March 24, 1999

Mr. Ron A. Juday, Supervisor
Petrotomics Company
P.O. Box 8509
Shirley Basin, WY 82615

SUBJECT: AMENDMENT 66 - LICENSE CONDITIONS 11, 21, 27, 41, 49.G., AND 50.B.2.

Dear Mr. Juday:

The U.S. Nuclear Regulatory Commission (NRC) staff, based on its review of your request by letter dated December 29, 1998, hereby amends Conditions 11, 21, 27, 41, 49.G., and 50.B.2. of Source Material License SUA-551 for the Shirley Basin, Wyoming, uranium mill. The amendment changes the reference in Condition 11 from "License Condition 11 Summary" dated February 10, 1994, to that dated December 29, 1998, and February 18, 1999, and deletes Conditions 21, 27, 41, 49.G., and 50.B.2, to reflect current reclamation status of the site. All other Conditions of this license shall remain the same.

The enclosed Technical Evaluation Report contains the staff's assessment of the licensing action. The license is being reissued to incorporate the requested change, and is enclosed. If you have any questions, please contact the NRC Project Manager, Mohammad Haque, at (301) 415-6640.

Sincerely,

[Signed by]

N. King Stablein, Acting Chief
Uranium Recovery Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

Docket No. 40-6659
TAC No. L51771 (closed)

Enclosures: As stated

cc: G. Beach, DEQ, WY
R. Chancellor, DEQ, WY
M. Moxley, DEQ, WY

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

March 24, 1999

Mr. Ron A. Juday, Supervisor
Petrotomics Company
P.O. Box 8509
Shirley Basin, WY 82615

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Dear Mr. Juday:

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Office of Nuclear Material Safety
and Safeguards

Docket No. 40-6659

Enclosures: As stated

cc: G. Beach, DEQ, WY
R. Chancellor, DEQ, WY
M. Moxley, DEQ, WY

ENCLOSURES

TECHNICAL EVALUATION REPORT

DATE: March 9, 1999

DOCKET NO. 40-6659 LICENSE NO. SUA-551

LICENSEE: Petrotomics Company

FACILITY: Shirley Basin, Wyoming

PROJECT MANAGER: Mohammad Haque

TECHNICAL REVIEWER: Mohammad Haque, John Lusher

SUMMARY AND CONCLUSIONS

Petrotomics Company (Petrotomics), by its letters dated December 29, 1998, and February 18, 1999, requested to amend Conditions 11, 21, 27, 41, 49.G., and 50.B.2. of the Source Material License SUA-551 to reflect current reclamation status of the uranium mill site at Shirley Basin, Wyoming. Based on its review, the U.S. Nuclear Regulatory Commission (NRC) staff has found Petrotomics' request to delete Conditions 21, 27, 41, 49.G., and 50.B.2., and to modify the "License Condition 11 Summary," as proposed, acceptable.

DESCRIPTION OF LICENSEE'S AMENDMENT REQUEST

Petrotomics has proposed to delete Conditions 21, 27, 41, 49.G., and 50.B.2.; and to update its February 10, 1994, submittal entitled "License Condition 11 Summary" (Summary). The revised Summary, submitted by letter dated December 29, 1998 (Attachment 1), and its modification by letter dated February 18, 1999 (Attachment 2), are attached to this report. The purpose of updating the Summary is to make Condition 11 of License SUA-551 commensurate with current site activities.

License Condition 11

Change reference of "License Condition 11 Summary" to submittal by letters dated December 29, 1998, and February 18, 1999. The original version of the Summary was dated February 10, 1994, which was later amended by NRC's letter dated October 7, 1996. The proposed changes in the Summary are as follows:

Section 4.2

Update reclamation status. Delete the requirement for quarterly dam inspections and the required training by a qualified dam inspector. The dam has been reconfigured as proposed in the reclamation plan and no longer serves as a dam.

Section 5.0

Change the words "corrective action" to "compliance monitoring."

Section 5.1-1, item 1

Reword the last sentence to reflect the current position the site supervisor reports to.

Figure 5.1-1

Revise to reflect the current reporting organization chart.

Section 5.1-2

Delete the second paragraph on non-routine maintenance.

Section 5.1-5

Rewrite the section to reflect current site status.

Section 5.3

Delete the last paragraph, and add a sentence on contractor training.

Section 5.3-1

Under retraining, modify the requirement from "annually" to "if needed as determined by the Radiation Coordinator."

Section 5.3-1

Under retraining, modify the requirement from "annually" to "if needed as determined by the Radiation Coordinator."

Section 5.3-1, item 11

Under Methods of Controlling Contamination, revise the wordings for compatibility with the current status of the site.

Section 5.3-1, item 12

Under Protective Clothing, revise the wordings for compatibility with the current status of the site.

Section 5.3-3

Delete this section as there are no radiation personnel other than the Radiation Coordinator.

Section 5.5-1

Delete the requirement for personnel dosimetry since the criteria required for monitoring under 10 CFR 20.1502 (a) and (b) are not met. A summary of annual exposures for the last 10 years was provided in the licensee's Attachment A.

Section 5.5-6, item 2

Revise the first paragraph to require the Radiation Coordinator to conduct quarterly spot checks if contamination surveys are required, as determined by the Radiation Coordinator.

Section 5 5-7-1

Delete the words "for the environmental monitoring program."

License Condition 21

Delete the Condition: The Condition discusses reporting of any failure of the tailings dam or tailings discharge and solution return system. The tailings dam has been reconfigured to the reclamation plan specifications and no longer acts as a dam. Amendment No. 63 "Concurrence on Alternate Concentration Limits" eliminated the ground water Corrective Action Plan and all solution return systems.

License Condition 27

Delete the part of the Condition that addresses expanding of the tailings dam by raising the height of the present dam or building a new dam for tailings impoundment.

License Condition 41

The Condition addresses the environmental and effluent monitoring program. Delete the Condition for the reasons as follow.

Air Particulate Sampling. This program consists of one sampler at or near the downwind site boundary with continuous sampling, composited quarterly and analysis for U-natural, Th-230, and Ra-226. All values after 1986 are much less than 10% of the values listed in 10 CFR Part 20, Appendix B, Table 2, Column 1, Air Effluent Concentration Limits. During inspection it was observed that this program was no longer necessary.

Radon Sampling. This program requires continuous sampling at two locations, one upwind and the other downwind. The average for the upwind and downwind sites is essentially the

same at 2.16 and 2.17, respectively. Terminate the program since the monitoring results show background levels (radon) only.

Groundwater. This program specifies the sampling of the wells listed in License Condition 47.A. Delete this item as it is a duplication of Condition 47.A.

Direct Radiation. This program consists of two locations near the site boundary, and is the same for radon samples. For the past three years, the average for the upwind site has been 42.85 mrem/qr while the average for the downwind site has been 48.58, a difference of 5.75 mrem/qr. This indicates compliance with 10 CFR 20.1301 (a)(2) for dose limits to individual members of the public, and therefore, this program should be terminated.

License Condition 49.G

This Condition addresses the requirement to submit a final cost estimate based on the approved reclamation plan no later than three (3) months following issuance of this amendment (Amendment 31 dated July 11, 1990). This Condition was met and is no longer applicable, and therefore should be deleted.

License Condition 50.B(2)

The Condition addresses a schedule for completion of ground water corrective action to meet performance objectives. Since by Amendment No. 63, Alternate Concentration Limits were established and there is a specific compliance monitoring program in place as required by License Condition 47, this item is no longer applicable and therefore, should be deleted.

TECHNICAL EVALUATION

The changes proposed above by Petrotomics have resulted from review of its reclamation status and the NRC staff comments made during annual inspections. With regard to the radiation safety program at a reduced level of activity, the staff concurs that it does not pose any significant health and safety concern as the site reclamation is nearing completion. Based on its evaluation of the proposed changes, the staff considers the licensee's request acceptable.

RECOMMENDED LICENSE CHANGE

The staff recommends that the Source Material License SUA-551 be revised to reflect the proposed changes described above. The modified License Conditions should read as follows. The other Conditions shall remain the same.

11. For use in accordance with statements, representations, and conditions contained in the License Condition 11 Summary submitted by letters dated December 29, 1998, and February 18, 1999, except where superseded by license conditions below.

Whenever the word "will" is used in the above referenced sections it shall denote a requirement.

[Applicable Amendments: 8, 9, 10, 21, 35, 42, 54, 66]

21. DELETED by Amendment No. 66.

27. Waste other than tailings shall not be disposed of in the tailings impoundment without written approval by the NRC in the form of a license amendment.

[Applicable Amendment: 66]

41. DELETED by Amendment No. 66.

49.G. DELETED by Amendment No. 66.

50.B.(2) DELETED by Amendment No. 66.

ENVIRONMENTAL IMPACT EVALUATION

An environmental assessment for this action is not required, since this action is categorically excluded under 10 CFR 51.22 (c)(11), and an environmental report from the licensee is not required by 10 CFR 51.60 (b)(2).

REFERENCES

Petrotomics Company (Petrotomics), 1998. Submittal by letter dated December 29, 1998, from Ron Juday (Petrotomics) to Joseph J. Holonich (NRC).

Petrotomics, 1999. Submittal by letter dated February 18, 1999, from Ron Juday (Petrotomics) to Joseph J. Holonich (NRC).

ATTACHMENT 1

Petrotomics Company
P.O. Box 8509, Shirley Basin, Wyoming 82615 · Telephone: (307) 234-9341

December 29, 1998

Mr. Joseph J. Holonich, Chief
Uranium Recovery Branch MS-T-7-J-9
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Reference: License Condition No. 11, 21, 27, 41, 49.G., 50.B (2) - Source Material License SUA – 551.

Dear Mr. Holonich:

During the routine inspection conducted by Mr. Louis C. Carson II on March 23 and 24, 1998 of our Source Material License SUA-551, a number of suggestions were made by Mr. Carson regarding elimination of programs that are no longer required by regulation, due to the level of radiation being measured, and the desirability of deleting conditions that no longer apply as a result of reclamation. We are therefore submitting this request for Amendment to our Source Materials License SUA-551 for License Conditions 11, 21, 27, 41, 49.G, 50 B (2) as explained below.

The following changes are suggested for License Condition 11 to conform to the activity level of operations. A new License Condition 11 Summary, revised December 1998 is attached. The following changes are proposed in the License Condition 11 Summary:

Section 4.2. Update of the reclamation status; delete the requirement for Quarterly Dam Inspections and the required training by a qualified dam inspector. The dam has been reconfigured to the reclamation configuration and no longer serves as a dam.

Section 5.0. Change the words "corrective action" to "compliance monitoring".

Section 5.1-1, Item 1. The last sentence was reworded to reflect the current position the site supervisor reports to.

Figure 5.1-1. Change to reflect the current reporting organization chart.

Section 5.1-2. Delete second paragraph on non-routine maintenance.

Section 5.1-5. This section has been rewritten to reflect the current site status.

Section 5.3. Add sentence on Contractor training; delete last paragraph.

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Section 5.3-1. Under retraining, the work "annually" is changed to "if needed as determined by the Radiation Coordinator".

Section 5.3-1 Item 11. This item has been rewritten.

Section 5.3-1 Item 12. This item has been corrected.

Section 5.3-3. Delete this section due to having no other radiation personnel other than the Radiation Coordinator.

Section 5.5-1. Delete the requirement for personnel dosimetry since the criteria required for monitoring under 10 CFR 20.1502 a and b is not met. A summary of annual exposures for the last 10 years is provided in Attachment A.

Section 5.5-6 Item 2. The first paragraph has been rewritten to require the Radiation Coordinator to conduct quarterly spot checks if contamination surveys are required.

Section 5.5-7-1. Delete the words "for the environmental monitoring program".

License Condition 21 discusses the reporting of any failure of the tailings dam or tailings discharge and solution return system. The tailings dam has been reconfigured to the reclamation plan specifications and no longer acts as a dam. Amendment No. 63 "Concurrence on Alternate Concentration Limits" eliminated the Corrective Action Plan (CAP) and all solution return systems. This license condition should be deleted.

License Condition 27 discusses the expanding of the tailings dam by raising the height of the present dam or building a new dam for tailings impoundment. This condition is no longer relevant and the above reference to expanding or building a new tailings impoundment should be deleted. The last sentence in Condition 27 could remain as "Waste other than tailings shall not be disposed of in the tailings impoundment without written approval by the NRC in the form of a license amendment.

License Condition 41 addresses the environmental and effluent monitoring program dated February 10, 1994. We are requesting that this condition be deleted based on the following information.

Air Particulate Sampling: This program consists of one sampler at or near the downwind site boundary with continuous sampling, composited quarterly and analysis for U-natural, Th-230, and Ra-226. Table 1 attached is a summary of the semi-annual environmental reports from the 1st Quarter 1985 through 2nd Quarter 1998. All values after 1986 are much less than 10% of the values listed in 10 CFR 20, Appendix B, Table 2, Column 1, Air Effluent Concentration Limits. It was the observation of Mr. Carson that this program is no longer necessary and we concur.

Radon Sampling: This program consist of two locations, one upwind and one downwind with continuous sampling at each location. Table 2 attached is a summary of the semi-annual environmental reports from the 1st Quarter 1985 through 2nd Quarter 1998. The average for the upwind and downwind sites is essentially the same at 2.16 and 2.17 respectively. This program should be terminated as the monitoring is showing background levels of radon only.

Groundwater: This program specifies the sampling of the wells listed in License Condition No. 47.A. This item should be deleted, as it is a duplication of License Condition 47.A.

Direct Radiation: This program consists of two locations near the site boundary, and is the same as for radon samples. Table 3 attached is a summary of the semi-annual environmental reports from the 1st Quarter 1985 through 2nd Quarter 1998. During the last three years the average for the upwind site has been 42.85 mrem/qr while the average for the downwind site has been 48.58, a difference of 5.75 mrem/qr. This demonstrates compliance with 10 CFR 20.1301 (a)(2) for dose limits to individual members of the public. Therefore this program should be terminated.

License Condition 49. G. addresses the requirement to submit a final cost estimate based on the approved plan no later than three (3) months following issuance of this amendment (Amendment 31, July 11, 1990). This item was originally submitted January 19, 1990 and was updated on March ., 1998. This item is complete and should be deleted from the license.

License Condition 50.B.(2) should be amended to reflect the completion of ground-water corrective actions(see Amendment No. 63 "Concurrence on Alternate Concentration Limits").

Please contact me if you need additional information.

Sincerely,

R. A. Juday
Supervisor

PC: Mr. Mohammad Haque - USNRC

U.S. Nuclear Regulatory Commission
Region IV
Attn: Ross Scarano, Director
Division of Radiation Safety and Safeguards
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

LICENSE CONDITION NO. 11
SUMMARY

Revised: December, 1998

3.4 DELETED by Amendment No. 21

3.5 DELETED by Amendment No. 21

3.6 DELETED by Amendment No. 21

4.0 Waste Management System

4.1 DELETED by Amendment No. 21

4.2 Liquids and Solids

The solid and liquid wastes from the milling process were placed in the tailings impoundment area. A brief description of the waste management program is presented below:

The tailings from the milling operation were deposited in an impoundment area west of the mill site. The tailings ponds were dry in 1987. The tailings were shaped and covered with a two foot thick cover layer of compacted clay in 1990, except for a six acre reserve area, in accordance with the reclamation plan. Two small evaporation ponds (total area approximately 37 acres) were constructed on the clay cover layer to receive corrective action pump-back water for evaporation. Construction in accordance with the reclamation plan was resumed in 1996.

The tailings dam has been reconfigured to the approved reclamation design and the remaining radon barrier cover has been placed except for the two evaporation ponds and the reserve area. The rock armor has been placed on the slopes except for a small area near the stage II evaporation pond.

Approval of the Alternate Concentration Limits in 1998 eliminated the corrective action program and the need for the evaporation ponds. No liquids are being pumped back and the ponds are in the process of being dried out prior to completion of the radon barrier cover. The reclamation of the tailings area will be completed as soon as possible.

Special inspections of the area would be performed after the occurrence of significant earthquakes, tornadoes, floods, intense local rainfall or other unusual events. If unusual conditions or signs of distress are noted in an inspection, additional technical evaluation of the reclaimed area will be performed.

5.0 OPERATIONS

Operations are limited to reclamation, compliance monitoring and related activities. All operations will be conducted in conformance with applicable laws and regulations of the various

governmental agencies involved. In order to assure compliance and further implement Petrotomics Company's policy of providing a safe working environment with implementation of the philosophy of maintaining radiation exposures as low as is reasonably achievable, the following programs have been initiated and maintained.

5.1 PROJECT ORGANIZATION

An organizational chart of individuals responsible for the development, review, approval, implementation and adherence to operating procedures and radiation safety programs is presented in Figure 5.1-1.

5.1-1 MANAGEMENT RESPONSIBILITIES

1. SITE SUPERVISOR: The Site Supervisor is responsible for the reclamation of the mine and mill, and all related facilities and activities associated with the Petrotomics Site. The Site Supervisor develops and maintains a plan of action to safely ensure the best possible reclamation at the lowest possible cost. The Site Supervisor reports to the Project Manager, Texaco Gro[illegible] Inc., Environmental Project Management Services, Den[illegible]er, Colorado.

2. RADIATION COORDINATOR: The Radiation/Environmental Coordinator is responsible for establishing and conducting monitoring and control procedures in accordance with State and Federal Government regulations. He ensures that necessary tests are performed to obtain data for radiological monitoring and maintains all records in connection with these tests. He works with State and Federal officials in matters pertaining to radiation control and assures compliance with provisions of the United States Nuclear Regulatory Commission license.
The Radiation/Environmental Coordinator reports directly to the Site Supervisor.

5.1-2 REQUIRED APPROVALS

Non-routine maintenance, cleanup and equipment modification and any remedial or corrective actions are initiated by any level of management with the appropriate action channeled through the Site Supervisor. Activities involving possible radiation exposure are monitored by the Radiation Department to assure the established limits are not exceeded. In addition to the required approvals discussed above, if it has been determined that any process or operation proves an immediate radiation hazard to employees, the Radiation Coordinator has the authority to stop the operation until the hazard has been mitigated.

5.1-3 DELETED by Amendment No. 21.

ORGANIZATIONAL CHART

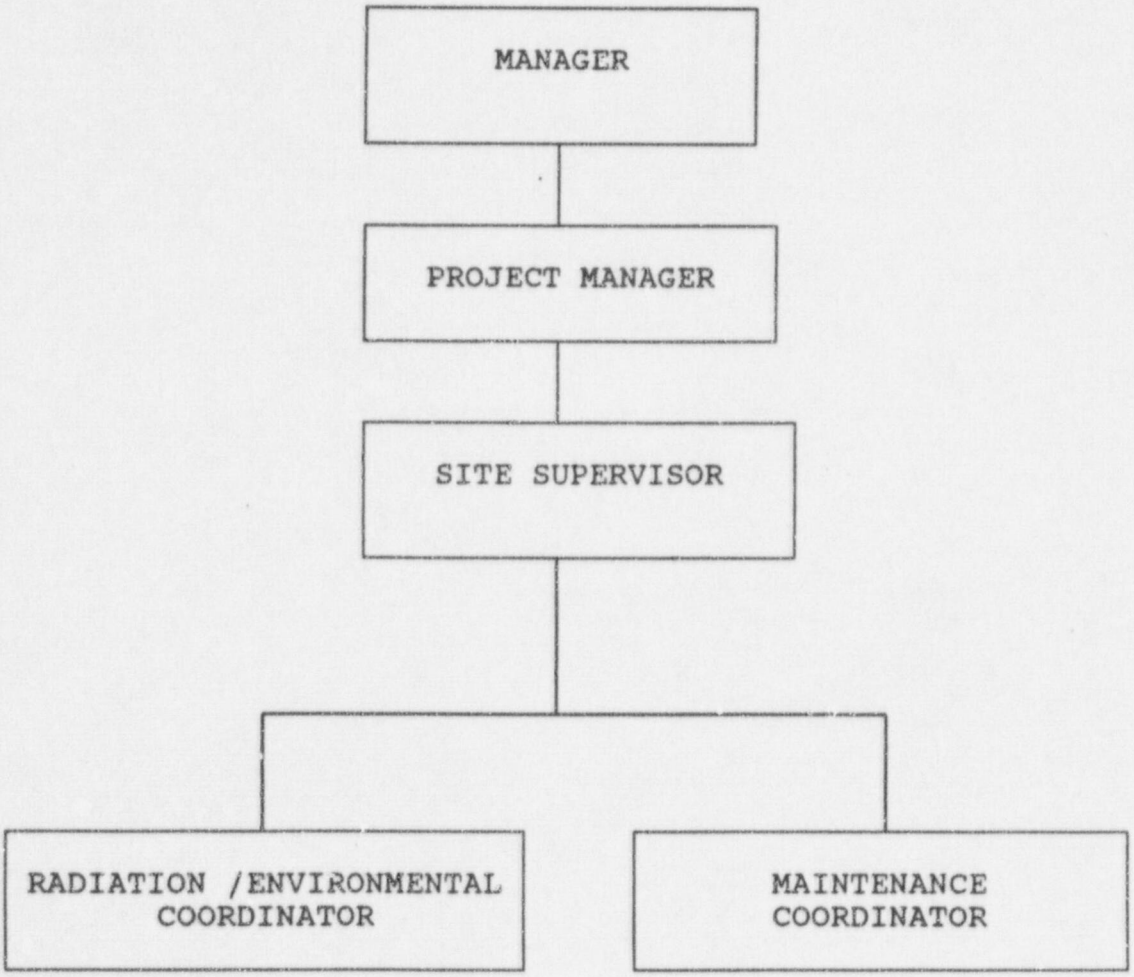

Figure 5.1-1

5.1-4 CORPORATE REVIEW AND ASSISTANCE

Corporate management and professional review, guidance and assistance from corporate management headquarters, Texaco Inc., is provided as needed. When necessary, outside consultants are brought in to review, evaluate and recommend remedial actions.

5.1-5 A.L.A.R.A. PROGRAMS

Petrotomics Company has been successful in maintaining employee exposure and insuring releases are as low as reasonably achievable (A.L.A.R.A.). As a result of reclamation activities, all tailings have been covered and levels of exposure are near or at background. The Radiation Coordinator will continue to monitor activities to insure no tailings are uncovered.

5.2 QUALIFICATIONS

Qualifications of radiation protection personnel are enumerated below:

1. Radiation Coordinator

   A. Education: A bachelor's degree in the physical sciences or engineering from an accredited college or university.

   B. General: One year of supervisory experience and one year of experience in a uranium mill or related industry.

   C. Health Physics Experience: One year of work experience in applied health physics, radiation protection, industrial hygiene or similar work.

   D. Specialized Training: A formalized intensive course in health physics. At least one week of the course should be specifically applicable to health physics for uranium milling and mining. Refresher training - DELETED by Amendment No. 35.

   E. Specialized Knowledge: A thorough knowledge of the proper applications and use of all health physics equipment used at the site, the chemical and analytical sampling and monitoring, methodologies used to calculate personnel exposure to uranium and its daughters.

2. DELETED by Amendment No. 35

5.3 TRAINING

The purpose of the in-house radiation safety program is:

1. To place in proper perspective for the employee the short and long-term radiation hazards associated with the job;

2. To instruct and train employees in practices instituted by management to keep occupational exposures as low as reasonably achievable;

3. To assure each employee has an understanding (both initially and over the duration of his employment) of the radiation safety procedures which should be followed;

4. To stress most safety radiation procedures are "common sense" procedures, just as are occupational safety procedures, that have been implemented to protect the employee, and;

5. To emphasize the employee's personal responsibility to protect himself and others by adhering to all safety procedures.

All new employees receive instructions in site and personal safety, including radiation safety procedures taken to minimize radiation exposure. Contract personnel will receive instruction on an as needed basis as determined by the Radiation Coordinator.

5.3-1 EMPLOYEE RADIATION SAFETY TRAINING

Basic indoctrination in radiation protection is given to all employees. The training is given prior to an employee's commencement of work activities. The new employee will sign a statement indicating he/she has read and is familiar with the safety procedures and understands such procedures prior to commencement of work. The signed statement will be included in the employee's exposure file.

Retraining, which addresses essentially the same material as is presented to new employees, is given to employees if needed as determined by the Radiation Coordinator. The basic employee indoctrination training includes the following:

1. Introduction. Included is a brief review of the historic milling process and the hazards associated with the milling of uranium ore.

2. Description of Radiation. Included is an explanation and definition of radiation and explanation of the associated health protection problems, and an

explanation of terms, i.e., half-life, rem, mrem, maximum permissible exposure.

3. Types of Radiation. A discussion of the types of radiation and their characteristics is presented. Emphasis is placed on alpha, beta and gamma radiation.

4. Biological Effects of Radiation. The effects of radiation on the body are discussed along with the exposure limits that have been established.

5. Radioactive Minerals in Mining. A look at U-238 and the products of its decay. Chemical characteristics, half-life and hazards are covered for these elements.

6. Health Hazards. Specific hazards of exposure to beta and gamma radiation and the ingestion or inhalation of radioactive dust is covered. Internal and external hazards are discussed, as well as protective measures.

7. Monitoring Programs. Addressed are the basic detection methods and instrumentation used for detection of radiation to determine employee exposure. Employees are instructed as to purposes and functions of equipment and the importance of monitoring programs.

8. Principles of ALARA. Management's position in support of the ALARA principles is stated and an explanation of the ALARA program is provided.

9. Employees Rights Under Federal Laws. Instruction is given in accordance with 10 CFR 19, "Instructions to Workers" commensurate with the potential radiological health protection problems in the restricted areas.

All female employees working on the site will be instructed in the potential health protection problems associated with prenatal radiation exposures outlined in Regulatory Guide 8.13, "Instructions Concerning Prenatal Radiation Exposure". Signed acknowledgments of the instruction and understanding of such instructions from each female employee will be maintained in the employee's exposure file.

Also reviewed are allowable exposure limits in accordance with 10 CFR 20 and general operating procedures to maintain exposures ALARA. Also reviewed are required notification and posting requirements in accordance with 10 CFR 19 as well as the radiation exposure reports which workers may request pursuant to 10 CFR 19.13. 10 CFR 21,

"Notification of Defects or Noncompliance" is also reviewed.

10. Radiation Safety Rules. Rules established to provide a safe working area are reviewed. Since protection from radiation safety hazards is commensurate with good industrial and good personal hygiene, emphasis is placed on the responsibility of the employee to maintain safe working conditions and abide by established safety rules. In accordance with general safety practices, repeated violations of the safety rules will result in disciplinary action, up to and including dismissal.

11. Methods of Controlling Contamination. Emphasis is placed on good personal hygiene and housekeeping as methods to control contamination. Cleaning clothing and/or monitoring prior to exiting property are required as necessary. Proper cleaning techniques are also stressed.

12. Protective Clothing. Included in the indoctrination is proper use and purpose of the appropriate protective equipment, including; clothing, gloves, boots, coveralls, eyeglasses, hard hats and respirators.

5.3-2 DELETED by Amendment No. 21.

5.3-3 RADIATION SAFETY PERSONNEL - DELETE

5.3-4 INDUSTRIAL SAFETY TRAINING

New employees are instructed in basic safety rules and work procedures. Safety awareness is continually emphasized at the facility. On a job-specific basis, employees are advised of the precautionary measures necessary for the safe handling and operation of tools, chemicals, solvents, and equipment used at the site.

First aid equipment and facilities are provided at the main office.

5.3-5 DELETED by Amendment No. 21

5.4 SECURITY

Access to the restricted area is controlled by a locked gate at the entrance when Company personnel are not on the property. The restricted area is surrounded by fence, either four strand barbed wire, or combination woven wire and barbed wire. The restricted area is posted in accordance with 10 CFR 20.203 (e). Also, the entrance to the property is posted with the sign, "CAUTION - ANY BUILDING OR CONTAINER WITHIN THIS AREA MAY CONTAIN RADIOACTIVE MATERIAL."

All visitors are required to register at the site office and are not permitted to tour the area without appropriate authorization. When necessary, visitors are escorted while within the secured areas.

Contractors having work assignments, such as equipment repair, will be given appropriate security, safety, and radiation protection orientation commensurate with their duties while in the restricted area.

5.5 RADIATION SAFETY

To comply with the requirements of 10 CFR 19 and 10 CFR 20, Petrotomics has reviewed the requirement for employee radiation monitoring and protection programs. Since the criteria required for monitoring under 10 CFR 20.1502 a and b is not met, monitoring is no longer required.

5.5-1 OCCUPATIONAL EXPOSURE - EXTERNAL - DELETE

5.5-2 DELETED by Amendment No. 21.

5.5-3 OCCUPATIONAL EXPOSURE - INTERNAL - DELETE

5.5-4 BIOASSAY - DELETE

5.5-5 DELETED by Amendment No. 21.

5.5-6 DECONTAMINATION PROCEDURES

Each employee is responsible for safety and quality in his work and for adherence to all safety and radiation protection rules as a condition of employment. Supervisors will ensure that all safety rules are adhered to.

1. Employees

   The potential for radiological contamination is minimal because the mill has been decommissioned and because earthen cover has been placed over the tailings pile. Requirements for self monitoring and decontamination by employees will be based on potential for contamination and will be established by the use of SOP's.

2. Contamination Surveys

If contamination surveys are required, as determined by the Radiation coordinator, the Radiation Coordinator will perform a spot check at least once per quarter, on employees with a survey instrument to verify that contaminated clothing is not removed from the property and proper self monitoring techniques are being used. An action level of 1,000 dpm alpha/100cm2 is used

Surveys of potentially contaminated equipment is conducted before the equipment is released to unrestricted areas. If contamination is detected, the equipment is decontaminated until additional efforts do not significantly reduce contamination levels. The surface contamination levels listed in U.S. NRC Regulatory Guide 1.86, "Termination of Operating Licenses for Nuclear Reactors" (June 1974), is used to establish release limits.

5.5-7 DELETED by Amendment No. 21.

5.5-7-1 SAMPLING METHODOLOGIES

All sampling methodologies are detailed in the Standard Operating Procedures.

General information regarding sampling methodologies include the following:

Sampling Locations;
Date and Time of Collection;
Sample Identification - i.e. air, vegetation, etc.;
Sample Type - i.e. grab, continuous;
Sample Preparation (if applicable);
Analysis Required;
Individual Collecting Sample.

5.6 EMERGENCY NOTIFICATION

In accordance with the conditions of 10 CFR 20.402, "Reports of Theft or Loss of Licensed Material"; 10 CFR 20.403, "Notifications of Incidents"; and 10 CFR 20.405, "Report of Overexposures and Excessive Levels and Concentrations", Petrotomics will take the appropriate actions immediately to notify the appropriate authorities. The management of Petrotomics will also be notified of any such instances.

Where indicated, an investigation shall be made of the instance and a written report shall be prepared. Reports submitted to the Nuclear Regulatory Commission should be in accordance with Sections 20.402, 20.403, and 20.405 of 10 CFR 20.

In accordance with 10 CFR 21, notification of reportable incidents to NRC will be through the delegated Executive Officer. The Executive Officer is the Site Supervisor for Petrotomics.

5.7 DELETED by Amendment No. 21.

5.8 DELETED by Amendment No. 21.

Table 1 - Petrotomics Company - Air Sampling Site No. 5. Downwind

All values are in mCi/ml X 10^{-15}

YEAR	QUARTER	U-nat	Th230	Ra226
1985	1st	3.07	1.60	1.10
	2nd	13.90	6.10	6.60
	3rd	5.41	11.00	2.00
	4th	1.27	6.00	1.40
1986	1st	7.65	16.50	0.96
	2nd	3.73	29.60	6.03
	3rd	3.30	8.72	1.29
	4th	1.14	1.18	0.65
1987	1st	0.33	0.98	0.08
	2nd	1.15	1.02	0.18
	3rd	1.08	1.56	0.14
	4th	0.41	0.30	0.14
1988	1st	0.48	0.48	0.30
	2nd	5.31	0.39	0.20
	3rd	0.90	0.47	0.13
	4th	0.81	0.50	0.19
1989	1st	0.03	0.89	0.17
	2nd	0.24	0.68	0.21
	3rd	0.43	0.23	0.13
	4th	0.26	0.41	0.44
1990	1st	0.56	0.36	0.08
	2nd	0.11	0.07	0.07
	3rd	0.19	0.10	0.58
	4th	1.46	0.10	0.11
1991	1st	0.03	0.08	0.03
	2nd	0.02	0.03	0.03
	3rd	0.51	0.24	0.81
	4th	0.50	0.44	0.12
1992	1st	0.36	1.06	0.12
	2nd	0.24	1.29	0.09
	3rd	0.53	0.26	0.16
	4th	0.53	0.10	0.05
1993	1st	0.48	0.02	0.24
	2nd	0.64	0.36	0.09
	3rd	0.56	1.38	0.02
	4th	0.06	0.11	0.02
1994	1st	0.08	0.21	0.06
	2nd	0.47	0.63	0.12
	3rd	0.14	0.41	0.34
	4th	0.07	0.26	0.19
1995	1st	0.35	0.03	0.14
	2nd	0.31	0.14	0.13
	3rd	0.32	0.23	0.06
	4th	0.11	0.04	0.02
1996	1st	0.41	0.06	0.02
	2nd	0.04	0.08	0.02
	3rd	0.19	0.09	0.06
	4th	0.07	0.04	0.06
1997	1st	0.29	0.02	0.01
	2nd	0.09	0.07	0.01
	3rd	0.72	0.17	0.17
	4th	0.80	0.12	0.14
1998	1st	0.05	0.05	0.05
	2nd	0.23	0.05	0.05
	3rd			
	4th			
	AVERAGE	1.16	1.80	0.49
	HIGH	7.65	29.6	6.03
	LOW	0.02	0.02	0.01
10 CFR 20, App. B, Table 2				
Col. 1, Air Effluent Conc. Limits		5.00E-10	2.00E-14	9.00E-13
Or expressed in mCi/ml x 10^{-15}		5000	20	900

Table 2 - Petrotomics Company - Radon Sampling

All values are in uCi/ml X 10^{-9}

YEAR	QUARTER	Upwind SITE 1	Downwind SITE 5
1985	1st	0.8	1.2
	2nd	2.6	1.6
	3rd	3.0	2.2
	4th	1.4	0.7
1986	1st	1.4	0.8
	2nd	1.5	0.9
	3rd	2.1	2.9
	4th	1.5	1.2
1987	1st	2.4	0.6
	2nd	1.7	0.9
	3rd	3.3	3.3
	4th	2.6	5.6
1988	1st	0.3	0.3
	2nd	5.7	3.9
	3rd	4.4	4.8
	4th	5.1	4.1
1989	1st	0.8	0.7
	2nd	2.5	1.4
	3rd	2.5	2.0
	4th	1.1	0.8
1990	1st	0.7	1.1
	2nd	1.2	1.6
	3rd	1.4	1.6
	4th	0.9	1.1
1991	1st	1.4	1.2
	2nd	1.0	1.3
	3rd	2.2	2.1
	4th	1.7	1.5
1992	1st	2.1	2.2
	2nd	3.2	3.4
	3rd	2.9	3.0
	4th	2.8	3.3
1993	1st	2.0	1.3
	2nd	1.6	2.1
	3rd	3.3	4.1
	4th	1.5	1.6
1994	1st	1.9	2.9
	2nd	2.8	3.7
	3rd	3.2	3.2
	4th	2.1	2.7
1995	1st	0.9	0.8
	2nd	1.5	2.6
	3rd	3.2	3.2
	4th	2.2	2.9
1996	1st	1.3	1.0
	2nd	2.3	2.9
	3rd	3.7	3.5
	4th	2.2	1.9
1997	1st	0.6	0.8
	2nd	2.2	2.4
	3rd	2.7	2.6
	4th	4.0	3.6
1998	1st	1.1	1.4
	2nd	1.7	2.0
	3rd	2.1	2.7
	4th		
	AVERAGE	2.16	2.17
	HIGH	5.7	5.6
	LOW	0.6	0.3
10 CFR 20, App. B, Table 2			
Col. 1, Air Effluent Conc. Limits		1.00E-10	1.00E-10
Or expressed in uCi/ml x 10^{-9}		10.0	10.0

Table 3 - Petrotomics Company - Direct Radiation Sampling

All values are in mRem/quarter

YEAR	QUARTER	Upwind SITE 1	Downwind SITE 5
1985	1st	53.6	77.2
	2nd	46.3	60.3
	3rd	41.4	55.6
	4th	46.2	56.7
1986	1st	51.0	84.4
	2nd	53.3	65.0
	3rd	42.6	62.0
	4th	72.6	68.8
1987	1st	42.3	58.8
	2nd	42.4	50.0
	3rd	42.2	53.8
	4th	51.6	64.4
1988	1st	42.8	66.0
	2nd	43.0	60.4
	3rd	36.6	66.6
	4th	46.2	81.0
1989	1st	40.8	67.6
	2nd	41.6	65.8
	3rd	37.4	63.6
	4th	38.6	67.8
1990	1st	38.8	62.0
	2nd	40.6	66.8
	3rd	44.6	69.0
	4th	47.6	70.0
1991	1st	38.8	53.0
	2nd	36.4	60.0
	3rd	41.8	66.2
	4th	34.4	101.2
1992	1st	38.6	64.2
	2nd	43.8	59.8
	3rd	39.8	63.2
	4th	36.8	72.0
1993	1st	52.4	74.2
	2nd	50.2	82.0
	3rd	48.2	65.6
	4th	51.0	73.8
1994	1st	46.2	64.4
	2nd	46.4	62.8
	3rd	59.0	81.2
	4th	50.0	54.6
1995	1st	45.0	70.6
	2nd	37.0	55.6
	3rd	41.0	55.0
	4th	31.6	53.6
1996	1st	50.6	44.6
	2nd	39.4	55.4
	3rd	56.0	59.4
	4th	38.2	45.4
1997	1st	33.8	51.2
	2nd	32.8	44.0
	3rd	49.0	52.0
	4th	48.8	49.6
1998	1st	42.6	51.2
	2nd	37.4	39.4
	3rd	42.8	42.2
	4th		
Average 1985 to present		44.11	77.20
Average 1996 to present		42.85	48.58
	HIGH	72.6	101.2
	LOW	31.6	39.4

ATTACHMENT "A"

SUMMARY OF DOSIMETERY DATA

1987 TO 1997

TMA
Thermo Analytical Inc.

TMA/Eberline
5635 Kircher Boulevard NE
Post Office Box 3874
Albuquerque, NM 87190-3874
(505) 345-9931

MAR 07 [illegible]

PETROTOMICS 4460
STEPHEN PHAFF
P.O. BOX 8509
SHIRLEY BASIN WY 82615

OUR RECORDS SHOW THE FOLLOWING
NUMBER OF BADGES IN THE
INDICATED WHOLE BODY EXPOSURE
RANGES FOR THE PERIOD FROM
JAN. 01, 1987 TO DEC. 31, 1987

BADGES	EXPOSURE RANGE
18	LESS THAN .010 REM
0	.010 TO .099 REM
1	.100 TO .249 REM
0	.250 TO .499 REM
0	.500 TO .749 REM
0	.750 TO .999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

TMA
Thermo Analytical Inc.

TMA/Eberline
5[illegible]5 Kircher Boulevard NE
Post Office Box 3874
Albuquerque, NM 87190-3874

(505) 345-9931

PETROTOMICS 4460

P.O. BOX 8509
SHIRLEY BASIN WY 82615

Our records show the following number of badges in the indicated whole body exposure ranges for the period from January 1, 1988 to December 31, 1988

BADGES	EXPOSURE RANGE			
13	LESS THAN	.010	REM	
0	0.010	TO	0.099	REM
0	0.100	TO	0.249	REM
0	0.250	TO	0.499	REM
0	0.500	TO	0.749	REM
0	0.750	TO	0.999	REM
0	1.000	TO	1.999	REM
0	2.000	TO	2.999	REM
0	3.000	TO	3.999	REM
0	4.000	TO	4.999	REM
0	5.000	TO	5.999	REM
0	6.000	TO	6.999	REM
0	7.000	TO	7.999	REM
0	8.000	TO	8.999	REM
0	9.000	TO	9.999	REM
0	10.000	TO	10.999	REM
0	11.000	TO	11.999	REM
0	12.000	OR	MORE	REM

MAR 1989

TMA Eberline
Thermo Analytical Inc.

TMA/Eberline
5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931

PETROTOMICS 4460
STEPHEN PHAFF
P.O. BOX 8509
SHIRLEY BASIN WY 82615

Our records show the following number of badges in the indicated Whole Body exposure ranges for the period from January 1, 1989 to December 31, 1989

BADGES	EXPOSURE RANGE			
20	LESS THAN		.010	REM
12	0.010	TO	0.099	REM
0	0.100	TO	0.249	REM
0	0.250	TO	0.499	REM
0	0.500	TO	0.749	REM
0	0.750	TO	0.999	REM
0	1.000	TO	1.999	REM
0	2.000	TO	2.999	REM
0	3.000	TO	3.999	REM
0	4.000	TO	4.999	REM
0	5.000	TO	5.999	REM
0	6.000	TO	6.999	REM
0	7.000	TO	7.999	REM
0	8.000	TO	8.999	REM
0	9.000	TO	9.999	REM
0	10.000	TO	10.999	REM
0	11.000	TO	11.999	REM
0	12.000	OR	MORE	REM

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PETROTONICS
STEPHEN PFAFF
P.O. BOX 8509
SHIRLEY BASIN

4460

WY 82613

Our records show the following number of badges in the indicated whole body exposure ranges for the period from January 1, 1990 to December 31, 1990

BADGES	EXPOSURE RANGE
31	LESS THAN .010 REM
2	0.010 TO 0.099 REM
0	0.100 TO 0.249 REM
0	0.250 TO 0.499 REM
0	0.500 TO 0.749 REM
0	0.750 TO 0.999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

TMA Eberline
Thermo Analytical Inc.

TMA/Eberline
5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931

PETROTOMICS 4450
STEPHEN PFAFF
P.O. BOX 8509
SHIRLEY BASIN WY 82615

Our records show the following number of badges in the indicated Whole Body exposure ranges for the period from January 1, 1991 to December 31, 1991

BADGES	EXPOSURE RANGE
12	LESS THAN .010 REM
0	0.010 TO 0.099 REM
0	0.100 TO 0.249 REM
0	0.250 TO 0.499 REM
0	0.500 TO 0.749 REM
0	0.750 TO 0.999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

Thermo Analytical Inc.

TMA/Eberline
5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931

PETROTOMICS
STEPHEN PFAFF
P.O. BOX 6509
SHIRLEY BASIN

4460

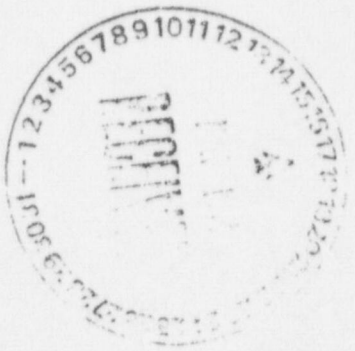
WY 82515

Our records show the following number of badges in the indicated Whole Body exposure ranges for the period from January 1, 1992 to December 31, 1992

BADGES	EXPOSURE RANGE
11	LESS THAN .010 REM
0	0.010 TO 0.099 REM
0	0.100 TO 0.249 REM
0	0.250 TO 0.499 REM
0	0.500 TO 0.749 REM
0	0.750 TO 0.999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

TMA Eberline
Thermo Analytical Inc.

TMA/Eberline
5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931



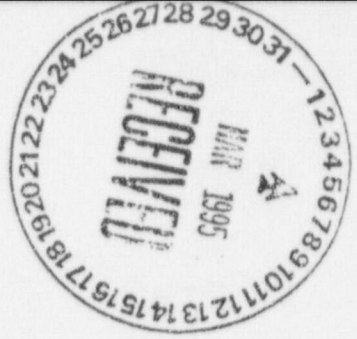
PETROTOMICS 4450
STEPHEN PFAFF
P.O. BOX 8509
SHIRLEY BASIN WY 82615

Our records show the following number of badges in the indicated Whole Body exposure ranges for the period from January 1, 1993 to December 31, 1993

BADGES	EXPOSURE RANGE
0	LESS THAN .010 REM
4	0.010 TO 0.099 REM
0	0.100 TO 0.249 REM
0	0.250 TO 0.499 REM
0	0.500 TO 0.749 REM
0	0.750 TO 0.999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

Thermo Analytical Inc.

TMA/Eberline
5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931



PETROTOMICS
STEPHEN PFAFF
P.O. BOX 8509
SHIRLEY BASIN

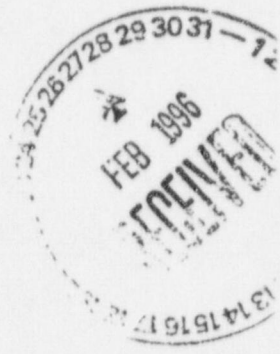
04460

WY 82615

Our records show the following number of badges in the indicated Deep exposure ranges for the period from January 1, 1994 to December 31, 1994.

BADGES	EXPOSURE RANGE
9	LESS THAN .010 REM
0	0.010 TO 0.099 REM
0	0.100 TO 0.249 REM
0	0.250 TO 0.499 REM
0	0.500 TO 0.749 REM
0	0.750 TO 0.999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

Thermo NUtech
5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931 · FAX (505) 761-5410



PETROTOMICS
STEPHEN PFAFF
P.O. BOX 3509
SHIRLEY BASIN

04460

WY 82615

Our records show the following number of badges in the indicated Deep exposure ranges for the period from January 1, 1995 to December 31, 1995.

BADGES	EXPOSURE RANGE			
6	LESS THAN		.010	REM
1	0.010	TO	0.099	REM
0	0.100	TO	0.249	REM
0	0.250	TO	0.499	REM
0	0.500	TO	0.749	REM
0	0.750	TO	0.999	REM
0	1.000	TO	1.999	REM
0	2.000	TO	2.999	REM
0	3.000	TO	3.999	REM
0	4.000	TO	4.999	REM
0	5.000	TO	5.999	REM
0	6.000	TO	6.999	REM
0	7.000	TO	7.999	REM
0	8.000	TO	8.999	REM
0	9.000	TO	9.999	REM
0	10.000	TO	10.999	REM
0	11.000	TO	11.999	REM
0	12.000	OR	MORE	REM

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PETROTOMICS
STEPHEN PFAFF
P.O. BOX 8509
SHIRLEY BASIN

04460

WY 82615

Our records show the following number of badges in the indicated Deep exposure ranges for the period from January 1, 1996 to December 31, 1996.

BADGES	EXPOSURE RANGE
8	LESS THAN .010 REM
0	0.010 TO 0.099 REM
0	0.100 TO 0.249 REM
0	0.250 TO 0.499 REM
0	0.500 TO 0.749 REM
0	0.750 TO 0.999 REM
0	1.000 TO 1.999 REM
0	2.000 TO 2.999 REM
0	3.000 TO 3.999 REM
0	4.000 TO 4.999 REM
0	5.000 TO 5.999 REM
0	6.000 TO 6.999 REM
0	7.000 TO 7.999 REM
0	8.000 TO 8.999 REM
0	9.000 TO 9.999 REM
0	10.000 TO 10.999 REM
0	11.000 TO 11.999 REM
0	12.000 OR MORE REM

Thermo NUtech

5635 Jefferson Street NE
Albuquerque, NM 87109
(505) 345-9931

NVLAP

The dosimetry processor accredited by NVLAP of the U.S. Department of Commerce as having the competence to perform specified tests in accordance with prescribed test methods and accreditation criteria.

CURRENT TLD OCCUPATIONAL RADIATION EXPOSURE REPORT

APPROVED FOR USE IN LIEU OF NRC FORM 5

CUSTOMER NO. 04460

ROSE MARIE TAUCHE

DATE 01/30/98

DOSIMETRY SERVICES

BADGE NUMBER / BODY LOCATION	WORK FACILITY / WORK LOCATION	NAME / BIRTHDATE AGE GENDER	ID / ID TYPE	SERVICE[1] / FREQ.[2]	DATE ISSUED / DATE RETURNED	DOSE FOR PERIOD (mrem) NOTE[3]	DEEP	LENS	ACCUMULATED DOSE (mrem) FOR CALENDAR QUARTER DEEP	LENS	SHALLOW	EXTREMITY	PERMISSIBLE ANNUAL DEE (rem) / ACCUMULATE LIFETIME DEE (rem)
						DOSE FOR PERIOD (mrem) NEUTRON	SHALLOW	EXTREMITY	ACCUMULATED DOSE (mrem) FOR CALENDAR YEAR DEEP	LENS	SHALLOW	EXTREMITY	
00000		CONTROL		T	10/01/97		59	TOTAL COUNTS					
					01/13/98								
00018		SJPFAFF	333365751	T	10/01/97		0	0	0	0	0		5.0
		03/21/43 54	SSN	Q	01/13/98		0		0	0	0		0.291
00177		GLTBAYER GL	520368931	T	10/01/97		0	0	0	0	0		5.0
		03/27/38 59	SSN	Q	01/13/98		0		0	0	0		0.221
00198		JUDAY RA	558508233	T	10/01/97		0	0	0	0	0		5.0
		04/11/40 57	SSN	Q	01/13/98		0		0	0	0		0.000
00200		MARTINSON		T	10/01/97		0	0	0	0	0		5.0
				Q	01/13/98		0		0	0	0		0.024
00203		EASTMAN P		T	10/01/97		0	0	0	0	0		5.0
				Q	01/13/98		0		0	0	0		0.000
00212		Scott Joyner.		T	10/01/97		0	0	0	0	0		5.0
				Q	01/13/98		0		0	0	0		0.011
00213		HYDRO-ENG		T	10/01/97		0	0	0	0	0		5.0
				Q	01/13/98		0		11	11	11		.47
00227				T	10/01/97		0	0	0	0	0		5.0
				Q	01/13/98		0		0	0	0		0.010

[1] SERVICE CODES
T - WHOLE BODY BADGE (BGX)
H - RING BADGE
J - ANKLE BADGE
K - WRIST BADGE
N - NEUTRON BADGE
A - ALBEDO BADGE

[2] FREQUENCY CODES
W - WEEKLY
B - BIWEEKLY
M - MONTHLY
P - BIMONTHLY
Q - QUARTERLY
S - SEMIANNUAL
A - ANNUAL
I - IRREGULAR

[3] NOTE CODES
C - BADGE DAMAGED
E - REPORTED BY TELEPHONE OR WIRE
F - BADGE NOT USED
G - EXPLANATION ATTACHED
X - CONTAMINATED
Z - CALCULATED CONTROL
P - PLANNED EXPOSURE

CUSTOMER
ATTENTION
ADDRESS
CITY

PETROTOMICS
STEPHEN PFAFF
P.O. BOX 8509
SHIRLEY BASIN WY 82615

ATTACHMENT 2

Petrotomics Company

P.O. Box 8509, Shirley Basin, Wyoming 82615 · Telephone: (307) 234-9341

February 18, 1999

Mr. Joseph J. Holonich, Chief
Uranium Recovery Branch MS-T-7-J-9
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Reference: License Condition No. 11 Section 5.5
Radiation Safety - Source Material License SUA - 551.

Dear Mr. Holonich:

Pursuant to a telephone conversation with Mr. Haque of your staff, on February 17, 1999, revisions have been made to Section 5.5, of the License Condition 11 modification proposal dated December 29, 1998. This submittal should replace section 5.5 in the December 29, 1998 submittal of our Amendment request.

Section 5.5-1. Maintains the occupational exposure - external program but makes the use of TLD badges necessary only if exposures are anticipated by the Radiation Coordinator to be greater than 10% of the yearly dose limit.

Section 5.5-2 Deleted by Amendment No. 21.

Section 5.5-3 Deleted by Amendment No. 42.

Section 5.5-4 Deleted by Amendment No. 42.

Section 5.5-5 Deleted by Amendment No. 21.

Section 5.5-6 Item 2. The first paragraph has been rewritten to require the Radiation Coordinator to conduct quarterly spot checks if contamination surveys are required, as determined by the Radiation coordinator.

Section 5.5-7 Deleted by Amendment No. 21.

Section 5.5-7-1. Delete the words "for the environmental monitoring program".

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Please contact me if you need additional information.

Sincerely,

R. A. Juday
Supervisor

PC: Mr. Mohammad Haque - USNRC

U.S. Nuclear Regulatory Commission
Region IV
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Division of Radiation Safety and Safeguards
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