September 27, 2002

Mr. Stephen Pfaff
Petrotomics Company
5020 East 16th St.
Casper, WY 82609

SUBJECT: PETROTOMICS COMPANY REQUEST FOR AN ALTERNATE GROUNDWATER PROTECTION STANDARD FOR SELENIUM, LICENSE AMENDMENT NO. 75 TO SOURCE MATERIALS LICENSE SUA-551 (TAC NO. L52426)

Dear Mr. Pfaff:

By letter dated April 25, 2002, Petrotomics Company (Petrotomics) requested that License Condition (LC) 47B of the Shirley Basin site Source Materials License SUA-551 be amended to modify the groundwater protection standard for selenium at the designated point of compliance (POC) wells. Specifically, Petrotomics proposed to increase the standard for selenium from the current value of 0.023 mg/l to 0.12 mg/l at POC wells 5DC, 19DC, 5SC, and 51SC. In a telephone conference on August 21, 2002, the staff requested that Petrotomics perform additional selenium transport simulations to support the license amendment request and this additional information was provided in a letter dated September 12, 2002. The U.S. Nuclear Regulatory Commission (NRC) staff has completed its review of the Petrotomics amendment request and the staff's detailed evaluation is documented in the enclosed Technical Evaluation Report (Enclosure 1).

Based on its review, the staff concludes that the Petrotomics request to amend LC 47B to modify the selenium groundwater protection standard is acceptable. In addition to the change to LC 47B, the staff is also taking this opportunity to correct the mailing address for Petrotomics Company in LC 2 which has changed since the issuance of the last amendment (Amendment No. 74) to Source Materials License SUA-551. The modifications to LCs 2 and 47B are provided as Amendment No. 75 to Source Materials License SUA-551 (Enclosure 2). All other conditions of the license shall remain the same.

If you have any questions regarding this letter or the enclosures, please contact Rick Weller, the Project Manager for the Shirley Basin facility, at (301) 415-7287 or by e-mail to RMW2@nrc.gov.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at http://www.nrc.gov/NRC/ADAMS/index.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Daniel M. Gillen, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards

Docket No.: 40-6659
License No.: SUA-551

Enclosures:
1. Technical Evaluation Report
2. Amendment No. 75 to Source Materials License SUA-551

cc: M. Franko, Petrotomics
R. Lewis, Petrotomics Consultant
D. Bergman-Tabbert, DOE Grand Junction
G. Beach, DEQ, WY
R. Chancellor, DEQ, WY
M. Moxley, DEQ, WY

September 27, 2002

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Disribution **(Closes TAC L52426)** Accession No. ML022740016
Docket No. 40-6659 FCFB r/f B. von Till CCain RIV ACNW

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NAME	R. Weller		J. Muszkiewicz		G. Janosko		D. Gillen	
DATE	09/25/02		09/25/02		09/26/02		09 /27/02	

OFFICIAL RECORD COPY

TECHNICAL EVALUATION REPORT
FOR
AN ALTERNATE SELENIUM GROUNDWATER PROTECTION STANDARD

DOCKET NO.: 40-6659

LICENSEE: Petrotomics Company

FACILITY: Shirley Basin

PROJECT MANAGER: Rick Weller

TECHNICAL REVIEWERS: John Bradbury, Bill von Till and Rick Weller

Introduction

By letter dated April 25, 2002, to the U.S. Nuclear Regulatory Commission (NRC) staff, Petrotomics Company (Petrotomics) requested that License Condition (LC) 47B of the Shirley Basin site Source Materials License SUA-551 be amended to modify the groundwater protection standard for selenium at the designated point of compliance (POC) wells (Petrotomics, 2002a). Specifically, Petrotomics proposed to increase the standard for selenium from the current value of 0.023 milligrams per liter (mg/l), as specified in LC 47B, to 0.12 mg/l at POC wells 5DC, 19DC, 5SC, and 51SC. Wells 5DC and 19DC are located in the Main Sand aquifer at the approximate northwestern edge and eastern edge of the tailings impoundment, respectively. Wells 5SC and 51SC are located in the Upper Sand aquifer at the approximate northern edge and eastern edge of the tailings impoundment, respectively. Petrotomics contends that the current selenium standard of 0.023 mg/l in LC 47B is overconservative and a higher standard (0.12 mg/l) would not pose a greater risk to human health and the environment. Petrotomics further contends that re-initiation of a groundwater corrective action program, as required by LC 47F, would not be cost effective and would not provide any additional protection to human health and the environment. Hence, consistent with the provisions of 10 CFR Part 40, Appendix A, Criterion 5B(6), Petrotomics has proposed an alternate groundwater protection standard for selenium.

This technical evaluation report (TER) evaluates the acceptability of the Petrotomics request for an alternate groundwater protection standard for selenium with respect to the requirements of 10 CFR Part 40, Appendix A, Criterion 5B(6). Criterion 5B(6) specifies that a site specific alternate concentration limit for a hazardous constituent in the groundwater may be acceptable to the NRC if that limit is as low as reasonably achievable (ALARA), after considering practicable corrective actions, and the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the limit is not exceeded.

Background

In a letter dated October 6, 1998, the NRC staff concurred in the alternate concentration limits (ACLs) proposed by Petrotomics for various constituents of concern, including selenium, in the groundwater at the Shirley Basin site (NRC, 1998). In that action, the staff concluded that the proposed ACLs will not pose a substantial present or potential future hazard to human health and the environment and are ALARA. The staff's ALARA finding recognized the diminishing practicality and benefit of the Petrotomics ongoing groundwater corrective actions to remove the constituents of concern.

The current ACL for selenium of 0.023 mg/l was proposed by Petrotomics in a letter dated October 30, 1997, (Petrotomics, 1997) in response to a staff request for additional information (RAI, NRC letter dated July 31, 1997) for the detailed review of the ACL application submitted by Petrotomics letter dated September 10, 1996 (Petrotomics, 1996). The staff's RAI expressed concern about both the database and methodology used by Petrotomics to develop the original ACLs for the constituents of concern that were proposed in the ACL application. In this regard, the ACL originally proposed for selenium was 0.12 mg/l. Following discussions with the staff, the ACL subsequently proposed by Petrotomics for selenium (0.023 mg/l) was based on sample data from January 1995 to the second quarter of 1997 for POC wells 5DC, 5SC, and 51SC and methodology which derived the ACL from the mean of the sample data from the three wells. Specifically, the ACL for selenium of 0.023 mg/l represented the 95% upper confidence limit (UCL_{95}) for the mean of the selenium sample data from the aforementioned POC wells. However, as noted in the Petrotomics April 25, 2002, letter, the groundwater selenium concentration in well 5SC has exceeded the ACL (0.023 mg/l) for most of the samples (5 out of 7 samples) taken since the ACL was adopted in October 1998. During this period, the selenium concentrations in well 5SC have ranged from 0.014 mg/l to 0.052 mg/l. The selenium ACL has not been exceeded in any of the other POC wells over the same period.

Petrotomics believes that the recorded levels of selenium in excess of the established ACL (0.023 mg/l) do not pose a hazard to human health and the environment but reflect an overly conservative ACL that was derived from a flawed methodology (i.e., deriving the ACL from the mean of the sample data from the three POC wells, including two wells with little observed selenium). As such, Petrotomics has proposed an alternate groundwater protection standard (0.12 mg/l) for selenium equivalent to the value proposed in the original ACL application.

Technical Evaluation

The staff has utilized the guidance in draft NUREG-1620 Rev. 1, "Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act", (NRC, 2002), to determine if the Petrotomics request to modify the groundwater protection standard for selenium satisfies the requirements of 10 CFR Part 40, Appendix A, Criterion 5B(6). The staff's review focused on the potential hazard to human health and the environment posed by a selenium ACL of 0.12 mg/l and whether this value is ALARA, considering practicable corrective actions.

Hazard Assessment:

To support the proposed ACL of 0.12 mg/l for selenium, Petrotomics provided an updated assessment in the April 25, 2002, letter of the flow and transport of selenium at the Shirley Basin site. This assessment was intended to substantiate the proposed ACL by demonstrating that elevated concentrations of selenium as high as 0.2 mg/l in the area of the tailings impoundment, including well 5SC, would not exceed the current U.S. Environmental Protection Agency Maximum Contaminant Level (MCL) of 0.05 mg/l, for selenium in drinking water, at the Long Term Care Area Boundary (LCAB, the point of exposure).

For the selenium flow and transport assessment, an updated MODFLOW code model (Petrotomics, 2002b) was used to simulate groundwater flow and the RAND3D code was used to simulate selenium transport at the site. The MODFLOW and RAND3D models were previously validated for the Shirley Basin site during the staff's prior review of the original ACL application (Petrotomics, 1996). For the current analysis, the flow model (MODFLOW) was run forward from 1997 conditions to January 2002 to establish the starting point for the 1,000-year selenium transport simulations. For these simulations, Petrotomics assumed a selenium source area that encompassed the former tailings pond area and POC well 5SC. A constant selenium concentration of 0.2 mg/l was assumed to exist within the source area (including well 5SC) for the 1,000-year simulation period. An assumed concentration of 0.2 mg/l is approximately 4 times higher than the highest recorded concentration of selenium in any of the POC wells since the ACL was adopted in October 1998. During that time frame, 26 samples were taken from the POC wells and only 2 samples (well 5SC) had concentrations in excess of 0.03 mg/l with values of 0.051 mg/l and 0.052 mg/l. Thus, an assumed selenium source concentration of 0.2 mg/l provides a reasonably conservative basis for the transport assessment.

For the transport model (RAND3D), Petrotomics assumed a selenium retardation factor (R, 30) equivalent to that of uranium and the results from the transport simulations indicate that, even with an assumed source area (including well 5SC) selenium concentration of 0.20 mg/l, the concentrations of selenium in both the Upper and Main Sand aquifers will be well below the MCL of 0.05 mg/l at the LCAB over the next 1,000 years (Petrotomics, 2002a). However, as discussed with the licensee in a telephone conference on August 21, 2002, the staff noted that, in the original ACL application (Petrotomics, 1996), chemical transport modeling of sulfate was used as the basis for predicting the concentration and risk posed by selenium and other site-derived constituents, excluding uranium. Accordingly, the staff requested that Petrotomics perform additional selenium transport simulations using the sulfate retardation factor (2.47) discussed in the original ACL application. In this regard, the staff notes that the sulfate retardation factor was derived from site-specific measurements at Shirley Basin. Petrotomics performed the additional transport simulations using the more conservative retardation factor for sulfate (2.47) and submitted the results in a letter dated September 12, 2002 (Petrotomics, 2002c). The results from these runs indicate that selenium concentrations will not exceed the MCL (0.05 mg/l) at the LCAB at any time during the 1000 year simulation period.

The staff has evaluated both the methodology (updated MODFLOW and RAND3D code models) and the assumptions (selenium source loading and retardation) employed by Petrotomics to simulate selenium transport over the next 1,000 years and concludes that the models are appropriate and provide reasonably conservative estimates of likely selenium

concentrations in the groundwater at the Shirley Basin site as a function of time and distance from the selenium source. The values incorporated in the analysis for both the source loading and retardation for selenium provide a reasonable basis for demonstrating that the proposed ACL of 0.12 mg/l at POC locations will not likely lead to public exposure to concentrations of selenium in excess of the MCL (0.05 mg/l) at the LCAB. This finding is reflected in the results of the transport simulations which indicate that selenium concentrations will not exceed 0.05 mg/l at the LCAB at any time during the next 1,000 years. Accordingly, the staff concludes that the proposed ACL for selenium of 0.12 mg/l will not pose a substantial present or potential hazard to human health and the environment.

ALARA Assessment:

Petrotomics conducted an active groundwater corrective action program at the Shirley Basin site from 1987 until the ACLs for the various constituents of concern were adopted in October 1998. This program included the recovery of both tailings liquid within the impoundment and affected groundwater from the Upper and Main Sand aquifers and enhanced evaporation of the collected water to effectively control and contain the migration of contaminants. When the staff concurred in the proposed ACLs for the Shirley Basin site in October 1998, the staff recognized the diminishing benefit and cost-effectiveness of the groundwater corrective action program and, correspondingly, concluded that the proposed ACLs were ALARA.

Consistent with the findings made from the prior review (NRC, 1998) of the original ACL application, including consideration of the various alternative corrective actions for further groundwater remediation, the staff agrees with Petrotomics that there are no corrective action alternatives that would be practicable or cost-effective. This is especially true now as the Shirley Basin site has been completely reclaimed. Moreover, the updated hazard assessment indicates that further remediation is unwarranted as there would be minimal benefit to human health and the environment. As such, the staff concludes that the proposed ACL for selenium of 0.12 mg/l is ALARA.

Conclusions

Based on the foregoing evaluation, the staff concludes that a selenium ACL of 0.12 mg/l as the groundwater protection standard at the POC wells will not pose a hazard to human health and the environment. The staff further concludes that this ACL value is ALARA, considering practicable corrective actions. Accordingly, the Petrotomics request to amend LC 47B to change the groundwater protection standard for selenium to 0.12 mg/l is acceptable.

Recommended License Change

The staff recommends that LC 47B be amended to read as follows:

47. B. Comply with the following ground-water protection standards at point of compliance well Nos. 5-DC, 19-DC, 5-SC, and 51-SC:

cadmium = 0.079 mg/l, chromium = 1.83 mg/l, lead = 0.05 mg/l, nickel = 6.15 mg/l, radium-226 = 91.3 pCi/l, radium-228 = 25.7 pCi/l, selenium = 0.12 mg/l, thorium-230 = 2409 pCi/l, and uranium = 9.2 mg/l.

Environmental Impact Evaluation

An environmental assessment for this action is not required because this action is categorically excluded under 10 CFR Part 51.22(c)(11). This action involves a change in process operations that does not result in a significant increase in the amount of selenium that may be released offsite.

References

Petrotomics Company, 1996. Letter dated September 10, 1996, from R. Juday, Petrotomics, to J. Holonich, NRC. Application for alternate concentration limits.

Petrotomics Company, 1997. Letter dated October 30, 1997, from R. Juday, Petrotomics, to J. Holonich, NRC. Response to NRC request for additional information.

Petrotomics Company, 2002a. Letter dated April 25, 2002, from S. Pfaff, Petrotomics, to M. Leach, NRC. Application to amend License Condition 47B of Source Materials License SUA-551.

Petrotomics Company, 2002b. Letter dated April 25, 2002, from S. Pfaff, Petrotomics, to M. Leach, NRC. Update of sulfate transport modeling at the Shirley Basin site.

Petrotomics Company, 2002c. Letter dated September 12, 2002, from R. Lewis, Consultant to Petrotomics, to R. Weller, NRC. Results from additional selenium transport modeling.

U.S. Nuclear Regulatory Commission, 1997. Letter dated July 31, 1997, from J. Holonich, NRC, to R. Juday, Petrotomics. Supplemental request for additional information.

U.S. Nuclear Regulatory Commission, 1998. Letter dated October 6, 1998, from J. Holonich, NRC, to R. Juday, Petrotomics. NRC concurrence on alternate concentration limits for groundwater constituents.

U.S. Nuclear Regulatory Commission, 2002. NUREG-1620 Rev. 1, “Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act”, Draft Report for Comment, issued January 2002.

NRC FORM 374

U.S. NUCLEAR REGULATORY COMMISSION

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and the applicable parts of Title 10, Code of Federal Regulations, Chapter I, Parts 19, 20, 30, 31, 32, 33, 34, 35, 36, 39, 40, 51, 70, and 71, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee	
1. Petrotomics Company	3. License Number SUA-551, Amendment 75
2. 5020 East 16th St.	4. Expiration Date Until NRC determines that site reclamation has been completed
Casper, WY 82609 [Applicable Amendments: 29, 73, 75]	5. Docket No. 40-6659 Reference No.

6. Byproduct Source, and/or Special Nuclear Material	7. Chemical and/or Physical Form	8. Maximum amount that Licensee May Possess at Any One Time Under This License
Uranium	Any	Unlimited

9. Authorized place of use: The licensee's uranium milling facilities located in Carbon County, Wyoming.

10. The licensee is hereby authorized to possess byproduct material in the form of uranium waste tailings generated by the licensee's milling operations.
[Applicable Amendments: 10]

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]

12. DELETED by Amendment No. 10.

13. DELETED by Amendment No. 10.

14. The results of sampling, analyses, surveys and monitoring; the results of calibration of equipment; reports on audits and inspections; all meetings and training courses required by this license; and any subsequent reviews, investigations, and corrective actions, shall be documented. Unless otherwise specified in NRC regulations, all such documentation shall be maintained for a period of at least 5 years.

15. DELETED by Amendment No. 10.

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16. Release of equipment or packages from the restricted area shall be in accordance with the attachment to SUA-551 entitled, "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct or Source Materials" dated September, 1984.

    [Applicable Amendments: 8]

17. Mill tailings other than samples for research or analysis shall not be transferred from the site without specific prior approval of the NRC in the form of a license amendment. The licensee shall maintain a permanent record of all transfers made under the provisions of this condition.

18. In order to ensure that no disturbance of cultural resources occurs in the future, the licensee shall have an archeological and historical artifact survey of areas of its property, not previously surveyed, performed prior to their disturbance, including borrow areas to be used for reclamation cover. These surveys must be submitted to the NRC and no such disturbance shall occur until the licensee has received authorization from the NRC to proceed.

    In addition, all work in the immediate vicinity of any buried cultural deposits unearthed during the disturbance of land shall cease until approval to proceed has been granted by the NRC.

19. The licensee shall conduct an annual survey of land use (private residences, grazing areas, private and public potable water and agricultural wells, and nonresidential structures and uses) in the area within five miles (8 km) of any portion of the restricted area boundary and submit a report of this survey to the NRC. This report shall indicate any differences in land use from that described in the last report.

20. The results of all effluent and environmental monitoring required by this license shall be reported in accordance with 10 CFR 40, Section 40.65 with copies of the report sent to the NRC.

    [Applicable Amendment: 72]

21. DELETED by Amendment No. 66.

22. Before engaging in any activity not previously assessed by the NRC, the licensee shall prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not assessed or that is greater than that assessed, the licensee shall provide a written evaluation of such activities and obtain prior approval of the NRC in the form of a license amendment.

23. The licensee shall maintain an NRC-approved financial surety arrangement, consistent with 10 CFR 40, Appendix A, Criteria 9 and 10, adequate to cover the estimated costs, if accomplished by a third party, for decommissioning and decontamination of the mill and mill site, for reclamation of any tailings or waste disposal areas, ground water restoration as warranted and the long-term surveillance fee.

Annual updates to the surety amount, required by 10 CFR 40, Appendix A, Criteria 9 and 10, shall be submitted to the NRC at least 3 months prior to the anniversary date which is designated as June 1 of each year. If the NRC has not approved a proposed revision to the surety coverage 30 days prior to the expiration date of the existing surety arrangement, the licensee shall extend the existing surety arrangement for 1 year. Along with each proposed revision or annual update, the licensee shall submit supporting documentation showing a breakdown of the costs and the basis for the cost estimates with adjustments for inflation, maintenance of a minimum 15 percent contingency fee, changes in engineering plans, activities performed and any other conditions affecting estimated costs for site closure. The basis for the cost estimate is the NRC approved reclamation/decommissioning plan or NRC approved revisions to the plan. Appendix C to NUREG-1620 (Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the Uranium Mill Tailings Radiation Control Act, June 2000) outlines the minimum considerations used by the NRC in the review of site closure cost estimates. Reclamation/decommissioning plans and annual updates should follow this outline.

Petrotomics' currently approved surety instrument, Irrevocable Standby Letter of Credit, issued by ABN-AMRO Bank N.V., shall be continuously maintained in an amount no less than $857,888 for the purpose of complying with 10 CFR 40, Appendix A, Criteria 9 and 10, until a replacement is authorized by the NRC.

[Applicable Amendments: 3, 8, 10, 13, 24, 27, 32, 34, 39, 43, 45, 47, 48, 50, 51, 55, 61, 62, 67, 70, 72, 74]

24. Prior to termination of this license, the licensee shall provide for transfer of title to byproduct material and land, including any interests therein (other than land owned by the United States or the State of Wyoming), which is used for the disposal of such byproduct material or is essential to ensure the long term stability of such disposal site to the United States or the State of Wyoming, at the State's option.

25. DELETED by Amendment No. 12.

26. DELETED by Amendment No. 10.

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]

28. DELETED by Amendment No. 42.

29. Standard written operating procedures (SOP's) shall be established for environmental monitoring and instrument calibrations. An up-to-date copy of each written procedure shall be maintained on file by the RSO.

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All procedures shall be reviewed and approved in writing by the RSO before implementation and whenever a change in procedure is proposed. In addition, the RSO shall perform a documented review of all existing operating procedures at least annually.

[Applicable Amendments: 8, 10]

30. DELETED by Amendment No. 29.

31. DELETED by Amendment No. 21.

32. DELETED by Amendment No. 11.

33. DELETED by Amendment No. 10.

34. The licensee shall implement the general emergency action plan as described in Section 6, excluding Section 6.4, of their June 4, 1985 submittal.

[Applicable Amendments: 5, 8, 9]

35. DELETED by Amendment No. 18.

36. DELETED by Amendment No. 10.

37. DELETED by Amendment No. 10.

38. DELETED by Amendment No. 10.

39. DELETED by Amendment No. 10.

40. DELETED by Amendment No. 10.

41. DELETED by Amendment No. 66.

42. DELETED by Amendment No. 10.

41. DELETED by Amendment No. 66.

42. DELETED by Amendment No. 10.

43. DELETED by Amendment No. 10.

44. DELETED by Amendment No. 10.

45. DELETED by Amendment No. 10.

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Amendment No. 75

46. DELETED by Amendment No. 10.

47. The licensee shall implement a compliance monitoring program containing the following:

A. Sample wells 5-DC, 10-DC, 19-DC, 5-SC, 40-SC, 51-SC, 54-SC, and the mine shop well on a semi-annual frequency for chloride, nitrate, sulfate, pH, TDS, cadmium, chromium, lead, nickel, radium-226, radium-228, combined radium-226 and 228, selenium, thorium-230, uranium, and measure water level.

The licensee shall sample the wells in the spring (April or May depending on weather conditions) and the fall (October or November depending on weather conditions) and shall submit to the NRC, by February 15 of each year, a report on the groundwater compliance monitoring program. The report shall include groundwater contour maps for the upper and main sand units and iso-concentration maps for sulfate, uranium, chloride and nitrate. Historic trends in groundwater concentrations for all wells monitored in this license condition shall be graphically illustrated for sulfate, uranium, chloride and nitrate, and water level.

B. Comply with the following ground-water protection standards at point of compliance well Nos. 5-DC, 19-DC, 5-SC and 51-SC:

cadmium = 0.079 mg/l, chromium = 1.83 mg/l, lead = 0.05 mg/l, nickel = 6.15 mg/l, radium-226 = 91.3 pCi/l, radium-228 = 25.7 pCi/l, selenium = 0.12 mg/l, thorium-230 = 2409 pCi/l and uranium = 9.2 mg/l.

C. Deleted by Amendment No. 63.

D. Deleted by Amendment No. 63.

E. Deleted by Amendment No. 63.

F. In the event the limits for the constituents in subsection B are exceeded, the licensee shall propose a new corrective action program with the objective of returning concentrations of those constituents to the concentration limits specified in subsection B.

[Applicable Amendments: 19, 22, 25, 26, 28, 30, 33, 33a, 36, 37, 38, 40, 41, 42, 44, 46, 49, 63, 68, 75]

48. DELETED by Amendment No. 20.

MATERIALS LICENSE
SUPPLEMENTARY SHEET

License Number
SUA-551

Docket or Reference Number
40-6659

Amendment No. 75

49. DELETED by Amendment No. 73.

50. DELETED by Amendment No. 73.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Dated: September 27, 2002

Daniel M. Gillen, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards