

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:)
)
JLM Chemicals, Inc.) **Administrative Order**
)
Proceeding Under Sections) **EPA-5-02-113(a) IL-02**
113(a)(3) and 114(a)(1))
of the Clean Air Act,)
42 U.S.C. §§ 7413(a)(3))
and 7414(a)(1))
_____)

Administrative Order

1. The Director of the Air and Radiation Division, United States Environmental Protection Agency (U.S. EPA), Region 5, is issuing this Order to JLM Chemicals, Inc. (JLM) under Sections 113(a)(3) and 114(a)(1) of the Clean Air Act (Act), 42 U.S.C. §§ 7413(a)(3) and 7414(a)(1).

Statutory and Regulatory Background

2. The Administrator of U.S. EPA may promulgate regulations establishing standards for the protection of the stratospheric ozone under Section 615 of the Act, 42 U.S.C. § 7671n.
3. Under Section 608 of the Act, 42 U.S.C. § 7671g, the Administrator promulgated the National Recycling and Emission Reduction Program under the Stratospheric Ozone Standards (Stratospheric Ozone Standards), 40 C.F.R. Part 82.
4. The Stratospheric Ozone Standards applies to any person servicing, maintaining, repairing, or owning appliances, as those terms are defined at 40 C.F.R. § 82.152.
5. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.152, defines "industrial process refrigeration" as complex customized appliances used in the chemical...industries. These appliances are directly linked to the industrial process.
6. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(2), requires that an owner or operator of

industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant must have leaks repaired if the appliance is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period. Repairs must bring annual leak rates to below 35 percent during a twelve month period.

7. The Stratospheric Ozone Standards, at 40 C.F.R. § 82.156(i)(9), requires that an owner or operator of industrial process refrigeration equipment must repair leaks pursuant to 40 C.F.R. § 82.156(i)(2) within 30 days after discovery of the leak.

Findings

8. JLM owns and operates a chemical manufacturing plant at 3350 131st Street in Blue Island, Illinois (the Facility). The Facility contains three industrial process refrigeration units with normal charges of over 50 pounds.
9. The three industrial process refrigeration units, Vilter, Carrier Circuit #1, and Carrier Circuit #2, use the class II refrigerant HCFC-22, or R-22.
10. R-22 was added to the three industrial process refrigeration units at JLM between November 1, 1998 and November 13, 2001.
11. Neither JLM nor the service contractor followed work procedure or record-keeping practices that were necessary to ensure compliance with the Stratospheric Ozone Standards. Specifically, JLM and the contractor were unable to know exactly how much more refrigerant was added than was evacuated during service to the three industrial process refrigeration units.

Compliance Program

12. By the effective date of this Order, JLM must achieve, demonstrate, and maintain compliance with the Stratospheric Ozone Standards at its Facility.
13. JLM, and/or any contractor hired by JLM, must measure, by use of a charging scale, how much refrigerant is evacuated from an industrial process refrigeration unit each time evacuation of refrigerant is needed during any type of service, maintenance, and/or repair on a unit. JLM must record and keep on-site the date, amount of refrigerant

evacuated, the type of refrigerant evacuated, and the type of service(s) performed.

14. JLM, and/or any contractor hired by JLM, must measure, by use of a charging scale, how much refrigerant is charged to an industrial process refrigeration unit each time any refrigerant is charged to a unit. JLM must record and keep on site the date, amount of refrigerant charged, the type of refrigerant used, and the type of service(s) performed. JLM must also record the amount of refrigerant charged that replaces any refrigerant which was evacuated in the process of servicing, maintaining, and/or repairing the unit.
15. JLM, and/or any contractor hired by JLM, must perform leak rate calculations, as specified in Section D-1 of the Compliance Guidance for Industrial Process Refrigeration Leak Repair Regulations under Section 608 of the Clean Air Act (Guidance), October 1995, any time refrigerant is charged to a unit.
16. JLM may exclude the amount of refrigerant evacuated and then returned to a unit during service and/or repair from the leak rate calculations if records are kept showing the date, amount of refrigerant evacuated, the type of refrigerant evacuated, and a description of the service(s) performed.
17. JLM may exclude the amount of purged refrigerant from leak rate calculations if the purged refrigerant is destroyed at an efficiency of at least 98% and records, in accordance with Purged Refrigerant guidelines of Section G of the Guidance, are maintained.
18. If industrial process refrigeration equipment normally containing more than 50 pounds of refrigerant is leaking at a rate such that the loss of refrigerant will exceed 35 percent of the total charge during a 12-month period, JLM must have leaks repaired such that annual leak rates are brought below 35 percent during a twelve month period.
19. JLM must make repairs of leaking industrial process refrigeration equipment in accordance with 40 C.F.R. § 82.156(i)(2) and within 30 days after discovery of the leak.
20. JLM must conduct an initial verification test at the conclusion of the repair efforts. The initial verification test must be conducted before the replacement of the full charge of refrigerant in instances where refrigerant has

been evacuated and before a unit is brought back on line. JLM must not bring a unit back on line until an initial verification test indicates that the leak is repaired.

21. JLM must conduct a follow-up verification test within 30 days after the initial verification test where normal operating characteristics or conditions, as defined in Section J of the Guidance and 40 C.F.R. § 82.152, have been maintained. If a unit has been taken off-line, JLM must conduct a follow-up verification test within 30 days of bringing the system back on-line and operating at normal operating characteristics or conditions.
22. JLM must use at least one of the following verification test methods for any initial and follow-up verification tests performed:
 - A. Soap bubble test; or
 - B. Electronic leak detector; or
 - C. Ultrasonic leak detector; or
 - D. Pressure test; or
 - E. Vacuum test; or
 - F. Fluorescent dye and black light test; or
 - G. Infrared test; or
 - H. Near infrared (black scatter absorption gas imaging) test; or
 - I. Halon refrigerant gas detection.
23. JLM must develop, implement, and complete a one-year retrofit and retirement plan if, for any reason, a leak cannot be repaired such that the leak rate will be below 35% and JLM decides not to mothball the unit. The plan must be developed within 30 days of leak detection. The plan must be dated and kept at the site of the leaking unit, where the original copy will be available for U.S. EPA inspection.
24. JLM must notify the U.S. EPA within 30 days of a failed follow up-verification test of the failed test. JLM must also report to the U.S. EPA and keep on site records of:
 - A. The leak rate;
 - B. The method used to determine the leak rate and full charge;
 - C. The date of discovery that the leak rate was above 35%; and
 - D. The location of the leaks.
25. JLM must resume all requirements of this Order when a unit returns to service after being mothballed, as defined in

Section J of the Guidance and 40 C.F.R. § 82.152, such that the date the unit was mothballed is treated as one day prior to the unit being returned to service. Essentially, as if the unit had never been mothballed.

26. JLM must certify in writing to U.S. EPA by **June 30, 2002**, what actions it has taken to come into and remain in compliance with the Stratospheric Ozone Standards, 40 C.F.R. 82, Subpart F.
27. Any notice, report, or other document submitted by JLM pursuant to this Order, which makes any representation concerning JLM's compliance or noncompliance with any requirement of this Order, shall be certified by an authorized representative of JLM. The certification of such responsible official shall be in the following form: "**I hereby certify that the information contained in or accompanying this submission is true, accurate and complete to the best of my knowledge, information and belief.**"
28. JLM must send all reports required by this Order to:

Attention: Compliance Tracker (AE-17J)
Air Enforcement and Compliance Assurance Branch
U.S. EPA, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

General Provisions

29. This Order does not affect JLM's responsibility to comply with other local, state, and federal laws and regulations.
30. This Order does not restrict U.S. EPA's authority to enforce Section 608 of the Act, or any other section of the Act.
31. Nothing in this Order limits U.S. EPA's authority to seek appropriate relief, including penalties under Section 113 of the Act, 42 U.S.C. § 7413, for violations of the National Recycling and Emission Reduction Program.
32. Failure to comply with this Order may subject JLM to penalties of up to \$27,500 per day for each violation under Section 113 of the Act, 42 U.S.C. § 7413.
33. The terms of this Order are binding on JLM, its assignees and successors. JLM must give notice of this Order to any successors in interest, prior to transferring ownership, and

must simultaneously verify to U.S. EPA, at the above address, that JLM has given the notice.

34. This Order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., because it seeks collection of information by an agency from specific individuals or entities as part of an administrative action or investigation.
35. U.S. EPA may use any information submitted under this Order in an administrative, civil or criminal action.
36. Section 113(a)(4) of the Act, 42 U.S.C. § 7413(a)(4), states that an Order shall not take effect until the person to whom it is issued has had an opportunity to confer with U.S. EPA about the alleged violation. Therefore, U.S. EPA is giving JLM an opportunity to confer with U.S. EPA concerning this Order. JLM may schedule a conference with U.S. EPA by calling Will Brooke, at (312) 886-0258, within 10 days of JLM's receipt of this Order.
37. The Order shall become effective on **May 31, 2002**. The Order shall expire one year from the effective date, if JLM has complied with all of its terms.

4/18/02
Date

Pamela Blakeley for SR
Stephen Rothblatt, Acting Director
Air and Radiation Division