## BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In re:	ASSET RECOVERY	GROUP,	INC.					
Petition	n for Variance							
					OGC	File	No.97-14	493
				,	′			

## FINAL ORDER GRANTING PETITION FOR VARIANCE FROM RULE 62-522.300(2)(a)

On September 3, 1997, Asset Recovery Group, Inc. (ARG) filed a petition for variance from requirements in rule 62-522.300(2)(a) 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(2)(a), which prohibits a zone of discharge for discharges through wells, in order to use the Oxy-Cat Remediation Process. This process involves the installation of one or more temporary Class V underground injection control wells at the site of soil and ground water contamination. The Department received no public comments on the notice of receipt of ARG's petition for variance published in the Florida Administrative Weekly on September 26, 1997.

- 1. Petitioner is located at 9645 E. Colonial Drive, Suite 114, Orlando, Florida 32817.
- 2. ARG has developed the Oxy-Cat Process for remediation.

  The wells are used to inject into ground water an oxidizer

  (hydrogen peroxide) and a proprietary catalyst. When the

oxidizer and the catalyst combine, a reaction occurs which creates free radicals that upon contact with the petroleum and solvent compounds break apart the complex hydrocarbon chains that make up these compounds. The by-products from this reaction are water and carbon dioxide. Laboratory and field tests using this process have demonstrated a high degree of success in reducing the levels of petroleum and solvents within 48 hours.

- 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 proprietary catalyst contains varying concentrations of iron sulfate which range from 0.3 to 300 mg/L. Upon injection into the ground water, it is expected that the concentrations of iron, a secondary drinking water standard, will temporarily exceed the ground water standard of 0.3 mg/L for iron within an area extending out in a radius of ten feet from the immediate point of injection. The presence of iron above the standard has the effect of discoloring the water and clothing washed in the water. No adverse impacts to human health are anticipated from the iron because such an exceedance will occur only within ground water already contaminated by petroleum or solvent compounds, and the ground water will not be used for domestic purposes. No other constituents of the catalyst, including buffers,

stabilizers, or reactants will exceed any primary or secondary drinking water standard.

- 5. The type of underground injection control wells will be 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(2)(a)) 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 use of the Oxy-Cat Remediation Process.
  - 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.
    - 62-522.300(2) No zone of discharge shall be allowed under any of the following circumstances:
      (a) Discharges through wells or sinkholes that allow direct contact with Class G-I and Class G-II ground water . . .

- 8. ARG has stated in its petition that to apply the zone of discharge prohibition to its use of this remediation process would create a substantial hardship and would violate the principles of fairness because the use of the process is to remediate contaminated ground water. ARG's substantial hardship is caused by the rule's prohibition of an exceedance of the iron standard, a non-health-based standard, in such a small area of already contaminated ground water would violate the principles of fairness. This small and temporary exceedance is not the usual occurrence, nor are most dischargers involved in the remediation of contaminated ground water.
- 9. Zones of discharge for the use of the Oxy-Cat
  Remediation Process are necessary because of the temporary
  exceedance of the iron standard in the ground water immediately
  surrounding the injection from the well. Because this ground
  water is contaminated and does not meet all applicable standards,
  allowing a zone of discharge as part of the approved remediation
  of petroleum or industrial solvents 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
  would not be used for drinking purposes, thus posing no threat to
  human health.
- 10. For the foregoing reasons, ARG has demonstrated that it is entitled to a variance from the prohibition of zones of

discharge in rule 62-522.300(2)(a) for its Oxy-Cat Remediation Process, with the conditions below.

- a. Use of the Oxy-Cat Remediation Process must be through a Department-approved remedial action plan 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 which 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 shall be a ten-foot radius from the point of injection, which area shall always be within the plume of the contaminated ground water.
- d. The Department-approved remedial action plan shall address appropriate ground water monitoring requirements associated with the use of the Oxy-Cat Remediation Process for remediation based on site-specific hydrogeology and conditions.

This final order will become final unless a petition for an administrative proceeding is filed pursuant to the provisions of sections 120.569 and 120.57 of the Florida Statutes. Any person whose substantial interests are affected by the Department's action may file such a petition. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 3900 Commonwealth

Boulevard, MS 35, Tallahassee, Florida 32399-3000. Petitions filed by ARG or any of the parties listed below must be filed within 21 days of receipt of this order. Petitions filed by any other person must be filed within 21 days of publication of the public notice or within 21 days of receipt of this order, whichever occurs first. A petitioner must mail a copy of the petition to ARG's attorney, Mr. Richard A. Lotspeich, Post Office Box 15347, Tallahassee, Florida 32317-5347, 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 will only be 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 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.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department final action may be different from the position taken by it in this order. Persons whose substantial interests will be affected by any such final decision of the Department on the petitions 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.

DONE AND ORDERED this 5th day of horember 1997 in

Tallahassee, Florida.

Secretary Department of Environmental Protection

3900 Commonwealth Boulevard

MS 10

Tallahassee, Florida 32399-3000 Telephone 850/488-1554

11/10/97 ...

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.

Copies furnished to:

Richard A. Lostspeich, Esquire

Richard Ruscito, Petroleum Cleanup Section 4

Richard Deuerling, UIC

Cynthia Christen, OGC