



INTERNATIONAL
URANIUM (USA)
CORPORATION

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August 9, 2004

VIA US MAIL

Mr. Gary Janosko, Chief
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
U.S. Nuclear Regulatory Commission
2 White Flint North, Mail Stop #8F42
11545 Rockville Pike
Rockville, MD 20852

Re: International Uranium (USA) Corporation
NRC Source Material License No. SUA-1358, Docket No. 40-8681
White Mesa Mill, Blanding, Utah
Annual Safety and Environmental Review Panel (SERP)
Report for July 1, 2003 through June 30, 2004

Dear Mr. Janosko:

Enclosed are three copies of International Uranium (USA) Corporation's ("IUSA's") Safety and Environmental Review Panel ("SERP") annual report for the White Mesa Mill for the period from July 1, 2003 through June 30, 2004. This report is provided pursuant to License Condition 9.4 (D) of Source Material License No. SUA-1358.

Should you have any questions regarding the information provided, please do not hesitate to contact me or Mr. Ken Miyoshi at (435) 678-2221.

Sincerely,

for: Ron E. Berg,
Radiation Safety Officer

cc: Ken Miyoshi, IUSA
Ron F. Hochstein, IUSA
David C. Frydenlund, IUSA
R. William von Till, U.S. Nuclear Regulatory Commission
Dane Finerfrock, UDEQ
Central File

WM5501

WHITE MESA MILL

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
REPORT FOR JULY 1, 2003 TO JUNE 30, 2004**

August 9, 2004

Submitted to the U.S. Nuclear Regulatory Commission

Submitted by:

White Mesa Uranium Mill
License No. SUA-1358
Docket No. 40-8681

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1.0 INTRODUCTION

This Annual Report is being submitted by International Uranium (USA) Corporation (“IUSA”), licensee of the White Mesa Uranium Mill (the “Mill”) to the U. S. Nuclear Regulatory Commission (“NRC”) in compliance with License Condition No. 9.4 (D), NRC Source Material License No. SUA-1358 (the “License”).

There were four Safety and Environmental Review Panel (“SERP”) evaluations conducted and reports prepared for the period of July 1, 2003 through June 30, 2004. Each SERP evaluation and review was conducted in accordance with SERP procedures set forth in the White Mesa Mill Standard Operating Procedure PBL-1, Rev. No. R-2. The evaluations are summarized below in Section 2.0.

2.0 SUMMARY OF SERP EVALUATIONS

This section describes changes, tests or experiments evaluated by the SERP pursuant to License Condition 9.4 of License SUA-1358, and summarizes the evaluations performed and actions taken by the SERP relative to each.

In each case, the SERP consisted of those select individuals specified in License Condition 9.4 (C), with additional members included as appropriate, to address technical aspects. Temporary members were, in some cases, consultants.

The SERP evaluations and actions taken were in accordance with and satisfy the following criteria set out in Part B of License Condition 9.4:

1. The change, test or experiment does not conflict with any requirement specifically stated in this license, or impair the licensee’s ability to meet all applicable NRC regulations.
2. There is no degradation in the essential safety or environmental commitments in the license application or provided by the approved reclamation plan.
3. The change, test or experiment is consistent with the conclusions of actions analyzed and selected in the Environmental Assessment (“EA”) dated February 1997.

2.1 SERP Report 03/04-01, Meeting of September 15, 2003

Proposed Action:

Review and Approval of the proposed 11e.(2) Byproduct Disposal Procedure, PBL-10, Rev. No. R-0, Book No. 10.

Descriptions of Change Test or Experiment:

The purpose of this SERP was to revise and update the Mill's 11e.(2) Byproduct Disposal Procedure to reflect current practice and technology. During an NRC inspection on June 26, 2003, the NRC inspector reviewed the Mill's procedure for 11e. (2) Byproduct disposal. The original procedure was prepared by Umetco, and had not been updated or incorporated into the Mill's document control system. The revised procedure introduces the use of global positioning satellite ("GPS") technology to facilitate mapping the disposal location of each shipment of 11.e(2) material in the Mill's tailings cell prior to covering the material, and introduces a photo-ionization detector (PID) for measuring volatile organic compounds that may be present in material debris and residues. The procedure also modifies the original procedure to reflect current Mill disposal practice.

Safety and Environmental Evaluation of this SERP Action:

The SERP Committee concluded that the revised procedure contains no provisions which would conflict with any requirement specifically stated in the License and does not create any degradation in the essential safety or environmental commitments in the License Application or provided by the approved Reclamation Plan. In fact incorporating the use of contemporary instrumentation and technology into Mill procedures is an enhancement of the Mill's safety and environmental procedures and is consistent with the concept of maintaining exposure to the public and to the environment As Low As Reasonably Achievable (ALARA).

SERP Action:

In accordance with the SERP SOP and Guidance, the procedure, PBL-10, Rev. No. R-0, Book No. 10, was approved for immediate usage at the Mill, subject to the minor editorial modifications discussed in the SERP meeting of September 15, 2003.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.2 SERP Report 03/04-02, Meeting of September 15, 2004

Proposed Action:

Revise the SOPs for the Mill's Hazard Training Procedures for Ore Delivery and Reagent Handling Personnel.

Description of Change Test or Experiment:

The purpose of this SERP was to revise the hazard training SOPs for reagent delivery and ore delivery personnel, based on the need to increase the surveillance of reagent delivery

personnel for health and safety reasons while they off-load their reagents into the Mill's storage tanks; and, to ensure that radiological contamination control practices are being adhered to. In addition, the SOPs were updated to reflect current operating practices.

Safety and Environmental Evaluation of this SERP Action:

The SERP review of the changes made to the original procedures were consistent with the requirements for SERP approval and actually increase the safety of personnel who deliver hazardous and corrosive materials to the Mill by providing immediate assistance to delivery personnel in the event of an accident while off-loading reagents.

SERP Action:

The SERP concluded that the recommendations and changes to the Mill's Hazard Training for Reagent Delivery and Ore Delivery Personnel SOPs are consistent with and meet the criteria set forth in the SERP SOP for approval and the changes were implemented.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.3 SERP Report 03/04-03, Meeting of March 9, 2004

Proposed Action:

Introduce and implement a Release and Shipping of Vanadium Blackflake P. PBL-15, Rev No. R-0, Book #10.

Description of Change Test or Experiment:

On April 18, 2001, IUSA submitted an analysis and proposal to NRC, in which IUSA proposed that the Mill institute certain procedures to assay lots of vanadium blackflake to ensure that each lot of vanadium blackflake that is shipped from the Mill site contains less than 0.05% source material and that the maximum and average contact radiation exposure rate for each drum of vanadium blackflake does not exceed stipulated levels. By a letter dated May 9, 2003, NRC agreed to IUSA's proposal and required IUSA to adopt the assaying and scanning procedures specified by IUSA in its April 18, 2001 letter.

The Release and Shipping of Vanadium Blackflake procedure incorporates the assaying and scanning procedures proposed by IUSA in its April 18, 2001 letter, as well as other procedures that currently exist in other Mill procedures relating to scanning and shipping vanadium blackflake. Accordingly, once the Procedure is implemented, some changes will be required to eliminate some of the language in existing procedures that will have been superseded by this procedure.

Safety and Environmental Evaluation of this SERP Action:

The SERP concluded that the Release and Shipping of Vanadium Blackflake procedure does not conflict with any requirements specifically stated in the Mill's License or impair IUSA's ability to meet all NRC regulations, and the additional source material assays and radiological surveys required, implement the concepts approved and required by NRC in its May 9, 2003 letter and are intended to better ensure that the Mill complies with the applicable requirements of 20 CFR Part 20 and 10 CFR Part 40. As a result, this criterion is satisfied.

The SERP determined that approval of this procedure would produce no degradation in the essential safety or environmental commitments in the License Application, or provided by in the approved Reclamation Plan, and therefore this criterion is met. This conclusion was based on the fact that:

- a) the License Application(s) envisioned production of vanadium at the Mill, in accordance with existing Mill design, and the sale of the vanadium for unrestricted release; and
- b) the procedure enhances, rather than degrades, essential safety commitments with respect to release and shipping of vanadium blackflake by instituting procedures that are intended to better ensure compliance with the applicable requirements of 10 CFR Part 20.

In addition to the above discussion, the SERP concluded that the EA contemplated the production of vanadium blackflake at the Mill and the unrestricted release of such vanadium to commercial customers in compliance with the applicable provisions of 10 CFR Part 20 and 10 CFR Part 40. This criterion requires that the action be consistent with the actions analyzed in the EA (i.e., that the licensee is not operating in an "unanalyzed condition"). Use of the procedure will better ensure that vanadium blackflake produced at the Mill will satisfy the applicable requirements of 10 CFR Part 20 and 10 CFR Part 40. The procedure is therefore expected to produce no environmental impacts beyond those assessed in the EA dated February 1997, and is consistent with the conclusions regarding actions analyzed in the EA. As a result, this criterion is also satisfied.

SERP Action:

The SERP conclusions and recommendations regarding the Release and Shipping of Vanadium Blackflake procedure are as follows:

- a) the procedure meets the criteria set forth in the SERP SOP for approval; and,
- b) in accordance with the SERP SOP and Guidance, the procedure, PBL-15, Rev. No. R-0, Book No. 10, was approved for immediate usage at the Mill.

Section 2.7.4 of the Radiation Protection Manual was superseded by this procedure, effective March 9, 2004. Section 2.7.4 of the Radiation Protection Manual will be deleted and replaced with a cross-reference to the Release and Shipping of Vanadium Blackflake procedure for matters involving release and shipping of vanadium blackflake. The precise wording of this change will be considered by the SERP at a later date.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.4 SERP report 03/04-04, Meeting of April 26, 2004

Proposed Action:

Receive Cabot Material in accordance with and pursuant to the provisions of the existing Cabot License Condition 10.9 of Source Material License SUA- 1358 (the "License").

Description of Change Test or Experiment:

The purpose of this SERP was to evaluate whether or not IUSA could receive additional alternate feed material from Cabot Super Metals Corp. (the "Additional Cabot Materials") pursuant to the requirements of License Condition 10.9 or whether a new amendment request would be required by the NRC for this purpose. On August 15, 1997 the NRC issued Amendment 4 to the Mill's License authorizing the Mill to receive and process Cabot alternate feed materials (the "Previous Cabot Materials"). As a result of that amendment, the following license condition 10.9 was added to the Mill's License:

"The licensee is authorized to receive and process source material from Cabot Performance Materials' facility near Boyertown, Pennsylvania, in accordance with the amendment request dated April 3, 1997, as amended by submittals dated May 19, and August 6, 1997."

The Previous Cabot Materials were received and processed at the Mill in 1997-1998. The Additional Cabot Materials together with the Previous Cabot Materials could possibly exceed the volume of materials contemplated in the existing license amendment. The SERP evaluated all public health, safety and environmental impacts that could result if the receipt of Additional Cabot Materials were to result in an exceedance of the quantity originally contemplated by the license. A tailings capacity evaluation was requested by the SERP to ensure that there are no issues if the volume does exceed the original anticipated volume. The SERP also evaluated whether there were any significant differences in the form, packaging, transportation, material handling or processing requirements of the Additional Cabot Materials compared to the Previous Cabot Materials that would require NRC approval in the form of a separate license amendment or similar action.

Safety and Environmental Evaluation of this SERP Action:

The SERP concluded that the minor differences in the transportation, receipt and processing of the Additional Cabot Materials compared to the Previous Cabot Materials as well as the possible increase in the volume of materials to be accepted, were minor and did not give rise to any incremental public health, safety or environmental impacts. In fact, due to the dryer nature and the improved packaging for transport and the ability to store the Additional Cabot Materials in their sealed synthetic liners on the ore pad pending processing, there were fewer potential public health, safety and environmental impacts associated with the Additional Cabot Materials than with the Previous Cabot Materials.

SERP Action:

The SERP concluded that this change to the assumptions underlying the existing license amendment meets the criteria set forth in the SERP SOP for approval, and that the Additional Cabot Materials may be received and processed at the Mill under the existing Cabot license amendment, without the need to seek additional regulatory approvals or license amendments.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

3.0 Summary and Conclusions

During the reporting period, four separate SERP evaluations were conducted and completed in accordance with the White Mesa Mill's SERP Procedure, SOP (PBL-1, Rev. No. R-2). All actions taken by the SERP were based on a thorough evaluation and review of proposed changes. All changes were consistent with criteria contained in License Condition 9.4(B) of NRC Source Material License SUA-1358. None of the SERP actions resulted in changes to any pages in the 1991 License Renewal Application or supporting letters. Records of each SERP evaluation and action are detailed in numbered SERP reports that are retained at the Mill for review and inspection.

WHITE MESA MILL

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
REPORT FOR JULY 1, 2003 TO JUNE 30, 2004**

August 9, 2004

Submitted to the U.S. Nuclear Regulatory Commission

Submitted by:

White Mesa Uranium Mill
License No. SUA-1358
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 - 2.4 SERP report 03/04-04, meeting of April 26, 2004
- 3.0 SUMMARY AND CONCLUSIONS

1.0 INTRODUCTION

This Annual Report is being submitted by International Uranium (USA) Corporation ("IUSA"), licensee of the White Mesa Uranium Mill (the "Mill") to the U. S. Nuclear Regulatory Commission ("NRC") in compliance with License Condition No. 9.4 (D), NRC Source Material License No. SUA-1358 (the "License").

There were four Safety and Environmental Review Panel ("SERP") evaluations conducted and reports prepared for the period of July 1, 2003 through June 30, 2004. Each SERP evaluation and review was conducted in accordance with SERP procedures set forth in the White Mesa Mill Standard Operating Procedure PBL-1, Rev. No. R-2. The evaluations are summarized below in Section 2.0.

2.0 SUMMARY OF SERP EVALUATIONS

This section describes changes, tests or experiments evaluated by the SERP pursuant to License Condition 9.4 of License SUA-1358, and summarizes the evaluations performed and actions taken by the SERP relative to each.

In each case, the SERP consisted of those select individuals specified in License Condition 9.4 (C), with additional members included as appropriate, to address technical aspects. Temporary members were, in some cases, consultants.

The SERP evaluations and actions taken were in accordance with and satisfy the following criteria set out in Part B of License Condition 9.4:

1. The change, test or experiment does not conflict with any requirement specifically stated in this license, or impair the licensee's ability to meet all applicable NRC regulations.
2. There is no degradation in the essential safety or environmental commitments in the license application or provided by the approved reclamation plan.
3. The change, test or experiment is consistent with the conclusions of actions analyzed and selected in the Environmental Assessment ("EA") dated February 1997.

2.1 SERP Report 03/04-01, Meeting of September 15, 2003

Proposed Action:

Review and Approval of the proposed 11e.(2) Byproduct Disposal Procedure, PBL-10, Rev. No. R-0, Book No. 10.

Descriptions of Change Test or Experiment:

The purpose of this SERP was to revise and update the Mill's 11e.(2) Byproduct Disposal Procedure to reflect current practice and technology. During an NRC inspection on June 26, 2003, the NRC inspector reviewed the Mill's procedure for 11e. (2) Byproduct disposal. The original procedure was prepared by Umetco, and had not been updated or incorporated into the Mill's document control system. The revised procedure introduces the use of global positioning satellite ("GPS") technology to facilitate mapping the disposal location of each shipment of 11.e(2) material in the Mill's tailings cell prior to covering the material, and introduces a photo-ionization detector (PID) for measuring volatile organic compounds that may be present in material debris and residues. The procedure also modifies the original procedure to reflect current Mill disposal practice.

Safety and Environmental Evaluation of this SERP Action:

The SERP Committee concluded that the revised procedure contains no provisions which would conflict with any requirement specifically stated in the License and does not create any degradation in the essential safety or environmental commitments in the License Application or provided by the approved Reclamation Plan. In fact incorporating the use of contemporary instrumentation and technology into Mill procedures is an enhancement of the Mill's safety and environmental procedures and is consistent with the concept of maintaining exposure to the public and to the environment As Low As Reasonably Achievable (ALARA).

SERP Action:

In accordance with the SERP SOP and Guidance, the procedure, PBL-10, Rev. No. R-0, Book No. 10, was approved for immediate usage at the Mill, subject to the minor editorial modifications discussed in the SERP meeting of September 15, 2003.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.2 SERP Report 03/04-02, Meeting of September 15, 2004

Proposed Action:

Revise the SOPs for the Mill's Hazard Training Procedures for Ore Delivery and Reagent Handling Personnel.

Description of Change Test or Experiment:

The purpose of this SERP was to revise the hazard training SOPs for reagent delivery and ore delivery personnel, based on the need to increase the surveillance of reagent delivery

personnel for health and safety reasons while they off-load their reagents into the Mill's storage tanks; and, to ensure that radiological contamination control practices are being adhered to. In addition, the SOPs were updated to reflect current operating practices.

Safety and Environmental Evaluation of this SERP Action:

The SERP review of the changes made to the original procedures were consistent with the requirements for SERP approval and actually increase the safety of personnel who deliver hazardous and corrosive materials to the Mill by providing immediate assistance to delivery personnel in the event of an accident while off-loading reagents.

SERP Action:

The SERP concluded that the recommendations and changes to the Mill's Hazard Training for Reagent Delivery and Ore Delivery Personnel SOPs are consistent with and meet the criteria set forth in the SERP SOP for approval and the changes were implemented.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.3 SERP Report 03/04-03, Meeting of March 9, 2004

Proposed Action:

Introduce and implement a Release and Shipping of Vanadium Blackflake P. PBL-15, Rev No. R-0, Book #10.

Description of Change Test or Experiment:

On April 18, 2001, IUSA submitted an analysis and proposal to NRC, in which IUSA proposed that the Mill institute certain procedures to assay lots of vanadium blackflake to ensure that each lot of vanadium blackflake that is shipped from the Mill site contains less than 0.05% source material and that the maximum and average contact radiation exposure rate for each drum of vanadium blackflake does not exceed stipulated levels. By a letter dated May 9, 2003, NRC agreed to IUSA's proposal and required IUSA to adopt the assaying and scanning procedures specified by IUSA in its April 18, 2001 letter.

The Release and Shipping of Vanadium Blackflake procedure incorporates the assaying and scanning procedures proposed by IUSA in its April 18, 2001 letter, as well as other procedures that currently exist in other Mill procedures relating to scanning and shipping vanadium blackflake. Accordingly, once the Procedure is implemented, some changes will be required to eliminate some of the language in existing procedures that will have been superseded by this procedure.

Safety and Environmental Evaluation of this SERP Action:

The SERP concluded that the Release and Shipping of Vanadium Blackflake procedure does not conflict with any requirements specifically stated in the Mill's License or impair IUSA's ability to meet all NRC regulations, and the additional source material assays and radiological surveys required, implement the concepts approved and required by NRC in its May 9, 2003 letter and are intended to better ensure that the Mill complies with the applicable requirements of 20 CFR Part 20 and 10 CFR Part 40. As a result, this criterion is satisfied.

The SERP determined that approval of this procedure would produce no degradation in the essential safety or environmental commitments in the License Application, or provided by in the approved Reclamation Plan, and therefore this criterion is met. This conclusion was based on the fact that:

- a) the License Application(s) envisioned production of vanadium at the Mill, in accordance with existing Mill design, and the sale of the vanadium for unrestricted release; and
- b) the procedure enhances, rather than degrades, essential safety commitments with respect to release and shipping of vanadium blackflake by instituting procedures that are intended to better ensure compliance with the applicable requirements of 10 CFR Part 20.

In addition to the above discussion, the SERP concluded that the EA contemplated the production of vanadium blackflake at the Mill and the unrestricted release of such vanadium to commercial customers in compliance with the applicable provisions of 10 CFR Part 20 and 10 CFR Part 40. This criterion requires that the action be consistent with the actions analyzed in the EA (i.e., that the licensee is not operating in an "unanalyzed condition"). Use of the procedure will better ensure that vanadium blackflake produced at the Mill will satisfy the applicable requirements of 10 CFR Part 20 and 10 CFR Part 40. The procedure is therefore expected to produce no environmental impacts beyond those assessed in the EA dated February 1997, and is consistent with the conclusions regarding actions analyzed in the EA. As a result, this criterion is also satisfied.

SERP Action:

The SERP conclusions and recommendations regarding the Release and Shipping of Vanadium Blackflake procedure are as follows:

- a) the procedure meets the criteria set forth in the SERP SOP for approval; and,
- b) in accordance with the SERP SOP and Guidance, the procedure, PBL-15, Rev. No. R-0, Book No. 10, was approved for immediate usage at the Mill.

Section 2.7.4 of the Radiation Protection Manual was superseded by this procedure, effective March 9, 2004. Section 2.7.4 of the Radiation Protection Manual will be deleted and replaced with a cross-reference to the Release and Shipping of Vanadium Blackflake procedure for matters involving release and shipping of vanadium blackflake. The precise wording of this change will be considered by the SERP at a later date.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.4 SERP report 03/04-04, Meeting of April 26, 2004

Proposed Action:

Receive Cabot Material in accordance with and pursuant to the provisions of the existing Cabot License Condition 10.9 of Source Material License SUA- 1358 (the "License").

Description of Change Test or Experiment:

The purpose of this SERP was to evaluate whether or not IUSA could receive additional alternate feed material from Cabot Super Metals Corp. (the "Additional Cabot Materials") pursuant to the requirements of License Condition 10.9 or whether a new amendment request would be required by the NRC for this purpose. On August 15, 1997 the NRC issued Amendment 4 to the Mill's License authorizing the Mill to receive and process Cabot alternate feed materials (the "Previous Cabot Materials"). As a result of that amendment, the following license condition 10.9 was added to the Mill's License:

"The licensee is authorized to receive and process source material from Cabot Performance Materials' facility near Boyertown, Pennsylvania, in accordance with the amendment request dated April 3, 1997, as amended by submittals dated May 19, and August 6, 1997."

The Previous Cabot Materials were received and processed at the Mill in 1997-1998. The Additional Cabot Materials together with the Previous Cabot Materials could possibly exceed the volume of materials contemplated in the existing license amendment. The SERP evaluated all public health, safety and environmental impacts that could result if the receipt of Additional Cabot Materials were to result in an exceedance of the quantity originally contemplated by the license. A tailings capacity evaluation was requested by the SERP to ensure that there are no issues if the volume does exceed the original anticipated volume. The SERP also evaluated whether there were any significant differences in the form, packaging, transportation, material handling or processing requirements of the Additional Cabot Materials compared to the Previous Cabot Materials that would require NRC approval in the form of a separate license amendment or similar action.

Safety and Environmental Evaluation of this SERP Action:

The SERP concluded that the minor differences in the transportation, receipt and processing of the Additional Cabot Materials compared to the Previous Cabot Materials as well as the possible increase in the volume of materials to be accepted, were minor and did not give rise to any incremental public health, safety or environmental impacts. In fact, due to the dryer nature and the improved packaging for transport and the ability to store the Additional Cabot Materials in their sealed synthetic liners on the ore pad pending processing, there were fewer potential public health, safety and environmental impacts associated with the Additional Cabot Materials than with the Previous Cabot Materials.

SERP Action:

The SERP concluded that this change to the assumptions underlying the existing license amendment meets the criteria set forth in the SERP SOP for approval, and that the Additional Cabot Materials may be received and processed at the Mill under the existing Cabot license amendment, without the need to seek additional regulatory approvals or license amendments.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

3.0 Summary and Conclusions

During the reporting period, four separate SERP evaluations were conducted and completed in accordance with the White Mesa Mill's SERP Procedure, SOP (PBL-1, Rev. No. R-2). All actions taken by the SERP were based on a thorough evaluation and review of proposed changes. All changes were consistent with criteria contained in License Condition 9.4(B) of NRC Source Material License SUA-1358. None of the SERP actions resulted in changes to any pages in the 1991 License Renewal Application or supporting letters. Records of each SERP evaluation and action are detailed in numbered SERP reports that are retained at the Mill for review and inspection.

WHITE MESA MILL

**SAFETY AND ENVIRONMENTAL REVIEW PANEL (SERP)
REPORT FOR JULY 1, 2003 TO JUNE 30, 2004**

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1.0 INTRODUCTION

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There were four Safety and Environmental Review Panel (“SERP”) evaluations conducted and reports prepared for the period of July 1, 2003 through June 30, 2004. Each SERP evaluation and review was conducted in accordance with SERP procedures set forth in the White Mesa Mill Standard Operating Procedure PBL-1, Rev. No. R-2. The evaluations are summarized below in Section 2.0.

2.0 SUMMARY OF SERP EVALUATIONS

This section describes changes, tests or experiments evaluated by the SERP pursuant to License Condition 9.4 of License SUA-1358, and summarizes the evaluations performed and actions taken by the SERP relative to each.

In each case, the SERP consisted of those select individuals specified in License Condition 9.4 (C), with additional members included as appropriate, to address technical aspects. Temporary members were, in some cases, consultants.

The SERP evaluations and actions taken were in accordance with and satisfy the following criteria set out in Part B of License Condition 9.4:

1. The change, test or experiment does not conflict with any requirement specifically stated in this license, or impair the licensee’s ability to meet all applicable NRC regulations.
2. There is no degradation in the essential safety or environmental commitments in the license application or provided by the approved reclamation plan.
3. The change, test or experiment is consistent with the conclusions of actions analyzed and selected in the Environmental Assessment (“EA”) dated February 1997.

2.1 SERP Report 03/04-01, Meeting of September 15, 2003

Proposed Action:

Review and Approval of the proposed 11e.(2) Byproduct Disposal Procedure, PBL-10, Rev. No. R-0, Book No. 10.

Descriptions of Change Test or Experiment:

The purpose of this SERP was to revise and update the Mill's 11e.(2) Byproduct Disposal Procedure to reflect current practice and technology. During an NRC inspection on June 26, 2003, the NRC inspector reviewed the Mill's procedure for 11e. (2) Byproduct disposal. The original procedure was prepared by Umetco, and had not been updated or incorporated into the Mill's document control system. The revised procedure introduces the use of global positioning satellite ("GPS") technology to facilitate mapping the disposal location of each shipment of 11.e(2) material in the Mill's tailings cell prior to covering the material, and introduces a photo-ionization detector (PID) for measuring volatile organic compounds that may be present in material debris and residues. The procedure also modifies the original procedure to reflect current Mill disposal practice.

Safety and Environmental Evaluation of this SERP Action:

The SERP Committee concluded that the revised procedure contains no provisions which would conflict with any requirement specifically stated in the License and does not create any degradation in the essential safety or environmental commitments in the License Application or provided by the approved Reclamation Plan. In fact incorporating the use of contemporary instrumentation and technology into Mill procedures is an enhancement of the Mill's safety and environmental procedures and is consistent with the concept of maintaining exposure to the public and to the environment As Low As Reasonably Achievable (ALARA).

SERP Action:

In accordance with the SERP SOP and Guidance, the procedure, PBL-10, Rev. No. R-0, Book No. 10, was approved for immediate usage at the Mill, subject to the minor editorial modifications discussed in the SERP meeting of September 15, 2003.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.2 SERP Report 03/04-02, Meeting of September 15, 2004

Proposed Action:

Revise the SOPs for the Mill's Hazard Training Procedures for Ore Delivery and Reagent Handling Personnel.

Description of Change Test or Experiment:

The purpose of this SERP was to revise the hazard training SOPs for reagent delivery and ore delivery personnel, based on the need to increase the surveillance of reagent delivery

personnel for health and safety reasons while they off-load their reagents into the Mill's storage tanks; and, to ensure that radiological contamination control practices are being adhered to. In addition, the SOPs were updated to reflect current operating practices.

Safety and Environmental Evaluation of this SERP Action:

The SERP review of the changes made to the original procedures were consistent with the requirements for SERP approval and actually increase the safety of personnel who deliver hazardous and corrosive materials to the Mill by providing immediate assistance to delivery personnel in the event of an accident while off-loading reagents.

SERP Action:

The SERP concluded that the recommendations and changes to the Mill's Hazard Training for Reagent Delivery and Ore Delivery Personnel SOPs are consistent with and meet the criteria set forth in the SERP SOP for approval and the changes were implemented.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.3 SERP Report 03/04-03, Meeting of March 9, 2004

Proposed Action:

Introduce and implement a Release and Shipping of Vanadium Blackflake P. PBL-15, Rev No. R-0, Book #10.

Description of Change Test or Experiment:

On April 18, 2001, IUSA submitted an analysis and proposal to NRC, in which IUSA proposed that the Mill institute certain procedures to assay lots of vanadium blackflake to ensure that each lot of vanadium blackflake that is shipped from the Mill site contains less than 0.05% source material and that the maximum and average contact radiation exposure rate for each drum of vanadium blackflake does not exceed stipulated levels. By a letter dated May 9, 2003, NRC agreed to IUSA's proposal and required IUSA to adopt the assaying and scanning procedures specified by IUSA in its April 18, 2001 letter.

The Release and Shipping of Vanadium Blackflake procedure incorporates the assaying and scanning procedures proposed by IUSA in its April 18, 2001 letter, as well as other procedures that currently exist in other Mill procedures relating to scanning and shipping vanadium blackflake. Accordingly, once the Procedure is implemented, some changes will be required to eliminate some of the language in existing procedures that will have been superseded by this procedure.

Safety and Environmental Evaluation of this SERP Action:

The SERP concluded that the Release and Shipping of Vanadium Blackflake procedure does not conflict with any requirements specifically stated in the Mill's License or impair IUSA's ability to meet all NRC regulations, and the additional source material assays and radiological surveys required, implement the concepts approved and required by NRC in its May 9, 2003 letter and are intended to better ensure that the Mill complies with the applicable requirements of 20 CFR Part 20 and 10 CFR Part 40. As a result, this criterion is satisfied.

The SERP determined that approval of this procedure would produce no degradation in the essential safety or environmental commitments in the License Application, or provided by in the approved Reclamation Plan, and therefore this criterion is met. This conclusion was based on the fact that:

- a) the License Application(s) envisioned production of vanadium at the Mill, in accordance with existing Mill design, and the sale of the vanadium for unrestricted release; and
- b) the procedure enhances, rather than degrades, essential safety commitments with respect to release and shipping of vanadium blackflake by instituting procedures that are intended to better ensure compliance with the applicable requirements of 10 CFR Part 20.

In addition to the above discussion, the SERP concluded that the EA contemplated the production of vanadium blackflake at the Mill and the unrestricted release of such vanadium to commercial customers in compliance with the applicable provisions of 10 CFR Part 20 and 10 CFR Part 40. This criterion requires that the action be consistent with the actions analyzed in the EA (i.e., that the licensee is not operating in an "unanalyzed condition"). Use of the procedure will better ensure that vanadium blackflake produced at the Mill will satisfy the applicable requirements of 10 CFR Part 20 and 10 CFR Part 40. The procedure is therefore expected to produce no environmental impacts beyond those assessed in the EA dated February 1997, and is consistent with the conclusions regarding actions analyzed in the EA. As a result, this criterion is also satisfied.

SERP Action:

The SERP conclusions and recommendations regarding the Release and Shipping of Vanadium Blackflake procedure are as follows:

- a) the procedure meets the criteria set forth in the SERP SOP for approval; and,
- b) in accordance with the SERP SOP and Guidance, the procedure, PBL-15, Rev. No. R-0, Book No. 10, was approved for immediate usage at the Mill.

Section 2.7.4 of the Radiation Protection Manual was superseded by this procedure, effective March 9, 2004. Section 2.7.4 of the Radiation Protection Manual will be deleted and replaced with a cross-reference to the Release and Shipping of Vanadium Blackflake procedure for matters involving release and shipping of vanadium blackflake. The precise wording of this change will be considered by the SERP at a later date.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

2.4 SERP report 03/04-04, Meeting of April 26, 2004

Proposed Action:

Receive Cabot Material in accordance with and pursuant to the provisions of the existing Cabot License Condition 10.9 of Source Material License SUA- 1358 (the "License").

Description of Change Test or Experiment:

The purpose of this SERP was to evaluate whether or not IUSA could receive additional alternate feed material from Cabot Super Metals Corp. (the "Additional Cabot Materials") pursuant to the requirements of License Condition 10.9 or whether a new amendment request would be required by the NRC for this purpose. On August 15, 1997 the NRC issued Amendment 4 to the Mill's License authorizing the Mill to receive and process Cabot alternate feed materials (the "Previous Cabot Materials"). As a result of that amendment, the following license condition 10.9 was added to the Mill's License:

"The licensee is authorized to receive and process source material from Cabot Performance Materials' facility near Boyertown, Pennsylvania, in accordance with the amendment request dated April 3, 1997, as amended by submittals dated May 19, and August 6, 1997."

The Previous Cabot Materials were received and processed at the Mill in 1997-1998. The Additional Cabot Materials together with the Previous Cabot Materials could possibly exceed the volume of materials contemplated in the existing license amendment. The SERP evaluated all public health, safety and environmental impacts that could result if the receipt of Additional Cabot Materials were to result in an exceedance of the quantity originally contemplated by the license. A tailings capacity evaluation was requested by the SERP to ensure that there are no issues if the volume does exceed the original anticipated volume. The SERP also evaluated whether there were any significant differences in the form, packaging, transportation, material handling or processing requirements of the Additional Cabot Materials compared to the Previous Cabot Materials that would require NRC approval in the form of a separate license amendment or similar action.

Safety and Environmental Evaluation of this SERP Action:

The SERP concluded that the minor differences in the transportation, receipt and processing of the Additional Cabot Materials compared to the Previous Cabot Materials as well as the possible increase in the volume of materials to be accepted, were minor and did not give rise to any incremental public health, safety or environmental impacts. In fact, due to the dryer nature and the improved packaging for transport and the ability to store the Additional Cabot Materials in their sealed synthetic liners on the ore pad pending processing, there were fewer potential public health, safety and environmental impacts associated with the Additional Cabot Materials than with the Previous Cabot Materials.

SERP Action:

The SERP concluded that this change to the assumptions underlying the existing license amendment meets the criteria set forth in the SERP SOP for approval, and that the Additional Cabot Materials may be received and processed at the Mill under the existing Cabot license amendment, without the need to seek additional regulatory approvals or license amendments.

This SERP action resulted in no changes to any pages in the 1991 License Renewal Application or supporting letters.

3.0 Summary and Conclusions

During the reporting period, four separate SERP evaluations were conducted and completed in accordance with the White Mesa Mill's SERP Procedure, SOP (PBL-1, Rev. No. R-2). All actions taken by the SERP were based on a thorough evaluation and review of proposed changes. All changes were consistent with criteria contained in License Condition 9.4(B) of NRC Source Material License SUA-1358. None of the SERP actions resulted in changes to any pages in the 1991 License Renewal Application or supporting letters. Records of each SERP evaluation and action are detailed in numbered SERP reports that are retained at the Mill for review and inspection.