UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

In	the Matter of:)
	South Florida Water Management District)) NPDES Permit No. FL0043885) (Motion to Begin Discharges)

Supplemental Order Authorizing Interim Discharge

This order addresses the issues raised at the hearing held on August 22, 1994.¹ For the reasons stated below, the order authorizing interim discharge is modified to provide that the authority to discharge is conditioned upon the EPA issuing its decision on the requests for hearing by December 15, 1994.² The date for achieving compliance for non-phosphorous water quality standards is also modified to require compliance by August 15, 1996, subject to reconsideration if this authorization is still in effect at that time. In all other respects, the order remains unchanged.

Although the hearing was held for the purpose of considering whether the four changes to the permit requested by SFWMD should be included in the order, Friends and Tribe have also renewed their objections to allowing any discharge except in what they deem to be emergency situations. Farmers has concentrated its objection on

¹ The hearing was transcribed and references to the transcript are indicated by "Tr."

² See Tr. 113. It should be noted that the 30-day period prescribed by the rules for issuing a decision on the requests for a hearing, 40 C.F.R. §124.75, expired on July 14, 1994.

what they see are inadequacies in the permit's mercury monitoring conditions.

To put the objections in proper light, a brief restatement of the factual background as disclosed in the papers before me seems in order.

The reduction of phosphorous in the water discharging into the Arthur R. Marshall Loxahatchee National Wildlife Refuge ("Refuge") and the Everglades has been approved by Statute and by a courtapproved consent decree.³ The phosphorous-enriched water comes from waters flowing from the Everglades Agricultural Area ("EAA"). These waters flow into the Refuge ("Refuge") and the Everglades National Park. The program for reducing the phosphorous is to route the coming from the EAA through artificially constructed water wetlands, or marshes, which will process and remove phosphorous from the water. The program is ambitious and is estimated to cost about \$470 million.⁴ The Everglades Nutrient Removal Project ("ENR"), the NPDES permit for which is at issue here, is a pilot artificially constructed wetlands designed to reduce phosphorous through natural processes. The project will through associated research and monitoring provide technological information on how these artificially constructed marshes will actually work under the conditions present in the Everglades area. The waters from the ENR

³ The Everglades Forever Act, Fl. Stat. section 373.4592 (1991); <u>United States v. South Florida Water Management District</u>, 847 F.Supp. 1567 (S.D. Fla. 1992), <u>aff'd in part and rev'd in part</u> and remanded, Nos. 92-4314 and 92-4831 (11th Cir. Aug 23, 1994).

⁴ Farmer's Reply to Agencies' Responses to Farmer's Proposed Mercury Monitoring Conditions, Exhibit J.

will be discharged into the Refuge.

In its application for an early discharge order, SFWMD has contended that the discharge will not result in any increase in pollutants but only in a reduction in the concentration of phosphorous in the water flowing into the Refuge, which is surely a desirable goal. Unfortunately, the issues with respect to the discharge are not that simple, as the objections of the parties make clear. The artificially constructed marsh will attract birds and other wildlife with possible undesirable environmental effects. The Project is also being constructed on former agricultural land, the soil of which can interact with the water as it flows through the marsh (which will take about 28 days) in the course of which pollutants can be added. Finally, the marsh itself will require the application of pesticides to assist the growth of desirable wetland vegetation and control the growth of undesirable vegetation.

Although the hearing was held to consider specifically the four changes to the permit suggested by the EPA, which SFWMD has requested be included in the order authorizing discharge, Farmers has raised a more fundamental question going to the very concept of the entire project, namely, the consequences of reducing the phosphorous in the water upon the presence of mercury in the biota in the Everglades. Farmers has come forward with evidence indicating that reduction of phosphorous could lead to an increase in the presence of mercury in the biota, and contends that the monitoring conditions in the permit are not adequate to guard against this occurring.

As written, the permit does require monthly analysis of mercury and methyl mercury at sample stations at the inflow pump, the outflow pump and at the L-7 Borrow canal upstream from the outflow pump.⁵ It also requires the permittee to develop and implement a mercury monitoring program that will measure mercury changes within the ENR such as the trends in body burdens of resident fish and shellfish within the first two years of operation, 28-day bioaccumulation within the first two years of operation, the mass balance of mercury species, mercury concentration and accumulation in the sediment and atmospheric mercury.

The presence of excess mercury in the biota in the Everglades has been a problem notwithstanding the discharge of the phosphorous-enriched waters.⁶ There does appear to be respectable scientific authority attesting to the fact that the presence of methylated mercury can be affected by the phosphorous content of the water under certain conditions. Thus, Farmers' claim is really that the reduction of phosphorous in the water discharged from the ENR could aggravate the problem that is already present. The monitoring conditions in the permit have approached the mercury problem by various mercury studies within the ENR. That the reduced phosphorous content of the discharged water will cause irreparable harm by creating an environment downstream from the discharge

⁵ Permit, ¶¶ A.1. and 15.

⁶ See Fla. DEP Permit No. 502232569, issued Feb. 18, 1994, ¶13.

favorable to increased mercury bioaccumulation is a hypothesis still to be tested. I cannot on this record conclude that the study significantly contribute to the Farmers will proposed by information about the effects of the discharge on the presence of mercury in the downstream biota over and above what will be obtained from the monitoring required by the permit, as well as by the other research being conducted by state and federal agencies on mercury in the Everglades. It short, it does appear from the record before me that requiring the monitoring proposed by Farmers will obligate SFWMD to expend monies on a monitoring program that in the permit proceedings is likely to be found to yield information of questionable or only marginal usefulness. I agree, therefore, that it would not be appropriate to include in the order the mercury study that Farmers contend should be made.⁷

With respect to the four changes proposed by SFWMD for inclusion in the early discharge order, Friends and Tribe have both renewed their objection to my authority to authorize these changes. These changes have been raised by SFWMD as objections to specific terms of the permit and for which it has requested an evidentiary hearing. The order entered herein does not make any changes in the permit but provides only for interim discharge during the pendency of the proceedings upon the requests for an evidentiary hearing,

⁷ The supplemental filing submitted by Farmers analyzing data obtained from the EPA's R-EMAP marsh transect sampling would seem to confirm the position taken by SFWMD and the EPA that the studies already being conducted will provide the information necessary to evaluate the relationship between the presence of mercury bioaccumulation and phosphorous in the water.

including any appeal to the Environmental Appeals Board either from an initial decision, if an evidentiary hearing is granted, or from a denial of the request for a hearing.⁸ The legislative history clearly supports my authority under \$124.60(a)(2) to include these changes in the discharge order, if I find it appropriate to do so.⁹

As to the specific changes, Friends objects to the elimination of the monitoring for fecal coliform. Fecal coliform can be present in animal waste, in this case coming from the wildlife that will be attracted to the marsh, but SFWMD argues that fecal coliform should not be of concern because humans are not likely to be exposed to the water.¹⁰

Friends argues that monitoring for fecal coliform is necessary, because its presence in a contained area such as the ENR will promote the growth of the deadly parasitic worm <u>Eustrongylides</u> <u>Ignotus</u>.¹¹ SFWMD and the EPA dispute this. The reason given by SFWMD for the change coupled with the evidence indicating that

⁹ 48 Fed. Reg. 39615 (Sept. 1, 1983).

¹⁰ Tr. 19-20,

¹¹ Tr. 20.

⁸ I agree with the EPA that my authority under 40 C.F.R. \$124.60(a)(2) extends only to the question of whether to authorize or not authorize the discharge pending the completion of proceedings applicable to requests for evidentiary hearings. I would be improperly intruding on matters delegated to the discretion of the Regional Administrator, if I were to direct that the permit be withdrawn, thereby, presumably, removing the issues from any further consideration in connection with the evidentiary hearing request. How the authorization to discharge will be affected if the Regional Administrator does withdraw the permit as provided in 40 C.F.R. \$124.60(b), is a matter on which the parties will be given the opportunity to be heard, if the Regional Administrator decides to pursue that route.

fecal coliform will not promote the growth of Eustrongylides in the ENR so as to endanger wildlife persuades me that it is more probable than not that this change will be included in the final permit and that during the interim period that this order is in effect, no irreparable harm is likely to result from the deletion of the fecal coliform monitoring requirement.¹²

With respect to the changes relating to the limits and concentration levels for phosphorus requested by SFWMD, SFWMD asserts that these changes are necessary to bring the permit in conformance with the Everglades Act and the Florida DEP permit. The inclusion of these changes in the interim authorization is not opposed by the EPA and the Florida DEP. The reason given for the changes make it likely that they will be included in the final permit. There is no evidence that allowing these changes is likely to result in irreparable harm to the environment while the permit proceedings are pending.

Another change requested has to do with the compliance period for non-phosphorous water quality parameters. It seems to be accepted that it will take two to three years for the project to stabilize. Consequently, within that period it will not be known for sure how successful this marsh treatment method will be in reducing phosphorous or whether there could not be pollutants added to the outflow. The preponderance of the evidence before me indicates that at the present time the discharge is not likely to add pollutants that will cause irreparable harm to the waters into

 12 See EPA's reply dated July 20, 1994, at 35-37.

which the discharge flows, but this is no assurance that this will continue to be the case as further evidence about the discharge is obtained. The monitoring reports, however, should disclose any increase in pollutants that could affect water quality standards. Aside from whatever reopening provisions are contained in the permit, itself, this order is always subject to reconsideration if data indicating that the discharge is likely to cause irreparable harm comes to light.¹³

A fourth change in the permit has to do with a change in measuring the differences between inflow and outflow data obtained from the monitoring required by the permit, for purposes of determining whether there has been a violation. Use of a rolling annual average is proposed and a statistical T-test to determine the significance of differences between inflow and outflow if the outflow concentration is shown to be greater than Florida's water quality standards and the inflow concentration. No specific objection appears to have been made to this change. While I am allowing this change, this ruling is subject to reconsideration if monitoring data as to a pollutant is obtained showing discharges in the outflow in concentrations in excess of Florida WQS and the inflow, the significance of which a party believes is not accurately measured by the rolling annual average and t-test method.

I am also requiring for purposes of the authorization granted by this order that compliance with the effluent limitations for

¹³ For reopening provisions of the permit, see Part III.

non- phosphorous water quality parameters be achieved by August 15, 1996, with this condition being subject to reconsideration at that time, if this order is still in effect.

Although the above safeguards are not a complete protection against the possibility of irreparable harm occurring, I find that they are sufficient to justify allowing the discharge, again because of the strong public interest in obtaining the information relating to the large scale phosphorous-reduction program that is contemplated.

Tribe during the hearing also repeated its argument that the discharge should not be allowed until there has been an environmental impact study ("EIS"). This study is no longer required by court order.¹⁴ The necessity of an EIS will be considered in the permit proceedings. I do not agree that an EIS is a requisite for finding whether the discharge will create irreparable injury. The EIS, if one is required, will consider the alternative results of allowing or not allowing the discharge. It is the EPA's position that the ENR, itself, is not a major Federal project requiring an EIS.¹⁵ This is a question to be determined in the permit proceeding. I find that the absence of any

¹⁵ EPA's Response to Comments at Time of Final Permit Issuance at 32.

¹⁴ <u>United States v. Southern Florida Water Management District</u>, Nos. 92-4314, 92-4831 (11th Cir. Aug. 23, 1994). I do not read the court decision as fully dispositive of the issue, since its reversal of the district court was based on its finding that there was not sufficient federal involvement to bring NEPA into play. It is not clear that the EPA's assertion of jurisdiction under the CWA was before the court at the time. This, however, is an issue to be resolved in the permit proceeding and not here.

demonstrable irreparable injury and the clear public interest in the purpose of the ENR are sufficient to allow the discharge pending the final resolution of this question in the permit proceeding.¹⁶

Accordingly, SFWMD's request for interim discharge is granted. The discharge is to be in compliance with the terms of the April 1, 1994, permit with the suggested changes stated in the letter of June 3, 1994, from Robert F. McGhee, Acting Director, Water Management Division, EPA Region IV, except for the compliance schedule for all non-phosphorous water quality parameters set herein. Insofar as the permit specifies a time period for action to be taken, based upon the effective date of the permit, the "effective date" for purpose of determining compliance with this order is August 8, 1994.¹⁷

The authorization granted herein will terminate on December 15, 1994, unless the EPA has acted upon the requests for hearing. This may seem, at first glance, to be penalizing SFWMD for delay by the EPA. While there is a strong public interest in allowing the ENR project to proceed, there is also an equally strong public interest in not allowing delay by the EPA to deprive those

¹⁷ See, <u>e.g.</u>, the permit's requirements for developing a eustrongylides monitoring plan.

¹⁶ <u>Cf.</u>, <u>United States v. South Florida Water Management</u> <u>District</u>, 847 F. Supp 1567, 1580-1582 (S.D. Fla. 1992), <u>aff'd in</u> <u>part and rev'd in part and remanded</u>, Nos. 92-4314 and 92-4831 (11th Cir. Aug. 23, 1994) (Court would not require proceeding to be delayed for purpose of preparing an EIS in view of the environmentenhancing purpose of the project and the absence of any showing of irreparable harm.)

requesting a hearing of a determination on their requests so that this proceeding can go forward in due course. It is not the intention of this authorization for interim discharge that it should be an alternative to the permit proceedings provided by the rules or an excuse for delay in those proceedings.

The motion of Friends and Tribe for reconsideration of my order is denied.

Herald Harwood

Senior Administrative Law Judge

Dated: October 19, 1994

CERTIFICATE OF SERVICE

This is to certify that the original of this SUPPLEMENTAL ORDER AUTHORIZING INTERIM DISCHARGE, dated October 19, 1994, in re: South Florida Water Management District, Dkt. No. NPDES Permit No. FL0043885, was mailed to the Regional Hearing Clerk, Reg. IV, and a copy was mailed to all parties (see list of addressees).

Allen F. Hand For Maria Whiting Legal Staff Assistant

DATE: <u>October 19, 1994</u>

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