BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In re: Environmental Consulting &
Technology, Inc.

Petition for Variance

OGC File No. 00-1922
_____/

FINAL ORDER GRANTING PETITION FOR
VARIANCE FROM RULE 62-522.300(3), F.A.C.

On October 10, 2000, Environmental Consulting & Technology, Inc. (ECT), filed a petition for variance from requirements in rule 62-522.300(2)(a) (renumbered in August 2000 as and hereafter cited as 62-522.300(3)) of the Florida Administrative Code, under section 120.542 of the Florida Statutes and rule 28-104.002 of the Florida Administrative Code. The petition was for a variance from rule 62-522.300(3), which prohibits a zone of discharge for discharges through wells, in order to use its in-situ remedial technology. This technology process involves the use of wells or borings which is considered installation of one or more temporary Class V underground injection control wells at the site of contamination. A notice of receipt of the petition was published in the Florida Administrative Weekly on November 3, 2000.

1. Petitioner is located at 6300 NE First Avenue, Suite 100, Fort Lauderdale, Florida 33334.

2. ECT wants to use ferric sulfate and sodium hydroxide to enhance the remediation of ground water at the Petroleum Products Corporation facility located at 3130 SW 19th Street, Pembroke Pines, Florida, which is contaminated with emulsified oil.

3. Under rule 62-520.420 of the Florida Administrative Code, the standards for Class G-II ground waters include the primary and secondary drinking water standards of rules 62-550.310 and 62-550.320 of the Florida Administrative Code.

4. The ground water treatment system incorporates the addition of ferric sulfate, sodium hydroxide, a high molecular weight anionic polymer, and dissolved air flotation to break the oil emulsion before additional polishing steps in the process. The polymer is certified by the National Sanitation Foundation as a drinking water additive. During startup activities it was noted that the dissolved sulfate and iron levels had increased and exceeded the secondary drinking water standards of 250 mg/L and 0.3 mg/L respectively, in rule 62-550.320 of the Florida Administrative Code. These standards will be exceeded at levels up to 500 mg/L for sulfate and 5 mg/L for iron for a distance around the injection point of no more than 100 feet, and for no longer than five years. The presence of sulfate and iron above the secondary drinking water standards, (maximum contaminant levels "MCLs"), which are aesthetically-based standards, has no anticipated adverse impacts to human health because such exceedances will occur only in ground water at a site already contaminated by petroleum products, and the ground water is not presently used for domestic purposes. No other constituents of the injected product or resulting remediation by-products will exceed any primary or secondary drinking water standard. The sulfate and iron will return to meeting the their respective standards, or natural background, whichever is less, within five years from injection.

5. The injection of these products through temporary wells or borings is considered a type of underground injection control well, Class V, Group 4, "injection wells associated with an aquifer remediation project," as described in rule 62-528.300(1)(e)4 of the Florida Administrative Code. Under rule 62-528.630(2)(c), "Class V wells associated with aquifer remediation projects shall be authorized under the provisions of a remedial action plan . . . provided the construction, operation, and monitoring of this Chapter are met."

6. The rule (62-522.300(3)) from which this petition seeks a variance prohibits the Department from granting a zone of discharge for a discharge through an injection well to Class G-II ground water. Strict adherence to this rule would preclude the Department from granting approval for the in-situ use of ferric sulfate and sodium hydroxide for remediation of contaminated ground water.

7. The applicable rules state in pertinent part:

> 62-522.300(1) . . . [N]o installation shall directly or indirectly discharge into any ground water any contaminant that causes a violation in the ground water quality standards and criteria for the receiving ground water as established in Chapter 62-520, F.A.C., except within a zone of discharge established by permit or rule pursuant to this chapter.
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> 62-522.300(3) Other discharges through wells or sinkholes that allow direct contact with Class G-I, F-I, or Class G-II ground water shall not be allowed a zone of discharge.

8. ECT has stated in its petition that to apply the zone of discharge prohibition to its use of this remediation technology would create a substantial hardship because the use of the technology is to remediate contaminated ground water as quickly and inexpensively as possible, without causing further harm to the environment or public

health. The petition also states that other methods of remediation not using in-situ products or processes are more costly and take longer. Remediation would improve the water quality, and to prohibit any exceedance of the drinking water standards in such a small area of already contaminated ground water and for short duration would cause a substantial hardship. This small and temporary exceedance is not the usual occurrence, nor are most dischargers involved in the remediation of contaminated ground water. By allowing the use of the injected products, the clean up of the contaminated ground water will be accelerated and returned to a usable condition. In addition, the use of the injected products has been tentatively approved by the Department's Division of Waste Management as being a sound environmental solution to the contamination, so long as ECT is able to obtain a variance.

9. Zones of discharge for the use of the injected products are necessary because of the temporary exceedance of iron and sulfate in the ground water immediately surrounding the injection at the Petroleum Products Corporation facility. Because this ground water is already contaminated and does not meet all applicable standards, allowing a zone of discharge as part of an approved remediation strategy for contaminants meets the purpose of the underlying statute, which is to improve the quality of the waters of the state for beneficial uses. Such contaminated ground water is not presently used for drinking purposes, thus posing no threat to human health.

10. The Department received no comments about the petition for variance.

11. For the foregoing reasons, Environmental Consulting & Technology, Inc., has demonstrated that it is entitled to a variance from the prohibition of zones of discharge in rule 62-522.300(3) for the remedial products, with the conditions below.

a. Use of the injected ferric sulfate and sodium hydroxide at the Petroleum Products Corporation facility must be through a Department-approved remedial action plan, or other Department-enforceable document, for an aquifer remediation project and such approval shall not be solely by a delegated local program.

b. The discharge to the ground water must be through a Class V, Group 4 underground injection control well that meets all of the applicable construction, operating, and monitoring requirements of chapter 62-528 of the Florida Administrative Code.

c. The extent of the zone of discharge for iron and sulfate shall be a 100-foot radius from the point of injection, and the duration of the zone of discharge shall be five years from last injection. This will allow ample time for the temporarily exceeded parameters to return to below their respective drinking water standards, or natural background, whichever is less. No other ground water standards shall be exceeded under this temporary variance.

d. The injection of the products shall be at such a rate and volume that no undesirable migration occurs of either the products, their by-products, or the contaminants already present in the aquifer.

e. The Department-approved remedial action plan shall address appropriate ground water monitoring requirements associated with the use of the injected ferric sulfate, sodium hydroxide, and the polymer for remediation based on site-specific hydrogeology and conditions.

These shall include the sampling of ground water at monitoring wells located outside the contamination plume, before use of the products, to determine the background levels of iron and sulfate, which are the parameters pertinent to this variance. Monitoring shall be required of these parameters in ground water downgradient from the injection points for at least five years after active remediation, and one year after active remediation has ended.

This order will become final unless a timely petition for an administrative hearing is filed under sections 120.569 and 120.57 of the Florida Statutes before the deadline for a filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's action may file 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) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions filed by Environmental Consulting & Technology, Inc., or any of the parties listed below must be filed within 21 days of receipt of this written notice. Petitions filed by any other persons 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 public notice receipt of the written notice, whichever occurs first. Under section 120.60(3), however, any person who 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 petitioner shall mail a copy of the petition to Environmental Consulting & Technology, Inc., 6300 NE First Avenue, Suite 100, Fort Lauderdale, Florida 33334, at the time of filing. The failure of any person to file a petition 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, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be 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.

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

(a) The name, address, and telephone number of each petitioner; the Department case identification number and the county in which the subject matter or activity is located;

(b) A statement of how and when each petitioner received notice of the Department action;

(c) A statement of how each petitioner's substantial interests are affected by the Department action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department action;

(f) A statement of which rules or statutes the petitioner contends require reversal or modification of the Department action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

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.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573 of the Florida Statutes is not available for this proceeding.

This action is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing 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, Mail Station 35, 3900 Commonwealth Boulevard, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

DONE AND ORDERED this 16th day of January 2001 in Tallahassee, Florida.

Mimi A. Drew
Director
Division of Water Resource Management

2600 Blair Stone Road
Mail Station 3500
Tallahassee, Florida 32399-2400
Telephone: (850) 487-1855

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to s. 120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

_____ _____
Clerk Date

Copies furnished to:
George Heuler, UIC Section
Jeff Lockwood, Bur. Waste Cleanup, MS 4535
Brent Hartsfield, Bur. Waste Cleanup
Rick Ruscito, Petroleum Cleanup
Cynthia Christen, OGC