads from the partially treated low salinity effluent will be especially evident in waters near the Cudjoe Plant.

37. The partially treated wastewater effluent, although required to meet AWT standards, is permitted to carry an annual average daily pollutant load of 3mg/liter of TN, with single sample TN loads of up to 6 mg/liter. The partially treated wastewater effluent is also permitted to carry an annual average daily pollutant load of 1mg/liter of TP with single sample loads of up to 2 mg/liter of TP, along with other contaminants. The forms of Nitrogen (N) present in the partially treated wastewater will include ammonium and nitrate, which are the most reactive forms of N that initiate and sustain harmful algal blooms. The forms of Phosphorus (P) in the partially treated wastewater will include soluble reactive phosphorus, which will adversely affect habitats including habitats that are strongly Phosphorus limited.

38. The effluent would be injected into saline groundwater at the Plant in highly porous limestone, uncased below 80 feet and drilled to approximately 120', and the effluent would rise via buoyant flow to the surface waters of the State of Florida, Outstanding Florida Waters and the Florida Keys National Marine Sanctuary.

39. Once in the Sanctuary and OFW surface waters, the lower salinity effluent carrying pollutant loads of increased ammonium, nitrate, and soluble reactive phosphorus concentrations would generate harmful algal blooms, adversely affecting sea grasses, corals, patch reefs and benthic organisms, and could result over time in a "dead zone," violating Florida water quality standards.

40. Contaminants in the effluent injected in the shallow injection wells would disperse through Sanctuary and Outstanding Florida Waters, leading to eutrophication and water quality degradation, including increased sea grass and coral die-offs, and result in harm to the habitat of species that rely on the Florida Keys' waters for their survival, including federally protected corals and sea turtles which feed on sea grasses in the area.

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,...

41. The surface waters around Cudjoe Key are already near, at, or exceed the numeric nutrient criteria recently adopted for the Florida Keys by the State of Florida. Rule 62-302.532 F.A.C. contains numeric nutrient standards for the Florida Keys, Lower Keys waters:

(g) Florida Keys	Annual geometric means that shall not be exceeded more than once in a three year period		
<i>Estuary</i>	<i>Total Phosphorus</i>	<i>Total Nitrogen</i>	<i>Chlorophyll a</i>
1. Back Bay	0.009 mg/L	0.25 mg/L	0.3 µg/L
2. Backshelf	0.011 mg/L	0.23 mg/L	0.7 µg/L
3. Lower Keys	0.008 mg/L	0.21 mg/L	0.3 µg/L
4. Marquesas	0.008 mg/L	0.21 mg/L	0.6 µg/L
5. Middle Keys	0.007 mg/L	0.22 mg/L	0.3 µg/L
6. Oceanside	0.007 mg/L	0.17 mg/L	0.3 µg/L
6. Oceanside	0.007 mg/L	0.17 mg/L	0.3 µg/L
7. Upper Keys	0.007 mg/L	0.18 mg/L	0.2 µg/L

42. Even slight increases in reactive forms of N and P can initiate harmful algal blooms in the shallow low nutrient waters of the Florida Keys. The discharge of effluent in large quantities carrying additional amounts of TN and TP up to an average of **3 mg/liter of TN and 1 mg/liter of TP** in the Cudjoe effluent will further degrade these waters, and cause or contribute to harmful algal blooms, eutrophication, violations of Florida DEP narrative and numeric nutrient standards, and contribute to violation of water quality standards, and impairment of the use of and the further degradation of the Outstanding Florida Waters.

43. The effluent will violate Surface Water Quality Criteria set forth in 62-302.530 including the narrative criteria for nutrients.

62-302.530 (47) (b) “Nutrients. In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna.”

44. The proposed agency action permitting the disposal of effluent into the four (4) shallow injection wells will also violate Section 62-602.302 F.A.C, which states, in pertinent part:

(13) The Department finds that excessive nutrients (total nitrogen and total phosphorus) constitute one of the most severe water quality problems facing the State. It shall be the Department’s policy to limit the introduction of man-induced nutrients into waters of the State. Particular consideration shall be given to the protection from further nutrient enrichment of waters which are presently high in nutrient concentrations or sensitive to further nutrient concentrations and sensitive to further nutrient loadings. Also, particular consideration shall be given to the protection from nutrient enrichment of those waters presently containing very low nutrient concentrations: less than 0.3 milligrams per liter total nitrogen or less than 0.04 milligrams per liter total phosphorus.

(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.

(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.

45. The proposed agency action permitting the disposal of effluent into the four (4) shallow injection wells will cause or contribute to existing water quality violations and will reduce the quality of the receiving waters of Cudjoe Basin.

46. The Florida Legislature requires that DEP prevent any discharge which will cause or contribute to violations of state water quality standards, even if the discharge is otherwise in compliance with the wastewater subsection of the Chapter 403, under Section 403.086 (10) (h), Florida Statutes, which provides:

“If it is demonstrated that a discharge, even if the discharge is otherwise in compliance with this subsection, will cause or contribute to a violation of state water quality standards, the department shall:

1. Require more stringent effluent limitations;
2. Order the point or method of discharge changed;
3. Limit the duration or volume of the discharge; or
4. Prohibit the discharge.”

47. The Florida legislature has clearly directed DEP to protect Florida waters from further degradation under Section 403.086 (10) (h) 2. The Department should “order the point or method of discharge changed” to require a deep well to avoid the further degradation of Outstanding Florida Waters and to prevent the wastewater plant’s effluent from causing or contributing to the violation of state water quality standards.

**THE PROPOSED ACTIVITY WILL VIOLATE FLA. STAT. §403.086(10)(e)(2):
(DEEP WELL REQUIRED)**

48. Petitioners assert that the Plant’s design capacity is in excess of 1 mgd. The 0.94 mgd average annual daily flow (AADF) contained in FKAA’s revised application submitted June 16, 2014 is the permitted capacity of the plant, not the design capacity.

The FKAA’s engineers stated that a maximum daily flow of 2.35 mgd was used to size and design the Plant in the following documents:

“All facilities and flows downstream of the equalization system will be designed for 2.35 mgd...” Black and Veatch Technical Memorandum, Influent Design Basis; Issued November 13, 2008; Latest Revision April 15, 2009. p.1. Submitted with original Permit Application.

“B&V [Black and Veatch] recommends sizing the EQ tanks such that the maximum downstream flow rate is limited to the design peak day flow of 2.35 mgd.” Supra, p. 2.

FDEP stated that the maximum flow leaving the plant will be 2.35 mgd and therefore will require “*deep well injection in accordance with the Chapter 99-395⁶*” and “*most shallow wells in the Florida Keys are only operational when the tide is receding. FDEP cited several plants with shallow wells that do not work.*” Black and Veatch, Meeting Memorandum, December 22, 2008. Submitted with original Permit Application.

A design capacity which properly accounts for flows used to size and design the plant, using sound engineering practices, reflects a design capacity for this Plant in excess of 1mgd.

49. A deep well is required under Florida law. Florida Statute 403.086(10) (e) (2) states, in pertinent part:

“... if the design capacity of the facility is equal to or greater than 1 million gallons per day, each primary injection well must be cased to a minimum depth of 2,000 feet or to such greater depth as may be required by department rule.”

50. Department rule Section 62-600.200, FAC defines design capacity as follows:

62-600.200 (19) “Design capacity” means the average daily flow *projected for the design year* which *serves as the basis for the sizing and design* of the wastewater facilities. The design capacity is established by the permit applicant. The time frame associated with the design capacity (e.g., **annual average daily flow⁷**, maximum monthly average daily flow, **three-month average daily flow⁸**) shall be specified by the permit applicant. (emphasis added)

51. The FKAA has repeatedly stated that the design capacity of the Plant is 1.07 mgd TMADF. Because the design capacity of the Plant is more than 1 million gallons per day, the proposed agency action permitting the disposal of effluent into the four (4) shallow injection wells will violate Florida Statute Section 403.086(10)(e)(2), which requires a deep well, regardless of the showing of water quality impairment.

52. The Application filed by FKAA in September, 2009, upon which the proposed permit is based, stated that the Cudjoe Plant design capacity is 1.07 mgd TMADF. Exhibit A, Page 2-A3 of the Application states:

⁶ Chapter 99-395 Laws of Florida, which has been codified as Fla. Stat. §403.086(10)(e)2.

⁷ **Annual Average Daily Flow** is denoted as (“AADF”)

⁸ **Three Month Average Daily Flow** is denoted as (“TMADF”)

7. Reclaimed Water Reuse and Effluent Disposal

Method of Reuse or Disposal	Number of Reuse or Disposal Points	Total Design Capacity (mgd)	Basis of Design Flow
Surface Waters - Excluding Ocean Outfalls and Wetlands (Rule 62-600.510, F.A.C.)			
Ocean Outfalls (Rule 62-600.520, F.A.C.)			
Wetlands (Rule 62-600.620, F.A.C.)			
Reuse of Reclaimed Water and Land Application (Rule 62-600.530, F.A.C.)			
Ground Water Disposal by Underground Injection (Rule 62-600.540, F.A.C.)	4	1.07 (0.84 Permitted)	Three-Month Average Daily Flow (TMADF)
Other (Describe)			
Total	4	1.07 (0.84 Permitted)	TMADF

53. FCAA again states the design capacity is 1.07mgd TMADF on Page 2-A6 of the Application:

SECTION 2. TREATMENT FACILITY DESCRIPTION

1. Flow

a. Design Capacity

Current Design Capacity	0	mgd
Proposed Incremental Design Capacity	+1.07 (0.84 Permitted)	mgd
Proposed Total Design Capacity	=1.07 (0.84 Permitted)	mgd

b. Basis of Design Flow

- Annual Average Daily Flow
- Maximum Monthly Average Daily Flow
- Three-Month Average Daily Flow
- Other. If other, specify.

	Two Years Ago	Last Year	This Year	
c. Annual Average Daily Flow Rate	N/A	N/A	N/A	mgd
d. Maximum Daily Flow Rate	N/A	N/A	N/A	mgd

54. And, again in the Application, Exhibit A, Page 2A-21 states:

4. Design Capacity of the Underground Injection Well Facility

Current Design Capacity	0.000	mgd
Proposed Incremental Design Capacity	+ 1.07	mgd
Proposed Total Design Capacity	= 1.07	mgd

5. Basis of Design Flow

- Annual Average Daily Flow
- Maximum Monthly Average Daily Flow
- Three-Month Average Daily Flow
- Other

If other, specify. **The requested permitted capacity of the underground injection well facilities is 0.84 mgd TMADF.**

55. On March 20, 2014, in its permit Renewal Application for the proposed permit, FKAA again stated that the design capacity for the Plant and for the four injection wells was 1.07 TMADF (permit capacity .84 mgd) Exhibit C, Pages 2A-3, 2A-6, and 2A-21.

56. In the Renewal Application, FKAA stated in Exhibit C, cover letter:

“The proposed facility remains as the previously permitted 0.84 three month average daily flow (TMADF) plant for the first 5 year permit cycle (starting with this renewal) which will allow the flows to be assessed based on observed operating conditions. Under these conditions (<1.0 mgd), the permitted shallow injection wells will continue to be acceptable for disposal of advanced treatment effluent under FL Chapter 99-395.”

57. On April 7, 2014, DEP filed a Request for Additional Information (RAI), indicating that well permit applications were missing from the Renewal Application. Exhibit C1.

58. On May 7, 2014, in response to this RAI, FKAA filed an additional new Form 2A and new well permit applications, relying, in part, on the earlier application. No additional calculations, drawings, data, analysis or supporting information was supplied regarding the design capacity. Exhibit C2.

59. On May 29, 2014, the Department sent FKAA another RAI for the permit renewal application, Exhibit C3, which stated:

“Refer to the Section 3C, item 4, on page 2A-21 of the Form 2A: The 0.94 MGD mentioned in each of the four Forms 62-528.900(1) that were provided on May 7, 2014, does not agree with the 1.07 MGD. Please clarify the design capacity. If the design capacity of the facility is equal to or greater than 1 million gallons per day, each primary injection well must be cased to a minimum depth of 2,000 feet or to such greater depth as may be required by department rule. [§403.086(10) (e), F.S.]”

60. On June 16, 2014, FKAA filed a letter from its engineer with new Form 2-A submissions which replaced the stated design capacity of 1.07 TMADF with the permitted capacity of 0.94 mgd AADF. Applicant’s engineer stated it was removing any reference to the 1.07 mgd TMADF design capacity because:

“The 1.07MGD referred to in Form 2A of both the original permit application and the Form2A submitted with the response to RAI#1 refers to the 3 Month Average Annual Daily Flow (TMAADF) [*sic*⁹] for the design condition in 2028. The .94MGD is the Average Annual Daily Flow (AADF) the plant (and the wells) are **being permitted for**. The Form2A submitted with this response has been change [*sic*¹⁰] to reflect only the .94MGD AADF figure.” (emphasis added) Exhibit C4.

61. Although form 2.A requested and Applicant describes the .94 AADF as design capacity, Applicant’s engineer points out in its cover letter that .94 AADF is in fact the permitted capacity. Exhibit C4.

62. The “design condition” in 2028 referred to by the Applicant’s Engineer, above, is the basis, or design year, for the design capacity. Exhibit C4.

63. No design changes were made, none of the calculations were redone or recalculated, none of the analysis was changed, and no new information was submitted to support any contention by Applicant that there had been a reduction in **design capacity** from 1.07mgd to 0.94 mgd.

64. The 1.07mgd TMADF design capacity designation on Form 2A was simply re-labeled a .94mgd AADF design capacity, but then qualified in the cover letter above to indicate that .94mgd AADF was the **permitted capacity**. See also, Exhibit E. (Letter dated 7-3-14 from FCAA General Counsel “...design capacity has not changed since construction of the facility was permitted and began construction....”).

65. FCAA altered the DEP Form 2A by submitting what it acknowledges is the *permitted capacity* instead of the **design capacity**, and failed to note this in the Section 2A submittal, although acknowledging the *permitted capacity* of .94mgd in the cover letter.

66. The Applicant has stated numerous times that the design capacity of the Plant is 1.07mgd TMADF, which is in excess of 1mgd, (i.e., 1.07 mgd TMADF), and even though the permitted capacity is now .94 mgd AADF, the requirement for a deep well under Florida law is triggered by the design capacity in excess of 1 mgd TMADF.

67. It is clear that **permit capacity** is not relevant to the issue of the Section 403.086(10) (e) (2)’s statutory trigger which requires a deep well for this facility which has a **design capacity**, (not permitted capacity) of 1mgd or greater (i.e., 1.07 mgd TMADF). “Permitted capacity” is defined by Rule 62-600.200 F.A.C., which states:

“Rule 62-600.200 (62) “**Permitted capacity**” means the treatment capacity for which a plant is approved by Department permit expressed in units of mgd. The permit shall specify the time frame associated with the permitted capacity (e.g., annual average daily flow, maximum monthly average daily flow, three-month average daily flow).”

⁹ *Sic* The word “is” is missing from the sentence.

¹⁰ *Sic* The letter “d” is missing from the word.

68. With regard to design capacity, Section 11.241.a. of the *Recommended Standards for Wastewater Facilities*, (RSWF) Rule 62-604.300 (g)¹¹ F.A.C. require that plants in areas of seasonal higher loads be designed for the high flow period rather than the annual average.
69. Rule 62-600.400(3)(a), F.A.C.¹² requires that “[T]he time frame selected shall reflect seasonal variations in flow, if any.”
70. The AADF (average annual daily flow) used in the Application does not reflect the seasonal variations of the Florida Keys.
71. The AADF obscures the highest and lowest daily flow during any given year and does not reflect seasonal variations in flows.
72. All flows for the design year that reflect seasonal variations (e.g., the 3 month average daily flow, maximum monthly flow and peak daily flow) are in excess of 1 mgd.
73. Use of an Average Daily Flow (ADF) which reflects the seasonal variations as required by DEP rules, yields a higher and more accurate design capacity in the design year.
74. The design year is the basis for sizing and design of the wastewater facility.
75. The 2009 flow calculations were projected to the design year of 2028. The Applicant’s design year remains 2028 in the 2014 application.
76. Use of Average Annual Daily Flow (AADF) does not “reflect seasonal variations in flows.” See, Rule 62-600.400(3)(a), F.A.C.
77. Use of Average Annual Daily Flow (AADF) was previously rejected, as the design capacity by the Applicant’s engineers See, Basis for Sizing and Design of Cudjoe Regional.
78. The flow calculations upon which the Plant design capacity was calculated in 2008 are based on now out-dated data.
79. The Applicant did not use the most current, best available data to calculate design capacity.
80. Actual current data regarding water use from 2008 through 2014 is available and should have been used for those years in which actual data is now available for the 2014 permit application. See Rule 62-600.405 F.A.C.

¹¹ (g) Recommended Standards for Wastewater Facilities (1997). Health Education Service, Inc., P. O. Box 7126, Albany, New York 12224, www.hes.org.

¹² (3) (a) The permittee shall establish the **design capacity** of a wastewater facility in the permit application and shall specify the time frame (e.g., annual average daily flow, maximum monthly average daily flow, three-month average daily flow). **The time frame selected shall reflect seasonal variations in flows, if any.**

81. The 2014 application does not reflect any adjustment to the average daily flow or any other calculations used to calculating design capacity. The Applicant specifically stated in its permit renewal application submitted under cover letter dated March 17, 2014:

“All supporting documentation required by Section 8 is the same as the original permit submittal and is not provided again.”

82. The Application relied on water use information from 2004 through 2007 for the service area as it was then defined. The 2014 Application should have used the best available data available at the time of permit renewal including actual data from 2008 to 2014.

83. The proposed permit requires the Applicant to apply for a Class V deep well permit when the capacity analysis report indicates that flow to the facility will exceed 1.0 MGD TMADF within five years. The Department has no authority to delay the statutory deep well requirement when the design capacity is more than 1 mgd. Florida Statute § 403.086(10) (e) (2) states, in pertinent part:

“... if the design capacity of the facility is equal to or greater than 1 million gallons per day, each primary injection well must be cased to a minimum depth of 2,000 feet or to such greater depth as may be required by department rule.”

84. In 2009 FKAA’s engineer projected that the level of flow will exceed 1 mgd by 2016. (Black and Veatch Technical Memorandum, page 6).

85. The plant is expected to be operational within 1-2 years. It is anticipated that it will take up to two (2) years for residents and users to connect to the central sewer.

86. According to *Recommended Standards for Wastewater Facilities*, *supra*, the Plant must be designed to handle “critical seasonal high hydraulic loading periods,” peak day flows, and peak hour flows, and Black & Veatch Engineering (B&V) “recommends sizing the EQ (equalization tanks) such that the maximum downstream flow rate is limited to the design peak day flow of 2.35 mgd.” Exhibit A, Page 2-1.

87. The design capacity must be based on accurate, realistic data and projections for the design year.

88. The sizing and design of the Plant must reflect the actual design capacity of the Plant.

89. The design capacity is established by the Applicant. Although the Applicant can build a larger or smaller plant, the Applicant cannot state a design capacity that does not reflect the true design capacity of the Plant and avoid the deep well requirement of §403.086(10)(e)(2), Florida Statutes.

a. Rule 62-600.200 (19) states:

62-600.200 (19) “Design capacity” means the average daily flow projected for the design

year which serves as the basis for the sizing and design of the wastewater facilities. The design capacity is established by the permit applicant. The time frame associated with the design capacity (e.g., annual average daily flow, maximum monthly average daily flow, three-month average daily flow) shall be specified by the permit applicant. (emphasis added).

- b. The Rule does not allow DEP, and the statute does not authorize DEP, to simply accept FKAA's statement that the design capacity is less than 1 mgd when Florida Statute § 403.086(10) (e) (2) requires that:

“... if the design capacity of the facility is equal to or greater than 1 million gallons per day, each primary injection well must be cased to a minimum depth of 2,000 feet or to such greater depth as may be required by department rule.”

- c. This statutory requirement for a deep well for injection of effluent equal to or greater than 1 mgd effluent was imposed by the Legislature and applies to Monroe County in order to protect the quality of the coastal environment of the Florida Keys.
- d. The Legislature found that: “the discharge of inadequately treated and managed domestic wastewater ...in the Florida Keys compromises the quality of the coastal environment, including nearshore and off shore waters, and threatens the quality of life and local economies that depend on those resources.” F.S. 403.086 (10).
- e. FKAA should not attempt to avoid the important requirements of § 403.086(10) (e) (2), which was intended by the Florida Legislature to protect the Florida Keys coastal environment.

90. The FKAA chose to size and design the plant to treat wastewater for the service area and the Plant is capable of treating and creating average daily flow “equal to or greater than 1 million gallons per day, each primary injection well must be cased to a minimum depth of 2,000 feet or to such greater depth as may be required by department rule.”.

91. Despite FKAA's obvious number-switching of the design capacity as the permitted capacity with no commensurate design changes, the Plant is designed and sized for more than 1mgd, and a deep well is required by 403.086(10) (e) (2), Florida Statutes.

92. The Department initially issued a permit for the Plant, including the four (4) shallow injection wells, on September 21, 2009, but there had been no compliance by FKAA with Department regulations requiring public notice of the proposed permit in Monroe County, and instead the publication of the notice of intent was placed in the Sun Sentinel, published in Broward, Palm Beach, Lee and Dade Counties. Exhibit G. The previous publication in 2009 violated Department rules regarding geographical location of the publication of notice contained in Rule 62-110.106(5) and (11) FAC. The practical effect of this violation was that few, if any, of the residents in the service area affected by the Cudjoe Regional Plant and its shallow injection wells were aware of the permit until 2014, when FKAA filed the Application for Renewal of the 5 year permit.

93. DEP and FKAA had discussed the requirement for a deep well in a pre-application meeting in December 2008. DEP stated that a deep well was required because of the volume of discharge for which the Plant was designed, including a 2.35 mgd peak day flow, and because DEP was concerned about impacts of shallow injection wells in the Florida Keys, because they frequently “don’t work.” FKAA contended, inaccurately,¹³ that if the facility were permitted for 0.84 mgd three month, maximum month average daily flow (TMMADF), shallow injection wells could be used rather than a deep injection well. DEP apparently agreed, with the proviso that when flow reached 1mgd, FKAA would apply for a deep well, and that environmental monitoring would be required. This agreement was filed by FKAA as a cover attachment to the application package. Exhibit A, meeting memorandum.

B&V distributed two technical memorandums outlining the anticipated flows and loads to the new WWTP. B&V stated that based on the flows and loads study by Brown and Caldwell, the plant design capacity will be 0.94 mgd, average annual flow.

FDEP stated that based on the memorandum the maximum flow leaving the plant will be 2.35 mgd and therefore will require deep well injection in accordance with the Chapter 99-395. B&V responded that Chapter 99-395 requires the design capacity to be greater than 1.0 million gallons in order to require deep wells for effluent disposal. FDEP responded and stated that most shallow wells in the Florida Keys are only operational when the tide is receding. FDEP cited several plants with shallow wells that do not work. After a lengthy discussion over deep wells versus shallow wells, the following was concluded:

- The FDEP would permit the facility on a 3-month, max month, rolling average.
- FKAA would build the plant to treat 0.94 mgd ADF with shallow injection wells and permit the plant for a lesser capacity such that the 3-month, max month rolling average would not exceed 1.0 mgd.
- A single deep well would be constructed if the 3-month, max month rolling average is anticipated to exceed 1.0 mgd based on a Capacity Analysis Report. The shallow wells built during the initial plant construction will be utilized as a backup to the deep well.
- The permit for the shallow wells will include special provisions for operational monitoring to confirm that no adverse environmental impacts are occurring.

94. Two different draft permits were issued on August 11, 2009. Each permit was slightly different from the other, although dated the same day, but both contained a maximum daily disposal limit of 0.94 mgd for the four shallow injection wells:

“Underground Injection U-01: Construct four, (4), nominal ten-inch, (10”) diameter, PVC casing, class V, Group 3, injection wells 295404-001, 002, 003 and 004. Injection is into the Key Largo and Miami Oolite Formations for the primary means of disposal of non-hazardous advanced treated domestic wastewater treatment facility effluent from the

¹³ Permitted capacity is irrelevant to the statutory requirement for a deep well, which is governed by design capacity.

WWTP to the existing injection wells **for a maximum daily disposal of 0.94 million gallons per day (MGD)**. The maximum injection rate to each well shall not exceed a peak hourly flow rate of 653.0 gallons per minute.” Exhibit H.

95. FCAA requested DEP to increase the draft permit effluent disposal limit for the shallow wells, but further communication with DEP District Office did not result in an increased maximum daily discharge limit in the draft permit(s).

96. On August 21, 2009, FCAA published the DEP’s notice of intent to issue permit –which at that point had a maximum daily disposal limit of .94mgd -erroneously describing it as “.84mgd of effluent” and also failing to publish it in Monroe County, where the Plant is sited. Exhibit G.

97. Five days later, FCAA notified DEP General Counsel that it would file a request for administrative hearing. Exhibit I. The final permit was issued less than thirty days later with no maximum daily effluent limitation. The language in the draft permit which stated “for a maximum daily disposal of 0.94 million gallons per day (MGD)” was deleted and replaced with language allowing **each well** to dispose of 0.94 million gallons per day (MGD) “The peak disposal rate, per well, shall be 0.94 million gallons per day (MDG) or 653 gallons per minute (gpm).”

98. No public notice of these significant changes that occurred after the inadequate publication of the original notice was provided.

99. The 2014 Proposed Notice of Agency Action and Draft Permit were uploaded by DEP on or about July 14, 2014, however the date of publication pursuant to Rule 62-110.106(5) and (11) FAC is unknown to undersigned as of the date of filing.

SPECIFIC STATUTES & RULES
WARRANTING MODIFICATION OR REVERSAL

Florida Statutes, Sections:

403.061(27);
403.086 (10)
403.086(10) (e2);
403.086 (10) (h)

Florida Administrative Code Sections:

62-110.106(7);
62-4.242 (2) and (3);
62-302.532;
62-302.700;
62-510 (18);
62-520.400;
62-528.630;
62-600.200;
62-600.300;
62-600.400(3)(a)
62-620.550 (1) and (2);
62- 620.528;
62-620.620(1) (g);
62-110.106 (5);
62-110.106 (11), FAC

All other rules or statutes cited in this petition.

REQUEST FOR RELIEF

Petitioners respectfully request that the Department deny or modify the proposed permit to require FKAA to apply for a deep well permit as soon as possible based on design capacity in order to protect the coastal environment of the Florida Keys, and to proceed to permitting, construction of the deep injection well without delay; or that the Department transmit the Petition to the Division of Administrative Hearings (DOAH) for a Formal Administrative Hearing held by a DOAH Administrative Judge on the disputed issues of fact and law and that the DOAH ALJ enter a Recommended Order recommending modification of the permit to require FKAA to utilize a deep injection well or recommending denial of the permit and that DEP issue a Final Order modifying or denying the Application.

Certificate of Service

I certify that the foregoing petition requesting a formal administrative hearing has been FILED on Friday July 25, 2014 with the Department of Environmental Protection (DEP), DEP Agency Clerk Lea Crandall 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399 Phone: (850) 245-2212 and was

FILED ELECTRONICALLY: Lea.crandall@dep.state.fl.us

FILED BY FAX: (850) 245-2303

/s/ Ralf Brookes Attorney
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VERIFICATION

STATE OF FLORIDA
COUNTY OF MONROE

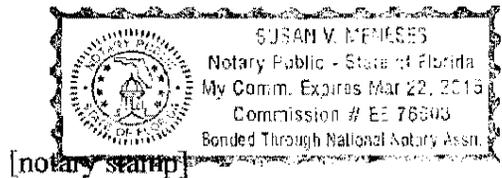
Under penalties of perjury, I declare that the following is true based upon my personal knowledge:

I, **Don DeMaria**, have read the foregoing Petition for Formal Administrative Hearing ("Petition"), have authorized the filing of the Petition and based upon reasonable inquiry, believe it is not interposed for any improper purposes, such as to harass or to cause unnecessary delay, or for frivolous purpose or needless increase in the cost of litigation and based upon my personal knowledge and reliance on expert opinions the activity, conduct, or product to be licensed or permitted, including the shallow well injection of effluent (FDEP DRAFT PERMIT #: FLA671932-003DWIP UIC PERMIT # FLA671932-001, 295404-005-DWC/CM, and 0067347-003-SQ) will have the effect of impairing, polluting, or otherwise injuring the water and natural resources of the State of Florida


Don DeMaria

NOTARY PUBLIC

As sworn and subscribed before me this 22 day of, 2014 by **Don DeMaria** who is either personally known to me _____ or produced Identification _____, Type of Identification Produced _____.



By 
Notary Public
State of Florida
County of Monroe

VERIFICATION

STATE OF FLORIDA
COUNTY OF MONROE

Under penalties of perjury, I declare that the following is true based upon my personal knowledge:

I, **Mike Laudicina**, have read the foregoing Petition for Formal Administrative Hearing ("Petition"), have authorized the filing of the Petition and based upon reasonable inquiry, believe it is not interposed for any improper purposes, such as to harass or to cause unnecessary delay, or for frivolous purpose or needless increase in the cost of litigation and based upon my personal knowledge and reliance on expert opinions the **activity, conduct, or product to be licensed or permitted, including the shallow well injection of effluent (FDEP DRAFT PERMIT #: FLA671932-003DWIP UIC PERMIT # FLA671932-001, 295404-005-DWC/CM, and 0067347-003-SQ) will have the effect of impairing, polluting, or otherwise injuring the water and natural resources of the State of Florida**

Mike Laudicina
Mike Laudicina

NOTARY PUBLIC

As sworn and subscribed before me this day of 22nd ^{July}, 2014 by **Mike Laudicina** who is either personally known to me or produced Identification _____, Type of Identification Produced _____.

Sheila Cantler
Notary Public - State of Florida
Commission #EE152071
My Commission Expires Dec. 8, 2015
(notary stamp)

By: *Sheila Cantler*
Notary Public
State of Florida
County of Monroe

EXPERT'S VERIFICATION & AFFIDAVIT

STATE OF VERMONT

COUNTY OF Washington

Under penalties of perjury, I declare that the following is true based upon my personal knowledge: I, Donald Maynard, M.S., P.G., P.E., have read the foregoing petition concerning: **DEP FILE NO.: FLA671932-003-DW1P, DEP PROPOSED PERMIT #: FLA671932-003-DWIP**; DEP UIC PERMIT # 295404-020, 021, 022, 023; (prior DEP No. FLA671932-001, 295404-005-DWC/CM, 295404-001, 002, 003, and 004; 0067347-003-SQ) and it is my expert opinion as an environmental engineer and hydrogeologist that the activity and conduct to be permitted is based upon out-dated and/or incorrect flow estimates, and that the effluent disposed into the shallow injection wells will migrate to the surface waters of the adjacent Outstanding Florida Waters and the Florida Keys National Marine Sanctuary.

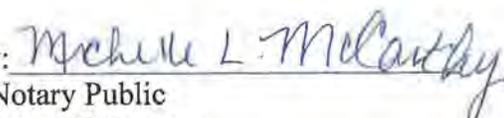


NOTARY PUBLIC

As sworn and subscribed before me this 25 day of July, 2014 by

Donald M. Maynard [affiant] who is personally known to me.

[notary stamp]

By: 
Notary Public
State of Vermont
County of Washington

**EXPERT
VERIFICATION & AFFIDAVIT**

STATE OF FLORIDA

COUNTY OF MONROE

Under penalties of perjury, I declare that the following is true based upon my personal knowledge:

I, Brian Lapointe, Ph.D., have read the foregoing petition and in my expert opinion the **activity, conduct, or product to be licensed or permitted, including the shallow well injection of effluent (FDEP DRAFT PERMIT #: FLA671932-003DWIP UIC PERMIT # FLA671932-001, 295404-005-DWC/CM, and 0067347-003-SQ)** will have the effect of impairing, polluting, or otherwise injuring the water and natural resources of the State of Florida.

Brian Lapointe

NOTARY PUBLIC

As sworn and subscribed before me this 23rd day of July, 2014 by
Brian Lapointe [affiant] who is either personally known to me
or produced Identification, Type of Identification
Produced _____.

By: Mami Offutt
Notary Public
State of Florida
County of Monroe

[notary stamp]

