# NITED STATES ENVIRONMENTAL PROTECTION AGENCY

PROTECTION AGENCY
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#### BEFORE THE ADMINISTRATOR

'IN THE MATTER OF

Docket No. RCRA (3008) VIII-83-5

Chemical Waste Management, Inc. (Denver-Arapahoe Chemical Waste Processing Facility),

Respondent

- 1. Resource Conservation and Recovery Act The Administrator of the United States Environmental Protection Agency is authorized and directed by the Act to promulgate regulations and establish standards applicable to operators of facilities as may be necessary to protect human health and the environment (42 USCA 6924).
- 2. Resource Conservation and Recovery Act Where the construction of an administrative regulation is an issue, deference to the Agency interpretation is clearly in order.
- 3. Resource Conservation and Recovery Act The word "malfunction" in 40 C.F.R. 265.15 is to be accorded its usual and ordinary meaning, viz., that all or any part of the equipment or structures comprising a hazardous waste surface impoundment are "not functioning properly."
- 4. Resource Conservation and Recovery Act In determining if a malfunction "may be causing or may lead to" a release to the environment, Respondent was required to consider all facts available to it and discern the potential for mischief or "problem" which such collective facts indicate and, on discernment of the problem, to take remedial action on a schedule which ensures that the problem does not lead to an

environmental or human health hazard and before harm results (40 C.F.R. 265.15(a) and (c)).

- 5. Resource Conservation and Recovery Act The Ground Water Monitoring Program of RCRA specifies a sequential approach, viz., remedial action to correct problems such as a suspected discharge resulting from malfunctions and deterioration before harm occurs and a subsequent groundwater assessment procedure to determine if a discharge to the environment is occurring or may occur.
- Regulations require that the operator of a hazardous waste surface impoundment drill a sufficient number of wells to characterize the potential of groundwater quality caused by said facility, and that a minimum of three down-gradient wells are to be installed at the perimeter of the waste management area. More than three wells may be required by many facilities to provide sufficient monitoring to meet said regulatory requirements.

## <u>Appearances</u>

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For Complainant: David J. Janik, Attorney

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Region VIII

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#### INITIAL DECISION

#### Marvin E. Jones Administrative Law Judge

On January 21, 1983, subject Complaint, Compliance Order and Notice of Opportunity for Hearing was issued to Respondent, Chemical Waste Management, Inc. (hereinafter "Respondent", "CWM" or "WMI"), pursuant to Section 3008(a)(1) of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (hereinafter "RCRA") of 1976, as amended, 42 U.S.C. 6928(a)(1), and in accordance with the United States Environmental Protection Agency (hereinafter "Complainant", "EPA", or "the Agency") Consolidated Rules of Practice, 40 C.F.R. Part 22, charging said Respondent, in four (4) Counts, with violations of Section 3008(a) of RCRA, 42 U.S.C 6928(a), and the regulations respecting applicable requirements and promulgated pursuant to Section 6924. Said Complaint proposes that civil penalties should be assessed for each violation so alleged pursuant to Section 3008(g) of RCRA, 42 U.S.C. 6928(g), and states that the penalties therein proposed are based on the factors in said statute provided.

Count I of subject Complaint alleges that Respondent, while operating the Denver-Arapahoe Chemical Waste Processing Facility, owned by the City and County of Denver, Colorado, which facility is used to treat, store and dispose of and otherwise manage hazardous waste by the operation of three

surface impoundments, Ponds 1, 2 and 3, which store and treat, by evaporation, hazardous wastes there impounded, failed to comply with requirements of 40 C.F.R. 1/ for the reason that Respondent's inspection log failed to contain notations indicating the presence of fluid in Pond #2 sump, although it was a condition known to Respondent, and also failed to record notations of any actions taken to remedy the condition alleged to be a malfunction or deterioration which "may lead to releases of hazardous waste constituents to the environment."

 $<sup>\</sup>underline{1}$ / Section 265.15 provides, in pertinent part, as follows:

<sup>(</sup>a) The owner or operator must inspect his facility for malfunctions and deterioration, operator errors, and discharges which may be causing - or may lead to: (1) Release of hazardous waste constituents to the environment or (2) a threat to human health. The owner or operator must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment.

<sup>(</sup>b)(1) The owner or operator must develop and follow a written schedule for inspecting all monitoring equipment . . .

<sup>(3)</sup> The schedule must identify the types of problems (e.g., malfunctions or deterioration) which are to be looked for during the inspection (e.g., inoperative sump pump, leaking fitting, eroding dike, etc.)

<sup>(4)(</sup>d) The owner or operator must record inspections in an inspection log or summary. . . . At a minimum, these records must include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions.

Count II alleges that, under the facts alleged in Count I of said Complaint, Respondent refused to acknowledge and failed to remedy a condition indicating a malfunction or deterioration of equipment and structures on a schedule which ensures that the problem does not lead to an environmental or health hazard, in violation of 40 C.F.R. 265.15(c). 2/

Count III alleges that Respondent's groundwater monitoring program fails to meet the criteria set forth in 40 C.F.R. 265.91(a)(2) providing that the number, locations and depth of the wells "must ensure that they immediately detect any statistically significant amounts of hazardous waste . . . constituents that migrate . . . to the uppermost aquifer", in that, e.g., the wells are located too far from the waste management area to allow immediate detection of contamination, in violation of 40 C.F.R. Part 265, Subpart F.

Count IV alleges violation by Respondent of 40 C.F.R. 265.52(a), 265.52(e) and 265.54(e) in that Respondent's contingency plan does not address non-sudden releases of hazardous waste to air, soil or surface water and that said plan has not been kept up to date so that it accurately reflects the emergency equipment currently on site.

The owner or operator must remedy any deterioration or malfunction of equipment or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.

<sup>2</sup>/ Section 265.15(c) provides:

A Compliance ORDER, requiring remedial action to correct the deficiencies complained of, was issued pursuant to Section 3008 of RCRA, 42 U.S.C. 6928, along with said Complaint.

An adjudicatory hearing was held in Division II Courtroom of the U.S. Court of Appeals in the U.S. Courthouse in Denver, Colorado, on October 5, 6 and 7, 1983. Immediately prior to said hearing, a conference was held (TR. 1-28). Respondent's Motion for Partial Summary Judgment on Counts I and II of the Complaint, received by me on September 21, 1983, accompanied by Respondent's Brief and replied to by Complainant on September 28, 1983, was denied on the basis that the Motion presented a mixed question of law and fact and a decision could best be made upon consideration of evidence elicited at the hearing.

At said conference, the parties advised that a settlement had been reached on Count IV of the Complaint, that the Respondent had complied with the compliance aspects of Count IV and had agreed to pay a reduced penalty. Further, agreement was reported concerning the Compliance aspects of Count I (keeping inspection logs and recording information) and virtual agreement as to the compliance aspects of Count III (additional wells). An effort had been made to settle the Compliance aspects of Count III with the possibility of discontinuing the operation of Pond #2 and not undertaking tracer studies. The parties further stipulated as to the reception of Stipulated Exhibits 1 through 90, 3/, and testimony which Judith Wong

<sup>3/</sup> Stipulated Exhibits are referred to as, e.g., Ex. S-1 and Ex. S-90.

would give were she called to trial (TR. 9-10) with 11 exhibits (S-1 through S-11). Stipulated Exhibits S-12 through S-27, "Stipulations on Business Records" (TR. 10), cover the construction reports for subject chemical waste facility. Exhibits S-28 through S-33B cover letters referred to by witnesses; S-35 through S-90 are laboratory analyses which it was stipulated would be received without supporting testimony (TR. 10).

The parties (TR. 12) further stipulated to the reception of the Robert Duprey deposition in lieu of his direct testimony and waived his cross-examination.

At the conclusion of the adjudicatory hearing, Respondent Counsel advised (TR. 366) of his disagreement with my ruling on Respondent's Motion for Summary Judgment on Counts I and II of Complaint, and of its desire to file Application for Interlocutory Appeal pursuant to 40 C.F.R. 22.29. Said application for Certification of Interlocutory Appeal was timely filed as was Complainant's Response thereto (dated October 12, 1983). Said application was granted and my ruling on Respondent's Motion for Summary Judgment was certified to the Administrator of the EPA, along with documents pertaining thereto, on October 14, 1983. The proceedings herein were then stayed for an additional 30 days. No action was taken by the Administrator in the time provided by regulation and the appeal was thereby denied, as were subsequent post-certification requests.

Upon consideration of the evidence, the proposed findings of fact and conclusions of law and the accompanyings briefs and arguments of the parties, I make the following:

## Findings of Fact

- 1. Respondent, Chemical Waste Management, Inc. (hereinafter "CWM" or "WMI"), is a corporation, and operates a facility owned by the City and County of Denver known as the Denver-Arapahoe Chemical Waste Processing Facility, located in Arapahoe County, Colorado, at 27500 Yale Avenue (Answer, Paragraph 1).
- 2. Among the hazardous waste management activities conducted at this facility was, and is, the operation of three surface impoundments known as Ponds 1, 2 and 3, used to store, and treat by evaporation, hazardous wastes (Answer, Paragraph 4; TR. 33; Exhibit C-3).
- 3. The evaporation ponds were constructed with a common liner beneath all three ponds. This liner was constructed in 1980 of compacted clay and designed for clay of a thickness of five feet and with a water permeability of less than  $1 \times 10^{-7}$  cm/sec. (TR. 247-48).
- 4. Above the lower clay liner and beneath each evaporation pond, there is a leachate collection system consisting of a layer of sand and gravel, 1.25 feet thick. There is a sump pipe which gives access to said sand and gravel layer and allows any liquid accumulating in the leachate collection system to be pumped up and out to the surface (TR. 248; Ex. C-43A, Figure 11).
- 5. The leachate collection system was designed to collect leachate; liquid accumulation in the leachate collection system could be released to the environment if it penetrated the lower clay liner (TR. 78-79).

- 6. Above the sand and gravel layer and beneath each pond there is an upper clay liner which forms the bottom and sides of the evaporation pond. This upper liner was reportedly contructed of compacted clay five feet thick and with a water permeability of less than 1 x  $10^{-7}$  cm/sec. A protective soil layer was placed over the upper clay liner in each evaporation pond (TR. 247-48).
- 7. In promulgating the final regulations, EPA explicitly deleted the requirement for double liners and leachate monitoring systems (43 Fed. Reg. 58986 (1978); 45 Fed. Reg. 33191 (1980).
- 8. No other hazardous waste facility in Colorado has the protection provided by a double liner and leachate collection system (TR. 77-78).
- 9. Liquid was placed in Pond 1 almost immediately after the facility opened and into Pond 3 within six months of opening. Pond 2 was left empty for eight months after construction (TR. 249-250).
- 10. Hazardous waste was placed in Pond 2 in April, 1981 (Ex. C-31).
- 11. On July 16, 1981, Dick Smith, employed by Respondent's transportation division and assigned to install locks and hasps on the sumps to the leachate collection systems at the evaporation ponds, found liquid in the Pond 2 sump (Ex. WMI-8).

  12. Upon discovering liquid in the Pond 2 sump, Respondent's employee in charge of inspecting the sumps concluded that it

indicated a possible leak in Pond 2's liner (TR. 37-43, 75-77, 88, 253, 322, 337; Ex. C-15).

- 13. The site manager informed her superior of the presence of liquid in the Pond 2 sump (Ex. WMI-8; TR. 349-350).
- 14. The presence of the liquid in the Pond 2 sump was discussed by John Baker of CWM's Environmental Management Division, CWM's regulatory lawyer, and the operations personnel (TR. 320, 322-327, 350-352, Ex. WMI 5).
- 15. Respondent deliberately omitted any entry pertaining to the Pond 2 sump fluids in the inspection log for the surface impoundments and instead wrote that there were no leaks (Answer, Paragraph 12; TR. 36-45, 89, 351-354).
- 16. Ms. Walls chose to consult with corporate headquarters to determine if there was any way to avoid informing the Colorado Department of Health (hereinafter "CDH") and Complainant of the presence of fluid in the Pond 2 sump (TR. 350-60, 321-9, 337-40; Ex. C-15, R-5).
- 17. Upon discovering fluids in the Pond 2 sump, Respondent quickly sampled the fluids in Pond #2 and the Pond 2 sump to determine if the sump fluids had leaked from Pond #2 (TR. 322-323, 350-1, 355; Ex. C-15, R-5).
- 18. Respondent made a deliberate decision, two or three days after discovering fluid in the Pond 2 sump, to withhold the sump information from the regulatory agencies by amending its groundwater monitoring plan and instead record the information in a separate log (TR. 42-5, 230-1, 238-40, 352-3, 359-62; Ex. S-31, C-15).

- 19. After being informed of the presence of liquid in the Pond 2 sump in July, 1981, John Baker and the company's environmental attorney reviewed the relevant regulations in 40 C.F.R. Part 265, and concluded that there was no evidence of a release to the environment (TR. 323-326, 351-352; WMI Ex. 5).
- 20. At that time, CWM questioned whether there was any malfunction or deterioration at the evaporation ponds, as initial tests of chemicals in Pond #2 and the Pond 2 sump did not indicate whether Pond #2 was the source of the liquid in the sump (WMI Ex. 5, 6, 89; TR. 326, 329-330).
- 21. The company personnel decided that on the basis of the facts known at that time there was no requirement to note the presence of liquid in the Pond 2 sump in the RCRA log or summary (TR. 352, 324-326; WMI Ex. 5).
- 22. The presence of liquid in the Pond 2 sump was not noted in the log or summary kept pursuant to RCRA until the Colorado

  Department of Health became aware of the liquid while inspecting the facility in September, 1982 (Ex. C-15, C-18; TR. 89, 353).
- 23. Respondent contracted for several studies relating to the presence of fluids in the Pond 2 sump and continued to pump out the sump as fluid accumulated (TR. 231-235, 243-262; Ex. C-31-34).
- 24. From the time of discovery of the liquids in the Pond 2 sump to January 21, 1983, the date the Complaint in this matter was filed, Respondent has not recorded: (1) the presence of sump liquids, or (2) actions taken to remedy the problem in its inspection log for the three surface impoundments (Answer, Paragraph 12).

- 25. The upper and lower liner of Pond #2 at Respondent's facility were constructed by the same company out of the same materials in the same manner (Answer, Paragraph 9).
- 26. At the time the Complaint was filed, Respondent had not remedied the leak in Pond #2 which allowed over 22,000 gallons of liquid to reach the Pond 2 sump (Answer, Paragraph 6).
- 27. As of January 21, 1983, Respondent had no downgradient groundwater monitoring well at the limit of the surface impoundment area (TR. 49-52, 91; Ex. C-43A, B, C).
- 28. As of January 21, 1983, Respondent had not installed down-gradient groundwater monitoring well or wells at the limit of the drum burial cell area (TR. 49-52, 91-2; Ex. C-43A, B, C).
- 29. The regulations relevant to the first two counts required immediate determination of two separate questions upon becoming aware of the fluid in the Pond 2 sump: whether there has been a malfunction or deterioration at the facility, and whether such a malfunction or deterioration may be causing or may lead to a release to the environment (40 C.F.R §265.15).
- 30. Subsequent to August, 1981, CWM received three reports from Woodward-Clyde relevant to answering these questions in terms of determining the source of the liquid in the Pond 2 sump (Exs. C-31, C-32, C-33).
- 31. The first report from Woodward-Clyde, "Preliminary Assessment of Fluid Accumulation in Sump of Pond No. 2," September 8, 1981, did not reach final conclusions as to the source of the fluid in the Pond 2 sump (Ex. C-31).

- 32. In November, 1981, a report was obtained from Golder Associates, which was a peer review requested in order to confirm whether or not Woodward-Clyde was taking appropriate steps in analyzing the source of fluids in the Pond 2 sump. It did not reach a final conclusion as to the source of the liquid in the Pond 2 sump but observed that the most obvious source was "from the pond through the clay (upper) liner" (Ex. C-34, pages 8-11; TR. 331).
- 33. The second Woodward-Clyde report, a letter of December 8, 1981, from Jean-Yves Perez to George Schau, did not reach a conclusion as to the source of the liquid in the Pond 2 sump (Ex. C-32).
- 34. The third Woodward-Clyde report, a letter of May 17, 1982, from Perez to George Schau, concluded that "[i]t is unlikely that the fluid accumulating in the sump originates as seepage of pond fluid through the upper liner" and that "it is likely that the fluid accumulating in the sump was trapped in the sand leachate collection layer between the upper and lower pond liners during construction (Summer, 1980)." (Ex. C-33).
- 35. There is no evidence or expert opinion or analysis that any hazardous waste constituents or mechanisms which may have caused penetration of the upper clay liner are operative on the lower clay liner.
- 36. The leachate collection system is an integral part of the total double liner system. It is included in the system for the reason that no material is completely impermeable; and the upper liner will eventually leak. At the Lowry site, it appears to have leaked sooner than anyone would have expected (TR. 267; Ex. C-34).

- 37. Woodward-Clyde Consultants, based on the later EPA finding of a significant concentration of bromide in the sump liquid, concluded that the liquid from the ponds was leaking into said sump (TR. 264).
- 38. Contamination of the clay material used in the upper and lower liners by more sandy material would serve to dramatically increase hydraulic conductivity and hence pond seepage because the presence of sand in any amount would make the material more pervious (TR. 269; Ex. C-34, page 7).
- 39. The Golder Associates' 1981 Report to Respondent indicated there was some problem with availability of sufficient clays to construct the subject liners and theorized that less than adequate materials may have been used, making portions or areas in the liner more permeable, increasing the flow of liquid from the pond through the liner (TR. 47, 74; Ex. C-34, p. 7).
- 40. Seepage into the leachate collection system from July 17, 1981, to August 31, 1981, was approximately constant at about 200 gallons per day when measured by Golder and Associates, compared with 15 gallons per day reasonably to be anticipated as a seepage rate (Ex. C-34, pages 2 and 8).
- 41. The heterogeneity of the (Lowry) site materials reduces the quality of natural containment should any pond liquor escape through both liners (Ex. C-34, p. 6)
- 42. Barrett Benson, an employee of the National Enforcement Investigation Center, who conducted the investigation and analysis of the evaporation ponds for EPA (as did Woodward-Clyde and Golder Consultants), considered the mechanisms or events which caused liquid to penetrate the upper clay liner of Pond #2 but not Ponds #1 and #3.

- 43. Investigations on November 21, 1981, and December 5, 1981, when the corners of the upper liner of Pond #2 were excavated to a maximum depth of sixteen inches for inspection purposes, did not disclose any visible cracks beyond a depth of approximately twelve inches. The excavations made in the corners were backfilled with compacted clay to the original grade of the liner (TR. 256).
- 44. The hydraulic pressure of the liquid in Pond #2 conceivably might have caused liquid to penetrate the upper liner of Pond #2 and reach the leachate collection system. Accumulating liquid was regularly removed from the Pond 2 sump. As a result, no hydraulic pressure was allowed to build up on the bottom clay liner (Ex. C-19B; TR. 251-252).
- 45. The upper clay liner of Pond #2 was partially breached after construction to insert a pipe running across the bottom of the pond. No such breach was made in the lower clay liner (TR. 248-249).
- 46. The evaporation ponds are placed above approximately 80 feet of unsaturated material at the Denver-Arapahoe facility (Ex. C-9, p. 14; TR. 130).
- 47. During the construction of the ponds, an independent field engineer was assigned to observe their construction, inspect the materials used including materials used on the clay liners and conduct quality control testing to assure that the work was done in accordance with the plans and specifications; his analysis is contained in his construction reports (TR. 243-244; Exs. Stip. 13-27).

48. The "groundwater monitoring regulation" requires

[m]onitoring wells (at least three) installed hydraulically downgradient (i.e. in the direction of decreasing static head) at the limit of the waste management area. Their number, locations and depths must ensure that they immediately detect any statistically significant amounts of hazardous wastes or hazardous waste constituents that migrate from the waste management area to the uppermost aquifer. (40 C.F.R. 265.91(a)(2)).

- 49. To be sure the wells detect the waste as immediately as possible, while also assuring that they detect any statistically significant waste that leaves the waste management area, more than three downgradient wells may be required (TR. 293, 295).
- 50. The purpose of a groundwater monitoring system at a hazardous waste site is the detection of fluids that might be leaking from that site (TR. 129).
- 51. Hazardous waste and hazardous waste constituents released from a waste management area may move in a lateral or horizontal direction prior to reaching the groundwater. In a subsurface—with varying layers of permeability, the degree of horizontal movement is related to the volume of the flow of liquids; the greater the flow, the more likely that the movement of the liquid would be horizontal (TR. 137-138, 141, 301, 318-319).
- 52. When liquids are released from the Denver-Arapahoe site, they will travel vertically through the sandstone layers until they reach a clay layer. At that point, the liquids will build up, spread out, and travel horizontally through the sandstone layer until they reach another sandstone layer, at which point they will travel vertically again (TR. 141, 293, 300, 318, 319).

53. Woodward-Clyde planned for and CWM installed three wells downgradient from the evaporation ponds; these wells are designated B-208, B-209, B-211. None of these wells is located on the boundary of the ponds' waste management area (TR. 50).

54. Woodward-Clyde planned for three wells downgradient from the drum burial cell; these wells have been installed and are designated B-202A, B-219, B-220. If the drum burial cell had been filled, these three wells would be downgradient from the drum

burial cell. None of these three wells is on the boundary of the

cell's waste management area (TR. 51, 166).

55. In designing the groundwater monitoring system, Woodward-Clyde determined that because hazardous wastes released from the facility would move laterally to some degree, three wells placed at the boundary of the waste management area might not, in their judgment, detect the movement of such wastes (TR. 299-300).

56. EPA did not begin to review the Denver-Arapahoe groundwater monitoring plan for compliance with RCRA requirements until mid-1982. Prior to that time, EPA gave no indication to CWM that it had not yet reviewed the plan for RCRA compliance and did not inform CWM that its comments on the plan related solely to Section 6 (TR. 8).

## Conclusions of Law

- 1. Complainant has the authority to bring this action under Section 3008(a) of RCRA, 42 U.S.C. Section 6928(a).
- 2. Respondent's facility is used to treat, store, and dispose of hazardous wastes, as these terms are defined by

Section 1004 of RCRA, 42 U.S.C. Section 6903, and 40 C.F.R. Part 261, and is therefore required to comply with the interim status requirements of 40 C.F.R. Part 265 - specifically, the inspection requirements of 40 C.F.R. Section 265.15 and the groundwater monitoring requirements of 40 C.F.R. Section 265.90 et seq.

- 3. The regulation relevant to Count I (40 C.F.R. §265.15(a)) requires operators of hazardous waste facilities to inspect such facilities for "malfunctions and deterioration, operation errors, and discharges which may be causing or may lead to: (1) Release of hazardous waste constituents to the environment . . ." and to record such inspections in a log or summary. Such inspections must be conducted to identify problems in time to correct them before they harm human health and the environment. Any deterioration or malfunction, of equipment or structures, revealed by such inspection must be remedied on a schedule which ensures the problem does not lead to an environmental or human health hazard.
- 4. A defect or flaw in an upper liner of Respondent's series of hazardous waste impoundments, which allowed hazardous waste constituents to penetrate at least one of the upper liners, is a malfunction or deterioration "which may be causing or may lead to: (1) Release of hazardous waste constituents to the environment . . . " within the meaning of 40 C.F.R. Section 265.15(a).

- 5. Respondent's failure to remedy the leak from Pond #2 contitutes a failure to "remedy any deterioration or malfunction... on a schedule which ensures that the problem does not lead to an environmental or human health hazard," and thus a violation of 40 C.F.R. Section 265.15(c).
- 6. Respondent's failure to record the presence of fluid in the Pond 2 sump and any actions it took towards remedying the problem constitutes violations of 40 C.F.R. Section 265.15(d).
- Respondent violated 40 C.F.R. Section 265.91, by not having a groundwater monitoring system that includes at least three hydraulically downgradient monitoring wells, "at the limit of the waste management area," whose "number, locations, and depths . . . ensure that they immediately detect any statistically significant amounts of . . . hazardous waste constituents that migrate from the waste management area . . . " (40 C.F.R. Section 265.91(a)).
- 8. The regulations do not provide nor contemplate, as an antecedent to compliance with said regulations, that a test or analysis determines whether given events have caused or have created a "likelihood" of a release of hazardous waste constituents; but, rather, provide for remedial action (as to any deterioration or malfunction found) on a schedule which ensures that the problem does not lead to such hazard (40 C.F.R. Section 265.15(c)).

- 9. The fact that said liquid was present in the sump beneath said Pond No. #2, when considered with the facts then known to it, was sufficient to apprise Respondent that a problem existed which might have then been causing or might lead to a release of hazardous constituents to the environment (Findings 5, 12, 25, 29, 36, 38, 40, 41, 51 and 52).

  10. Intent is not an element of the violations charged in subject Complaint seeking civil penalties pursuant to Section 3008(q), 42 U.S.C. 6928(q).
- 11. A civil penalty, assessed for a violation found on this record, should appropriately take into account the seriousness of the violation and any good-faith efforts (on the part of the violator) to comply with the applicable requirements (42 U.S.C. 6928(c).
- 12. Respondent's said MOTION FOR A PARTIAL SUMMARY JUDGMENT, on Counts I and II of subject Complaint, should be and it is hereby denied for the reasons stated in the above and foregoing Conclusions of Law.

### Discussion

The regulations here applicable were promulgated pursuant to Section 3004 of the Act, 42 USCA 6924, which provides, in pertinent part:

"... the Administrator shall promulgate regulations establishing such performance standards, applicable to owners and operators of facilities for the treatment, storage or disposal of hazardous waste (sic), as may be necessary to protect human health and the environment..." (Emphasis supplied.)

 $40^{\circ}$  C.F.R., Part 265, establishes minimum national Standards which define the acceptable management of hazardous waste during the period of interim status (Section 4/ 265.1(a)).

The statute and the regulations so promulgated are remedial in nature. It is universally recognized that remedial legis-lation should be broadly construed and liberally interpreted to effectuate its purpose and to achieve Congressional intent (Tcherepin v Knight, 389 U.S. 332, 88 S. Ct. 548 (1967)).

It is well settled that regulations issued under a claimed authority and pursuant to law carry a strong presumption of validity (Edwards v. Owens, 137 F.S. 63 (1956); Foremost-McKesson, Inc., 488 S.W.2d 193 (MO)); and that the statutory interpretation of any agency, which is charged with the administration of a particular act, will not be overturned, unless it is patently unreasonable. When, as here, the construction of an administrative regulation (rather than a statute) is an issue, deference to the agency interpretation is even more clearly in order. The interpretation need not be the only interpretation but simply a reasonable one (Train v NRDC, 421 U.S. 60, l.c. 87 (1975); Udall v Tallman, 380 U.S. 1, 16-18 (1965); McLaren v Fleischer, 256 U.S. 477, 480 (1921)).

I find that Respondent's failure to note, in its inspection log, the findings of its inspection of July, 1981, which

<sup>4/</sup> Said Standards, referred to herein by Section number only, are those included in said Part 265 of 40 C.F.R. unless otherwise indicated.

revealed the presence of fluids in the sump underlying said Pond #2, was a violation of said Section 265.15 and said.section further required that Respondent note actions taken by it to remedy the condition indicated, which I find was a malfunction, deterioration or discharge within the meaning of §265.15(a). I further find that Respondent violated Section 265.15(c) in that, as alleged in Count II of subject Complaint, it refused to acknowledge and failed to remedy a condition indicating a "deterioration or malfunction of equipment or structures which (sic) inspection reveals" on a <a href="schedule which">schedule which</a> "ensures that the <a href="problem">problem</a> does not lead to an environmental or human health hazard" (emphasis supplied). Said subsection further requires that where a hazard is imminent or has already occurred, remedial action must be taken immediately.

I have reached the foregoing conclusions based on the plain wording of the regulations. It is not disputed that a malfunction was experienced at said Pond #2: it did not function properly. Respondent states in its Reply Brief, page 1:

"This is not a case about where the liquid in the Pond #2 sump came from; it is about whether the liquid in the sump was going anywhere" (emphasis supplied).

The latter portion of Respondent's above statement and its further statement that (Complainant) has the burden of showing . . . that there was a malfunction . . . that <u>is causing</u> or may lead to a release to the environment is inaccurate. Section 265.15(a) provides that the object of the required inspection

by Respondent was to reveal malfunctions . . . and discharges which may be causing, or may lead to: (1) Release of hazardous waste constituents to the environment . . . Said regulation further requires (Section 265.15(a)) that the frequency of such inspection should be "often enough to identify problems in time to correct them before they harm human health or the environment" (emphasis supplied).

The foregoing language clearly indicates the intent that a "problem" must be discerned and action must be taken before determination, if so, that the "problem" is causing such release. Remedial action is required on a schedule which ensures that the "problem" does not lead to an environmental or human health hazard (§265.15(c)). Groundwater quality assessment and determination of whether the said liquid is "going anywhere" is contemplated as a subsequent procedure. Obviously, the Inspection Requirements address the means of preventing contamination by the correction of problems resulting from malfunctions and the like before any contamination occurs. Said preamble explains the "sequential approach", alluded to above, 45 FR 33194, col. 3:

The final regulations have been revised to remove ambiguities. . . . the final regulations specify a sequential approach. Upon detecting any suspected discharge from the facility . . . the owner or operator is required to notify the Regional Administrator . . . that his facility may be contaminating the groundwater. He must also, within 15 days after this notification, develop and submit a plan . . . for assessing the quality of the groundwater . . . (emphasis supplied).

At the time the liquid was discovered in the sump, it was Respondent's duty to (1) recognize and identify the problem (that Pond #2 was not functioning properly); (2) take corrective and remedial action which would "ensure that the problem did not lead to an environmental or health hazard" (for example, emptying the pond and sump), and at a time <u>before</u> harm to human health and the environment could result.

Respondent argues that there is no showing that the malfunction (leaking from the pond) was such that it then indicated that it might be causing or might lead to such release. This record indicates the contrary. It was and should have been apparent to Respondent's management that the most obvious source of the liquid in Pond 2 sump was "from the pond through the clay upper liner." This conclusion is supported, first, by the amount and location of the fluid. Respondent pumped (Finding 26) 22,000 gallons of fluid from the sump which was beneath Pond #2. The seepage from Pond #2 was constant at about 200 gallons per day as compared with a rate of 15 gallons per day reasonably to be anticipated (Finding 40). Respondent's employee (Finding 12), and its consultant, Golder Associates (Finding 32), on noting the great amount of liquid in the sump, found it apparent and concluded that it came from the pond or that the pond was the most obvious source.

This conclusion, that the Pond was the most obvious source of the sump #2 fluid, was further supported by the fact that said Pond had been left empty until April, 1981 (Finding 10), following its construction (Finding 9) and the fluid was found

in the sump on inspection approximately two months later (Finding 11). Respondent then knew that the materials comprising the upper and lower liners were not completely impermeable (Finding 36); that the seepage was sooner and in much greater quantities than anyone reasonably anticipated (Findings 36 and 40); and that the upper and lower liners were constructed by the same company out of the same materials in the same manner (Finding 25). From these facts, Respondent reasonably could and should have concluded that the great amount of fluid in the Pond 2 sump was fluid that had seeped from Pond #2; that if the upper liner leaked, the lower liner was potentially flawed and thus could be leaking as it was constructed from the same materials and in the same manner as the upper liner. If the lower liner leaked, liquid accumulation below the Pond #2 upper liner could be released to the environment (Finding 5).

The above supports the Complainant's contention that a malfunction existed which <u>may</u> have been causing or which might lead to a release. Though Respondent "questioned" whether there was any malfunction (Finding 20), it should have been beyond question that Pond #2 was "not operating properly" and thus that a malfunction was present which was a "problem." It was then Respondent's duty to act to remedy the malfunction, which the inspection revealed, "on a schedule which ensures that the problem does not lead to an environmental or human health hazard" (§265.15(c)), and "before they harm human health and the environment" (§265.15(a)). Instead, it

proceeded to "assess the problem" in an effort to refute the facts then apparent which, as outlined above, indicated, at least potentially, a malfunction and discharge of and from Pond #2 which then might be causing or might lead to a release of hazardous waste to the environment.

While Respondent was and is not required to adopt a "worse case scenario" when, upon inspection, a malfunction is revealed, it is required to consider all facts available to it and to discern the potential for mischief - or problem - which such collective facts indicate. In this instance, Respondent did not follow the regulatory requirement which provides that it "must inspect . . for malfunctions . . . which may be causing - or may lead to" such release; rather, it chose to disregard the language of §265.15, providing a sequential approach to the problem, and proceeded to an empirical assessment rather than noting the observations the inspection revealed and then acting remedially before a harmful release occurred.

Instead of complying with the regulation, Respondent devoted considerable time and effort to find ways to avoid compliance (Findings 14, 16). In its post-hearing brief, Respondent submitted, as proposed finding 33, that "there is no evidence or expert opinion or analysis that any hazardous waste constituents have penetrated the lower clay liner . . ." which finding was adopted, in part, herein as Finding 35.

This fact cannot be disputed; nor can it be disputed that hazardous waste constituents <u>may have</u> so penetrated the

lower liner allowing release to the environment. This circumstance "points up" the urgency for compliance by Respondent, at the time and in the manner prescribed by regulation, as well as the rationale behind the promulgation of the regulation.

It is unquestioned that, to permit surface impoundments of hazardous waste, extreme preventive measures are essential in the form of standards "as may be necessary to protect human health and the environment".

The wisdom of the legislation is aptly demonstrated by a hypothesis that the assessment, subsequent to discovery of the problem revealed by Respondent's inspection, had, in fact, revealed a release to the uppermost aquifer underlying Pond No. #2.

At that juncture, facts revealed by the inspection along with facts available to Respondent respecting construction of subject facility would suggest that said release resulted from a failure to institute timely and effective remedial measures to prevent it.

Moreover, it is the Agency who has the responsibility for "hazardous waste management" and the promulgation of standards which effectively provide remedial measures to prevent harm to human health and the environment, pursuant to statutory mandate. Respondent's interim status as a permittee under the Act is premised on strict compliance with said standards promulgated pursuant to the Act which should be broadly interpreted and liberally construed so that the intent

of Congress to protect the public may be fully effectuated: Marriott v. Nat. Mut. Cas. Co., 195 F.2d 462 (1952).

In the premises, I conclude that Respondent has violated §265.15 as set forth in Counts I and II of the Complaint; and that Civil Penalties should be appropriately assessed as discussed hereinbelow.

Further, I find that Respondent's MOTION FOR SUMMARY

JUDGMENT on Counts I and II of subject Complaint should be
and it is hereby denied on the basis of the evidence appearing
in the record.

## Count III

A violation of Section 265.91(a)(2) is clearly demonstrated on this record, as alleged in Count III of the Complaint, because monitoring wells (at least three) installed downgradient were not located at the limit of the waste management area (defined §265.91(b)(2)). Said subsection further provides that the number, location and depths (of said wells) must ensure that they immediately detect any statistically significant amounts of hazardous waste . . . that migrate from the waste management area to the uppermost aquifer.

This requirement is addressed in the Preamble to subject regulations 45 FR 33192, cols. 2 and 3:

These final regulations require that the owner or operator drill a sufficient number of wells to characterize the potential of groundwater quality caused by his hazardous waste facility.

While the Agency has maintained in the regulations the requirement for a minimum of three wells, it expects that many facilities will have to drill more than three wells..

\* \* \*

Ultimately the burden is on the owner or operator to develop the monitoring system necessary. . .

At page 33193 of said Preamble, it is pointed out that monitoring wells should be placed as close to the waste boundary as possible in order to give a prompt indication of groundwater contamination - to provide early detection.

Said discussion is concluded at 45 FR 33193, col. 2:

The Agency's past and present intent was and is that the groundwater monitoring system would be installed at the perimeter of the waste management area. That intent is specifically stated in the regulations.

#### Count IV

The parties have resolved the issues raised respecting Count IV of the Complaint.

## Civil Penalties

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In assessing the civil penalties, I have given consideration to 40 C.F.R. 22.27(b) which provides:

"(b) Amount of civil penalty. If the Presiding Officer determines that a violation has occurred, the Presiding Officer shall determine the dollar amount of the recommended civil penalty to be assessed in the initial decision in accordance with any criteria set forth in the Act relating to the proper amount of a civil penalty, and must consider any civil penalty guidelines issued under the Act. If the Presiding Officer decides to assess a penalty different in amount from the penalty recommended to be assessed in the complaint, the Presiding Officer shall set forth in the intial decision the specific reasons for the increase or decrease . . . "

Section 3008(c) of RCRA, 42 U.S.C. 6928(c) provides the criteria for penalty assessment, stating:

"Any order issued under this section . . . shall state with specificity the nature of the violation and specify a time for compliance and assess a penalty, if any, which the administrator determines is reasonable taking into account the seriousness of the violation and any good faith efforts to comply with the applicable requirements."

I have reviewed memoranda developed in EPA Headquarters, entitled, respectively: "Penalty Policy for RCRA Subtitle C Violations, Guidance on Developing Compliance Orders under Section 3008 of RCRA", and "Guidance of Application of Interim Status Standards . . . " and the most recent Draft of the RCRA Civil Penallty Policy, dated January 31, 1984. The purpose of these documents is to provide guidance to the Regional offices in determining how to proceed against persons or facilities which had violated certain requirements of the statute and the regulations promulgated pursuant thereto.

The Draft Penalty Policy provides a basis whereby a uniform penalty assessment process can be utilized by all the Regions within EPA so that there is not a disparity among the Regions in assessing penalties for the same or similar violations. One of the foundations of this process is the establishment of classifications of violations and then the creation of the penalty matrix for each class of violations. Upon one axis of a grid is a Classification of Respondent's Non-Compliance, and on the other axis is Actual or Threatened Damage. Each of these axes is divided into three categories: Major, Substantial and Moderate, in descending order of seriousness.

I have considered the above along with the pertinent prosions of the Act, <u>supra</u>, in arriving at appropriate penalties for the violations found to have occurred.

From the Matrix for Class I violations (Attachment'I hereto), I have considered Actual or Threatened Damage (Threat) caused by Respondent's Non-Compliance with Regulatory Standards (Departure), on each Count, and I find that the Civil Penalties reasonably to be assessed are:

Count I \$25,000 (Major threat; major departure);

Count II \$ 9,000 (Major threat; substantial departure);

Count III \$ 6,000 (Substantial threat; substantial departure)

\$40,000

In addition, I have considered the conduct of the Respondent at the time of the inspection and the subsequent "efforts to look at the groundwater requirements" considered by the Regional Administrator (TR. 115). On consideration of the presence or absence of good-faith efforts, I find no adjustment to the above amounts is warranted. Intent to violate is not an element of the offense for which civil penalties are provided by the Act (Section 3008(g)) but it may be and has been here appropriately considered in determining the presence or absence of good faith.

Upon consideration of the record, the submissions of the parties and the conclusions reached herein, in accordance with the criteria set forth in the Act, I propose the following:

## FINAL ORDER 5/

- 1. Pursuant to Section 3008(c) of the Act, 42 USCA 6928(c), a civil penalty in the total sum of \$40,000 is hereby assessed against Respondent Chemical Waste Management, Inc. (Denver-Arapahoe Chemical Waste Processing Facility).
- 2. Payment of the full amount of the civil penalty assessed shall be made, within sixty (60) days of the Service of the Final Order upon Respondent, by forwarding to the Regional Hearing Clerk, U.S. EPA, Region VIII, a Cashier's or Certified Check payable to the Treasurer, United States of America.
- 3. Respondent shall in all respects comply with the Compliance Order issued herein (Complaint, pages 6-9) and shall provide Notice of Compliance with the terms of same, with a description of steps taken to achieve compliance, within five (5) days after completion, to the following:
  - (a) The Regional Administrator, U.S. EPA, Region VIII;
  - (b) The Regional Hearing Clerk, U.S. EPA, Region VIII, and
  - (c) Complainant is Counsel of Record.

In the event, and in those instances, where any of said actions have already been completed, notice of same shall be provided within five (5) days from and after the effective date hereof.

DATED: February 22, 1984

Marvin E. Jones Administrative Law Judge

<sup>5/ 40</sup> C.F.R. 22.27(c) provides that this Initial Decision shall become the Final Order of the Administrator within 45 days after its service upon the parties unless an appeal is taken by one of the parties herein or the Administrator elects to review the Initial Decision.

Section 22.30(a) provides for appeal herefrom within 20 days.

# THE PENALTY MATRIX FOR CLASS I VIOLATIONS AND FOR POTINUED OR FLAGRANT CLASSIII VIOLATIONS

Actual or Threatened Damage			
-	Major	 	Moderate
Major	\$25,000	\$10,000	\$2,500
	to	to	to
	20,000	8,000	1,500
	19,000	7,000	1,000
Substantial	to	to	to
	15,000	5,000	500
Moderate	14,000	4,000	400
	to	to	to
	11,000	3,000	100

#### PENALTY CALCULATION

classification of Respondent's con-compliance with Regulatory

ebabha:

## 1. Selection of Appropriate Penalty Cell-

(a) Determine "Damage" Category -- the actual harm or potential for harm to human health or the environment. Based on the facts of a particular situation, this threat should be classified as major, substantial or moderate.

ALL CLASS III VIOLATIONS ARE PRESUMED TO POTENTIALLY CAUSE "MODERATE" DAMAGE

(b) Determine "Non-compliance" Category -- extent of Respondent's non-compliance with regulatory standards. Based on the facts of a particular situation, this noncompliance should be classified as major, substantial or moderate.

#### 2. Determine Base Penalty Amount

Each cell contains a limited range from which to choose; often the midpoint may be chosen but it is at the discretion of enforcement personnel to go higher or lower depending on the circumstances of the case.

## CERTIFICATION OF SERVICE

I hereby certify that, in accordance with 40 C.F.R. 22.27(a), I have this date forwarded to the Regional Hearing Clerk, of Region VIII, U.S. Environmental Protection Agency, the Original of the foregoing Initial Decision of Marvin E. Jones, Administrative Law Judge, and have referred said Regional Hearing Clerk to said section which further provides that, after preparing and forwarding a copy of said Initial Decision to all parties, she shall forward the Original, along with the record of the proceeding, to the Hearing Clerk, EPA Headquarters, Washington, D.C., who shall forward a copy of said Initial Decision to the Administrator.

DATED: February 22, 1984

Mary Lou Clifton

Secretary to Marvin E. Jones, ADLJ

# Attachment C

## RECUSAL FORM

This form must be included with <u>all</u> documents requiring review by the Administrator, Mr. William D. Ruckelshaus.

<u>_</u>   1;	listed on Attachment A, or the industry of which it is a member, is distinctively affected or involved in this particular matter.
	Name of entity and/or industry:
	Nature of entity's interest:
2.	It appears that (1) this is a particular regulatory or adjudicatory matter in which an entity listed on Attachment A or Attachment B is a party-in-interest and (2) the matter (a) was pending before EPA at the time Mr. Ruckelshaus was affiliated with that entity, or (b) was one in which he was directly and substantially involved while affiliated with that entity.
	Name of entity:
	Nature of entity's participation:
] 3.	It appears that the entity listed below has an interest in this matter and that Mr. Ruckelshaus had a prior affiliation with such entity. (Do not check this box if No. 1 or No. 2 above applies.)
	Name of entity:
	Nature of entity's interest:

<u>x</u>   4.	There is no potential recusal issue apparent to the office originating this matter.				
	Names and signature of official(s) filing regusal form.				
	Marvin E. Jones Administrative Law Judge				
	Date: February 22, 1984				
•					
Concur _	Non-concur				
Comments	s:				
	General Counsel				
	The concurrence of the General Counsel is not required if Box 4 is checked.				
	•				
I recuse	myself from decision-making in this matter.				
Date: _	Administrator				
I do not	recuse myself from decision-making in this matter.				
Date: _	Administrator				
	Δαπι <b>ηιςτγάτου</b>				