

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

IN RE:

**ESTABLISHMENT OF ALTERNATIVE
DISSOLVED OXYGEN CRITERIA IN A SEGMENT
OF THE FENHOLLOWAY RIVER, THE HENDERSON
RIVER, AND ADJACENT COASTAL WATERS**

OGC CASE NO. 05-1699

**FINAL ORDER
ESTABLISHING ALTERNATIVE DISSOLVED OXYGEN CRITERIA**

On May 25, 1995, the Department of Environmental Protection (Department) received a petition to establish a Site Specific Alternative Criteria (SSAC) pursuant to rule 62-302.800, F.A.C., from Buckeye Florida, L.P. (Buckeye). The petition requested a SSAC for dissolved oxygen (DO) at concentrations other than those required by rule 62-302.530(31), F.A.C., for a segment of the Fenholloway River, the Henderson River, and adjacent coastal waters located in Taylor County. The petition was requested to change the DO criteria to accurately reflect natural background conditions. Buckeye submitted this petition in association with the NPDES permit application for its industrial wastewater facility near Perry, Florida (Permit No. FL0000876). In September of 2003, Buckeye amended its petition and provided additional water quality information as described in the second finding below.

In its petition for a SSAC, the applicant requested a change to the water quality criterion for DO from that specified by rule 62-302.530(31), F.A.C., in a four mile segment of the Fenholloway River in Taylor County. The current Class III water quality DO criteria that apply to these predominantly marine waters are 4.0 mg/L (minimum) and 5.0 mg/L as a 24-hour average; both criteria apply year-round.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

Chapter 62-302 of the Florida Administration Code provides for the consideration of natural background DO levels when evaluating attainment of water quality standards. Specifically, Paragraph 62-302.500(2)(f), states that:

Notwithstanding the specific numerical criteria applicable to individual classes of water, dissolved oxygen levels that are attributable to natural background conditions or man-induced conditions which cannot be controlled or abated may be established as alternative dissolved oxygen

criteria for a water body or portion of a water body. Alternative dissolved oxygen criteria may be established by the Secretary or a Director of District Management in conjunction with the issuance of a permit or other Department action only after public notice and opportunity for public hearing. The determination of alternative criteria shall be based on consideration of the factors described in Rule 62-302.800(1)(a)1.-4., F.A.C. Alternative criteria shall not result in a lowering of dissolved oxygen levels in the water body, water body segment or any adjacent waters, and shall not violate the minimum criteria specified in Rule 62-302.500(1), F.A.C. Daily and seasonal fluctuations in dissolved oxygen levels shall be maintained.

The Department has determined that the establishment of Alternative Dissolved Oxygen Criteria (ADOC) under rule 62-302.500(2)(f), F.A.C., is more appropriate in this case than the establishment of a SSAC under rule 62-302.800, F.A.C. An ADOC is a type of SSAC and the issuance of an ADOC under rule 62-302.500(2)(f), F.A.C., must take into consideration the factors contained in rule 62-302.800(1)(a)1.- 4., F.A.C.

The Department intends to establish Alternative Dissolved Oxygen Criteria pursuant to the following findings:

1. The area requested for consideration in the SSAC petition was defined as a zone "that extends 2 miles upstream and 2 miles downstream of the outfall." The exact location of the area under consideration could not be better specified at the time of original submittal of the petition, as the request was based on preliminary computer modeling.

2. Water quality data presented to support the petition were collected at stations located in the nearby Econfina River basin. The Econfina River was selected for use as a surrogate system due to its similarity to the Fenholloway River with regard to drainage inputs, slope, and geographic location. The Fenholloway River could not be used due to the long-term presence of effluent discharged from the Buckeye facility. Two stations (E03, E06) lying within the tidal portion of the Econfina River are deemed by the Department to be cognate stations to those that would have been selected to evaluate the Fenholloway River. Stations E03 and E06 were intensively sampled for DO concentrations for the period June 29 through October 4, 1994. As part of the amended request, Buckeye submitted to the Department a second data set of datalogger DO measurements from stations E03, E06, E07, and E11 collected between March of 1999 and January of 2001.

3. The original petition requested that the SSAC be set on a seasonal basis. The requested SSAC (based on 1994 data) specified seasonal minimum values for DO of 2.6 mg/L (as a minimum) and 3.0 mg/L as a 24-hour average for the period April 1 through November 30. Cumulative frequency analyses conducted by the Department indicated that, were the proposed criteria currently applicable for this area, violations of the minimum criterion would be expected more than 50 percent of the time, for the period June 1 through September 30.

4. The Department's analyses support the conclusion that the lower DO concentrations in the Econfina River are caused by natural conditions. Rule 62-302.800, F.A.C., authorizes the Department to adopt alternative criteria for DO to reflect natural background conditions. The Department is required by this same rule to determine whether any evidence exists that man-induced sources are present that could be abated. The Department found no evidence that indicated man-induced sources of contamination that could be abated were going to the Econfina River. Forested and wetland land uses represent greater than 90% of both the upper and lower portions of the Econfina River basin. The Landscape Development Intensity (LDI) Index calculated for land use within 100 meter on either side of the freshwater portion of the Econfina River was 1.21 (natural system = 1.0, pine plantation = 1.6). The LDI consists of a coefficient between one and ten, with one indicative of natural land uses and ten indicative of very intense human-influenced land uses¹. The low LDI value of 1.21 reflects a natural, unimpacted system. Based on the 2000 census, the population density is less than 14 people per square mile. The freshwater portion of the Econfina River contains one of the State's biological reference stream sites used to establish the stream condition index (SCI) for macroinvertebrates.

5. The Department conducted statistical analyses on the 1994 and 1999 – 2001 data presented for stations E03 and E06 as uncontaminated surrogate stations representative of similar (but contaminated) stations (F03 and F06) in the Fenholloway River. Stations E07 and E11 were considered as uncontaminated surrogate stations representative of similarly located stations (F09 and F14) in the near coastal waters that are influenced by the Fenholloway River.

Alternative Dissolved Oxygen Criteria are established for the area described below subject to the following conditions:

1. The ADOC for DO described below shall not take effect until final issuance of the NPDES Permit for Buckeye, Permit No. FL0000876.

2. The ADOC for DO will apply to the Henderson River and that portion of the Fenholloway River that extends one quarter mile below (South of) Rivermile 0.0 within the coastal waters adjacent to the mouth of the Fenholloway River (a line which extends generally West to East from Big Grassy Island to the tip of the unnamed promontory which lies adjacent to the Fenholloway River mouth) upstream to Rivermile 3.5. In addition, the ADOC for DO shall apply to all coastal waters below the mean high water line that lie within the following described area: : Point A-29°59'12"N and 83°49'6"W, Point B-29°57'00"N and 83°49'6"W, Point C-29°55'24"N and 83°45'18"W, and Point D-29°56'9"N and 83°43'00"W. This area shall be referred to as the "Adjacent Coastal Waters."

3. Each year, for the period April 1 through September 30:

a. The ADOC for DO in the Fenholloway River and Henderson River shall not be less than 1.0 mg/l for more than 10% of the observations at all times and places, and the 24-hour average DO at any location within the described area shall not be less than 2.3 mg/L.

¹ Brown, M.T. and M.B. Vivas. 2004. Landscape Development Intensity Index. *Environmental Monitoring and Assessment*. Vol. 101, no. 1-3, pp. 289-309.

b. The ADOC for DO in the Adjacent Coastal Waters shall not be less than 1.7 mg/L for more than 10% of the observations at all times and all places, and the 24-hour average DO at any location within the described area shall not be less than 3.2 mg/L.

4. Each year, for the periods February 1 through March 31, and October 1 through November 30:

a. The ADOC for DO in the Fenholloway River and Henderson River shall not be less than 2.1 mg/L for more than 10% of the observations at all times and places, and the 24-hour average DO at any location within the described area shall not be less than 3.5 mg/L.

b. The ADOC for DO in the Adjacent Coastal Waters shall not be less than 3.4 mg/L for more than 10% of the observations at all times and places, and the 24-hour average DO at any location within the described area shall not be less than 5.0 mg/L.

5. Each year, for the period December 1 through January 31:

a. The ADOC for DO in the Fenholloway River and Henderson River shall not be less than 3.5 mg/l for more than 10% of the observations at all times and places, and the 24-hour average DO at any location within the described area shall not be less than 5.0 mg/L.

b. The ADOC for DO in the Adjacent Coastal Waters shall not be less than 4.0 mg/L for more than 10% of the observations at all times and all places, and the 24-hour average DO at any location within the described area shall not be less than 5.0 mg/L.

6. The DO concentration under extreme wet weather conditions shall not be depressed at any point in the downstream waters below Rivermile 3.5 more than 0.1 mg/L below that DO concentration measured at mid-depth at Rivermile 3.5. For purposes of this ADOC final order, extreme wet weather conditions shall be defined as flows in the Fenholloway River in excess of 500 cubic feet per second (cfs), as measured at Rivermile 3.5, and absent any contribution from the Buckeye facility effluent.

This provision shall apply in lieu of the ADOC described in paragraphs 3 through 5 above for a period beginning on the day the flow first exceeds 500 cfs and ends 10 days after the flow drops below 500 cfs. This provision shall apply at any time of year.

THEREFORE, IT IS ORDERED that:

The Alternative Dissolved Oxygen Criteria in a segment of the Fenholloway River, the Henderson River, and adjacent coastal waters are hereby established, subject to the above listed conditions.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a sufficient petition for an administrative hearing is timely filed under sections 120.569 and 120.57 of the Florida Statutes as provided below. If a sufficient petition for an administrative

hearing is timely filed, this intent to issue automatically becomes only proposed agency action on the application, subject to the result of the administrative review process. Therefore, on the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department.

Mediation is not available.

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received by the clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Under rule 62-110.106(4) of the Florida Administrative Code, a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon. If a request is filed late, the Department may still grant it upon a motion by the requesting party showing that the failure to file a request for an extension of time before the deadline was the result of excusable neglect.

If a timely and sufficient petition for an administrative hearing is filed, other persons whose substantial interests will be affected by the outcome of the administrative process have the right to petition to intervene in the proceeding. Intervention will be permitted only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-106.205 of the Florida Administrative Code.

In accordance with rules 28-106.111(2) and 62-110.106(3)(a)(4), petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under section 120.60(3) of the Florida Statutes, however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication.

The failure of any person to file a petition for an administrative hearing within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;

(c) A statement of when and how the petitioner received notice of the agency decision;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301 of the Florida Administrative Code. Under paragraphs 120.569(2)(c) and (d) of the Florida Statutes, a petition for administrative hearing must be dismissed by the agency if the petition does not substantially comply with the above requirements or is untimely filed.

This final order establishing alternative dissolved oxygen criteria constitutes an order of the Department. Subject to the provisions of paragraph 120.68(7)(a) of the Florida Statutes, which may require a remand for an administrative hearing, interested parties have the right to seek judicial review of the order under section 120.68 of the Florida Statutes, by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000; and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when the order is filed with the Clerk of the Department.

DONE AND ORDERED this 31st day of October, 2005.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



William C. Green
Acting District Director
Northeast District

FILED ON THIS DATE PURSUANT TO § 120.52,
FLORIDA STATUTES, WITH THE DESIGNATED
DEPARTMENT CLERK, RECEIPT OF WHICH IS
HEREBY ACKNOWLEDGED.

CLERK

DATE

Copies furnished to:

Elsa Potts, P.E., FDEP
Jerry Brooks, FDEP
Betsy Hewitt, FDEP OGC
Doug Beason, FDEP OGC
Stacey Cowley, FDEP OGC
Wayne Magley, FDEP
Eric Shaw, FDEP
Greg Knecht, FDEP
Ray Andreu, Buckeye (Ray_Andreu@BKITECH.COM)
Chet Thompson, Buckeye (Chet_Thompson@BKITECH.COM)
Dan Simmons, Buckeye (Dan_Simmons@BKITECH.COM)
EPA Region 4, Water Management Division, Surface Water Permits and Facilities Branch
(buff.virginia@epa.gov)
Karrie-Jo Shell, EPA Region 4 (Shell.Karrie-Jo@epamail.epa.gov)
Marshall Hyatt, EPA Region 4 (Hyatt.Marshall@epamail.epa.gov)
Drew Bartlett, EPA Region 4 (Bartlett.Andrew@epamail.epa.gov)
SRWMD, Executive Director, (Jerry Scarborough) (jerry.scarborough@srwmd.state.fl.us OR
district@srwmd.state.fl.us)

Florida Fish & Wildlife Conservation Commission (Attn: Director, Office of Environmental Services -Maryann Poole (maryann.poole@myfwc.com) ;Ron Mezich - Biological Scientist IV (ron.mezich@myfwc.com)
U.S. Fish & Wildlife Service, Jacksonville, Attn: Jim Valade (Jim_Valade@fws.gov)
District Engineer, U.S. Corps of Engineers - Jacksonville (John.R.Hall@saj02.usace.army.mil)
National Marine Fisheries Service - St. Petersburg (Attn: Eric Hawk) (eric.hawk@noaa.gov)
NMFS, Habitat Conservation: (NMFS.HCDPC@noaa.gov)
Florida Department of State, Division of Archives and History (Attn: Director Division of Historical Resources - Janet Synder Matthews) (c/o Scott Edwards) (sedwards@mail.dos.state.fl.us)
Florida Department of Community Affairs (Attn: Ray Eubanks)(ray.eubanks@dca.state.fl.us);
terri.stoutamire@dca.state.fl.us)
Linda Young, Clean Water Network, Southeast Regional Office (llyoung@igc.org)
Terry Cole (tcole@ohfc.com)