

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)	
PETROTOMICS COMPANY)	Docket No. 40-6659
)	Source Material License
)	No. SUA - 551
Shirley Basin Mill)	
P.O. Box 2509)	Amendment No. 7
Shirley Basin, WY 82615)	

ORDER TO MODIFY LICENSE

I

Petrotomics Company (Licensee) is the holder of Source Material License No. SUA-551 issued by the Nuclear Regulatory Commission (Commission). The license authorizes the possession, use and processing of natural uranium and the production of 1500 tons of U_3O_8 per year. The current license was issued October 3, 1984 and will expire on September 30, 1990.

II

On September 30, 1983, the Administrator of the Environmental Protection Agency (EPA) promulgated, pursuant to Section 275b of the Atomic Energy Act of 1954 (Act), the final health and environmental standards to govern stabilization and control of byproduct materials at licensed commercial uranium and thorium processing sites (40 CFR 192). Under the terms of Section 275d of the Act, the Commission is responsible for the implementation and enforcement of the standards promulgated by EPA.

Section 192.32(a)(2)(iii) of EPA's 40 CFR 192 requires that detection monitoring programs for ground water (required by 40 CFR 264.98) to establish ground water protection standards for hazardous constituents for each

regulated unit (40 CFR 264.92) be in place and operational within one year of the date of promulgation. All NRC licensees subject to the rule, therefore, were required to have an acceptable detection monitoring program in operation no later than September 30, 1984.

By letter dated July 10, 1984, the Commission notified the licensee of the acceptance criteria it would use in evaluating whether the licensee's ground water monitoring program was acceptable to meet these requirements. The Commission also pointed out those specific areas of the licensee's current program which it believed did not meet the acceptance criteria. The licensee was directed to submit its proposed program sufficiently in advance of the September 30, 1984 deadline to permit NRC review and implementation of the program.

The licensee responded to the July 10, 1984 letter on September 27, 1984. The Staff's analysis of the licensee's response and evaluation of its program for conformance to the acceptance criteria is set forth in the attachment to this Order.

The detection monitoring program has been required in order to establish ground water standards for each regulated entity to assure that hazardous constituents entering the ground water from that entity do not exceed established concentration limits in the uppermost aquifer passing under the tailings impoundment. As described above, detection monitoring programs have been required to be in place since September 30, 1984. If contamination exceeds standards pursuant to 40 CFR 192.33, a corrective action program as specified in 40 CFR 264.100 may be required to be in operation no later than 18 months after a finding of exceedance is made. If undetected contamination of ground water occurs, it may degrade the ground water to the extent that

available corrective actions will be ineffective and the contamination will irretrievably pose a substantial present or potential hazard to human health or the environment. Therefore, I have determined pursuant to 10 CFR 2.204 that the public health, safety, and interest requires that the monitoring program to gather the information to establish the appropriate ground water standards for this licensee and to detect their exceedance should be implemented as soon as possible and that the license modification set forth below should be effective immediately.

III

Accordingly, pursuant to sections 61, 81, 84, 161(b & o) and 275 of the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR 2.204 and Part 40, IT IS HEREBY ORDERED EFFECTIVE IMMEDIATELY THAT: License No. SUA-551 is amended by adding the following License Condition No. 51 to read as follows:

51. The licensee shall implement a ground water detection monitoring program to ensure compliance to 40 CFR 192.32(a)(2) which includes the following elements:
 - A. The licensee shall monitor at the temporary point of compliance and background wells for the following indicator parameters: Arsenic, Selenium and pH. The licensee shall utilize analytical techniques capable of providing lower limits of detection of 0.005 mg/l and 0.001 mg/l for arsenic

and selenium, respectively. Measurements of pH shall be reported to the nearest 1/10 standard unit.

- B. The determination of compliance shall be based upon sampling Wells 5-SC and 42-SC.
- C. The determination of background levels for the parameters specified in subsection (A) shall be defined by sampling Wells 39-SC and 41-SC.
- D. The licensee shall sample for those parameters specified in subsection (A) at those wells designated in subsections (B) and (C) on a monthly basis for a period of one (1) year and at least twice annually thereafter. The first monthly sample shall be taken within 30 days of the date of this Order. All semiannual samples shall be taken at least four months apart.
- E. The licensee shall, within 60 days of collection of the last of the twelve monthly samples, propose for USNRC review and approval in the form of a license amendment background levels for indicator parameters and a statistical procedure for identifying significant changes (95% confidence level) between data from the wells specified in subsections (B) and (C).
- F. The licensee shall report the data required by subsection (D) semiannually along with those data required by License

Condition No. 22 in accordance to the reporting format, Attachment No. 4 to SUA-551, "Sample Format for Reporting Detection Monitoring Data." These monitoring requirements are in addition to the requirements specified in License Condition No. 45.

- G. The licensee shall report at least annually in accordance to reporting requirements specified in subsection (F) the rate and direction of ground water flow under the tailings impoundment.

IV

The licensee or any other person adversely affected by this Order may request a hearing within 25 days after issuance of this Order. Any answer to this Order or any request for hearing shall be submitted to the Director, Uranium Recovery Field Office, U.S. Nuclear Regulatory Commission, P.O. Box 25325, Denver, Colorado, 80225. Copies shall also be sent to the Executive Legal Director, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555 and to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region IV, Parkway Central Plaza Building, 611 Ryan Plaza Drive, Suite 1000, Arlington, Texas, 76011. ANY REQUEST FOR A HEARING SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

If a hearing is requested by the licensee, the Commission will issue an order designating the time and place of any hearing. If a hearing is held, the issue to be considered at such hearing shall be:

Whether, on the basis of the matters set forth in this Order, this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

/s/

R. Dale Smith, Director
Uranium Recovery Field Office
Region IV

Dated at Denver, Colorado
this 19th day of July 1985