



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
612 EAST LAMAR BLVD, SUITE 400
ARLINGTON, TEXAS 76011-4125

September 16, 2009

Mr. T. W. Hardgrove
Operations Manager
Pathfinder Mines Corporation
935 Pendell Blvd.
P.O. Box 730
Mills, Wyoming 82644

SUBJECT: NRC INSPECTION REPORT 040-06622/09-001 AND NOTICE OF VIOLATION

Dear Mr. Hardgrove:

This refers to the inspection conducted on July 29-30, 2009, at Pathfinder Mines Corporation's Shirley Basin site located in Carbon County, Wyoming. This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel. The preliminary inspection results were presented to you at the conclusion of the onsite inspection, and the final inspection results were presented to you via teleconference on September 9, 2009. The enclosed report presents the results of this inspection.

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements occurred. The first violation involves your failure to conduct bimonthly safety meetings as required by the license, and the second violation involves your failure to provide transportation training to a site worker. The violations are cited in the enclosed Notice of Violation (Notice) and the circumstances surrounding them are described in detail in the subject inspection report. The violations are being cited in the Notice because you failed to identify the violations and because you did not provide detailed corrective actions to prevent recurrence of the violations by the end of the inspection period.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. For your consideration and convenience, an excerpt from NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," is enclosed. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

Based on the results of this inspection, the NRC has also determined that one additional Severity Level IV violation of NRC requirements occurred. This violation involves your use of an uncalibrated survey meter to conduct license-required vehicle and equipment release surveys. This violation is being treated as a Non-Cited Violation (NCV), consistent with Section VI.A of the Enforcement Policy. The NCV is described in the subject inspection report. If you contest the violation or significance of the NCV, you should provide a response within 30 days of the

date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to: (1) the Regional Administrator, Region IV, 612 East Lamar Blvd., Suite 400, Arlington, TX 76011-4125; and (2) the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Finally, during this inspection, the NRC conducted a follow-up review of a previously identified NRC inspection finding. During the August 2006 inspection, the inspectors identified an Unresolved Item related to the release of waste containers from the Shirley Basin site. The inspectors were unable to determine if you were required to ship the empty containers in accordance with U.S. Department of Transportation (DOT) requirements, or if you were required to free-release the containers in accordance with your license. During this inspection, the NRC inspectors determined that you had revised your site procedures during January 2008 to clarify and stipulate that empty containers are to be shipped in accordance with DOT requirements. Based on this information, the inspectors closed the Unresolved Item. Details about the NRC's review of the Unresolved Item are provided in the enclosed inspection report.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC's Web site at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Should you have any questions concerning this inspection, please contact Mr. Robert Evans, Senior Health Physicist, at (817) 860-8234 or the undersigned at (817) 860-8197.

Sincerely,

/RA Roberto J. Torres for/

Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

Docket: 040-06622
License: SUA-442

Enclosures:

1. Notice of Violation
2. NRC Inspection Report 040-06622/09-001
3. NRC Information Notice 96-28

cc w/enclosures 1 & 2:

Scott W. Ramsay

Wyoming Radiation Control Program Director

State of Wyoming Office of Homeland Security

2421 E. 7th Street

Cheyenne, Wyoming 82001

William Hogg

Land Quality Division

Wyoming Department of Environmental Quality

122 W 25th Street

Herschler Building, 3-W

Cheyenne, Wyoming 82002

bcc w/enclosure:

Art Howell, D:DNMS

Chuck Cain, DD:DNMS

Jack Whitten, C:DNMS/NMSB-B

Ted Carter, FSME/DWMEP/DURLD

Lifeng Guo, FSME/DWMEP/DURLD

Robert Evans, NMSB-B

Linda Gersey, NMSB-B

Fee Coordinator, DRMA

DRAFT: S:\DNMS\NMSB-B\RJE\Pathfinder SB 2009-001.doc

FINAL: R:\ DNMS\ HB\2009\Pathfinder SB 2009-001.doc

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ADAMS	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> SUNSI Rev Complete	Reviewer Initials:	RJE
Publicly Avail.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sensitive Value:		
RIV:DNMS:NMSB-B	NMSB-B	C:NMSB-B		
RJEvans	LMGersey	JEWhitten		
<i>/RA/</i>	<i>/RA/</i>	<i>/RA RJTorres for/</i>		
09/10/09	09/10/09	09/16/09		

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NOTICE OF VIOLATION

Pathfinder Mines Corp.
Carbon County, Wyoming

Docket 040-06622
License SUA-442

During an NRC inspection conducted on July 29-30, 2009, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. License Condition 35 states, in part, that the licensee shall conduct and document the attendance at bi-monthly safety meetings for all restricted area facility employees.

Contrary to the above, the licensee suspended all bi-monthly safety meetings at the end of 2007. No bi-monthly safety meetings were conducted during calendar years 2008 and 2009 up to the time of the inspection.

This is a Severity Level IV violation (Supplement VI).

- B. 10 CFR 71.5 states, in part, that each licensee who transports licensed material outside the site of usage or where transport is on public highway, or delivers licensed material to a carrier for transport, shall comply with the applicable requirements of the U.S. Department of Transportation regulations in 49 CFR Part 171 through 180.

49 CFR 172.702 requires that each hazmat employer shall ensure that each hazmat employee is trained and tested, and that no hazmat employee performs any function subject to the requirements of 49 CFR Parts 171-177 unless trained, in accordance with Subpart H of 49 CFR Part 172. The terms hazmat employer and hazmat employee are defined in 49 CFR 171.8.

49 CFR 172.704(a)(2) states, in part, that each hazmat employee must be provided function-specific training concerning requirements of this subchapter that are specifically applicable to the functions the employee performs.

Contrary to the above, during June-July 2009, the licensee did not provide training to one onsite contractor as required by Subpart H to 49 CFR Part 172. This contractor signed bills of lading for shipment of empty containers without function-specific training.

This is a Severity Level IV violation (Supplement V).

Pursuant to the provisions of 10 CFR 2.201, Pathfinder Mines Corporation is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, Region IV, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation" and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or

revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC's Web site at www.nrc.gov/reading-rm/pdr.html or www.nrc.gov/reading-rm/adams.html, to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days.

Dated this 16th day of September 2009

U.S. NUCLEAR REGULATORY COMMISSION
REGION IV

Docket 040-06622

License SUA-442

Report 040-06622/09-001

Licensee: Pathfinder Mines Corporation

Facility: Shirley Basin Mill site

Location: Carbon County, Wyoming

Dates: July 29-30, 2009

Inspectors: Robert Evans, PE, CHP, Senior Health Physicist
Nuclear Materials Safety Branch B

Linda Gersey, Health Physicist
Nuclear Materials Safety Branch B

Accompanied By: Ted Carter, Health Physicist
Uranium Recovery Licensing Branch
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental
Management Programs

Lifeng Guo, Hydrogeologist
Uranium Recovery Licensing Branch
Division of Waste Management and Environmental Protection
Office of Federal and State Materials and Environmental
Management Programs

Approved By: Jack E. Whitten, Chief
Nuclear Materials Safety Branch B

Attachment: Supplemental Inspection Information

EXECUTIVE SUMMARY

Pathfinder Mines Corp. Shirley Basin Mill Site
NRC Inspection Report 040-06622/09-001

This inspection was a routine, announced inspection of decommissioning activities being conducted at the Shirley Basin mill site.

Management Organization and Controls

- Staffing levels were sufficient for the work in progress. The licensee no longer conducted routine site inspections of ponds and impoundments because these areas had been reclaimed. Site procedures had been established and were being maintained up-to-date (Section 1).

Radiation Protection

- The licensee implemented a radiation protection program that met the requirements of 10 CFR Part 20 and the license. Occupational exposures for 2006-2007 were below the annual regulatory limit (Section 2). The licensee suspended occupational monitoring during 2008 as allowed by regulations.

Operator Training/Retraining

- Radiation protection training was provided to site workers as required by regulations and the license from 2006-2007. The licensee suspended radiation protection refresher training at the beginning of 2008 as allowed by the license application (Section 3).
- The licensee's failure to conduct bi-monthly safety meetings during 2008 and the first seven months of 2009 was a violation of a license condition (Section 3).
- The licensee's failure to provide function-specific training for the onsite contractor was a violation of U.S. Department of Transportation training regulations (Section 3).

Maintenance and Surveillance Testing

- At the time of the inspection, survey meters were being calibrated as required by the license and site procedures. Survey meters in service appeared operable with up-to-date calibrations (Section 4).
- The licensee failed to conduct vehicle and equipment release surveys with a calibrated survey meter during June-November 2008, a violation of the license. The licensee self-identified and self-corrected the violation (Section 4).

Environmental Protection

- The licensee implemented the environmental and groundwater monitoring programs in accordance with the license. The licensee had not released licensed material into the environment in quantities exceeding regulatory or licensed limits. The routine groundwater and environmental monitoring program reports were submitted to the NRC as required by the license (Section 5).

Transportation of Radioactive Material and Radioactive Waste Management

- The licensee was conducting transportation and waste disposal operations in accordance with license requirements and site procedures (Section 6).
- A previous NRC Unresolved Item related to the release or shipment of empty containers was closed (Section 6).

Emergency Preparedness

- The licensee had adequate procedures, equipment, and training needed to respond to emergencies (Section 7).

Report Details

Summary of Plant Status

Since the August 2006 NRC inspection, the licensee completed a number of reclamation activities. The licensee graded the former mill site and installed radon barrier material and topsoil/rock cover over the area. Former evaporation Ponds 1 and 2 were reclaimed. The off-tailings areas were cleaned, re-contoured, and graded. The licensee also added topsoil and reseeded the Area 3 north waste dump, Area 3 south waste dump, and former topsoil piles.

At the time of the inspection, no reclamation activities were in progress. The licensee continued to accept byproduct material for disposal in the Pond 3 area. The remaining structures on site included the office, change house/garage, wash bay, and lubrication bay.

The licensee plans to complete site reclamation at a later date, after disposal operations have been permanently discontinued. The areas that remain onsite that must be reclaimed include the shop yard, stockpile area, office, industrial pond, Pond 3 area, and local roads. In addition to the above reclamation activities, the licensee also has to complete the construction of three drainage channels after disposal operations are discontinued. The first channel will be located adjacent to the former evaporation ponds, the second channel will be located parallel to the access road, and the third channel will be located at the Pond 3 area.

1 Management Organization and Controls (88005)

1.1 Inspection Scope

The purpose of this portion of the inspection was to ensure that the licensee had established an organization to administer the technical programs specified in the license.

1.2 Observations and Findings

At the time of the inspection, site staffing consisted of one onsite contractor and the radiation safety officer. The contractor was a former employee of the licensee that conducted onsite work as needed. Onsite work conducted by the contractor included receipt of waste disposal shipments, equipment release surveys, heavy equipment operations, and water sampling. The radiation safety officer conducted oversight activities and reviews as needed to maintain compliance with the license.

Routine site inspection requirements are specified in the license application in Section 4.2. In previous years, the inspections included a daily visual inspection of the evaporation ponds, monthly survey of evaporation pond levels, and bi-monthly monitoring of piezometer levels. The licensee had previously discontinued all of these routine inspections because these areas have since been reclaimed.

License Condition 33 states, in part, that standard operating procedures shall be established. The inspectors reviewed selected procedures and confirmed that the required procedures had been established. The procedures provided sufficient detail for conducting the work. The radiation safety officer continues to perform annual reviews of remaining procedures.

1.3 Conclusions

Staffing levels were sufficient for the work in progress. The licensee no longer conducted routine site inspections of ponds and impoundments because these areas had been reclaimed. Site procedures had been established and were being maintained up-to-date.

2 Radiation Protection (83822)

2.1 Inspection Scope

The purpose of this portion of the inspection was to determine if the licensee's radiation protection program was in compliance with 10 CFR Part 20 requirements and the license.

2.2 Observations and Findings

The inspectors reviewed the licensee's occupational exposure monitoring program. The licensee had previously discontinued the use of personnel dosimeters during 2006 as allowed by 10 CFR 20.1502(a) because a review of dosimetry records determined that external doses were consistently less than 10-percent of the annual limits.

During 2006-2007, the internal doses of two individuals were monitored by the licensee. Annual occupational exposures were assigned to the workers based on breathing zone air sampling results. The highest occupational dose during 2006-2007 was 120 millirems, a dose that was below the total effective dose equivalent limit of 5,000 millirems per year as specified in 10 CFR 20.1201(a). Based on these results and the status of site decommissioning, the licensee subsequently elected to suspend the occupational exposure monitoring program during January 2008 as allowed by 10 CFR 20.1502(a).

License application Section 5.5.4 and License Conditions 33 and 42 provide the bioassay program requirements. The inspectors reviewed the licensee's implementation of the bioassay program. The licensee suspended routine bioassay sampling during 2006. The program was suspended because the risk of ingesting tailings material was minimal. Future bioassay samples will be collected at the discretion of the radiation safety officer.

The licensee issued its last radiation work permit during 2006. This radiation work permit supported the unloading of incoming in-situ leach wastes. No radiation work permit has been issued since the previous NRC inspection.

License Condition 36 states, in part, that the annual As Low As Reasonably Achievable (ALARA) report will be submitted to the NRC for review. The licensee continued to conduct annual radiation protection program reviews. The most recent ALARA reports were submitted to the NRC on May 30, 2007, and October 10, 2008. The inspectors reviewed these reports, discussed the results of the reports with the radiation safety officer, and determined that the annual reviews were adequate for the work in progress.

The inspectors conducted a site tour to observe site status. During the site tour, the NRC inspectors conducted radiation surveys using a Ludlum Model 19 microRoentgen

survey meter (NRC Number 015544, calibration due date of April 4, 2010). The background ambient gamma exposure rate, measured in the office, was 18-20 microRoentgens per hour. Ambient gamma exposure rates averaged 30-50 microRoentgens per hour in most areas of the site. The areas adjacent to the Pond 3 waste disposal area measured up to 250 microRoentgens per hour. The inspectors noted that the ambient gamma exposure rates were elevated because the Pond 3 waste disposal area has not been remediated.

2.3 Conclusions

The licensee implemented a radiation protection program that met the requirements of 10 CFR Part 20 and the license. Occupational exposures for 2006-2007 were below the annual regulatory limit. The licensee suspended occupational monitoring during 2008 as allowed by regulations.

3 Operator Training/Retraining (88010)

3.1 Inspection Scope

The inspection objectives were to determine whether the licensee was complying with regulations and license requirements related to the training of employees.

3.2 Observations and Findings

The inspectors reviewed the licensee's training program to determine compliance with 10 CFR 19.12, License Condition 35, and Section 5.3.2 of the license application. The licensee provided refresher training during 2006-2007. No new employees were assigned to the site since the previous inspection; therefore, the licensee did not provide new employee training during this time frame.

The licensee suspended all training and bi-monthly safety meetings at the end of 2007. No training and bi-monthly safety meetings were conducted during calendar years 2008 and 2009 up to the time of the inspection. The licensee provided the inspectors with an internal memorandum dated May 22, 2007, that explained the justification for discontinuance of radiation safety training. The licensee discontinued the training because the contaminated tailings material had been covered with clean material. The inspectors noted that the licensee was authorized to suspend refresher training, according to Section 5.3.2 of the license application, if employees are not working with tailings material. However, bi-monthly safety meetings are required by License Condition 35. The licensee's failure to conduct bi-monthly safety meetings during 2008 and the first seven months of 2009 was a violation of License Condition 35 (NOV 040-06622/0901-01).

The inspectors reviewed the licensee's shipping records for receipt of waste material for disposal in the Pond 3 area. The inspectors noted that several shipping papers contained bills-of-ladings that were signed by the licensee's contractor acting as the shipper during the June-July 2009 time frame. The bills-of-ladings were used to ship the empty waste containers back to the original consignees.

The inspectors concluded that the contractor did not have the up-to-date training specified by U.S. Department of Transportation (DOT) regulations for shipment of radioactive containers. Regulation 49 CFR 172.702 requires, in part, each hazmat employer to ensure that each hazmat employee is trained and tested, and that no hazmat employee performs any function subject to the requirements of 49 CFR Parts 171-177 unless trained, in accordance with Subpart H of 49 CFR Part 172. Regulation 49 CFR 172.704(a)(2) states, in part, that each hazmat employee must be provided function-specific training concerning requirements of this subchapter that are specifically applicable to the functions the employee performs. (A hazmat employee includes an individual who prepares hazardous materials for transportation. Waste shipments containing residual uranium or uranium byproduct material may be considered hazardous material shipments under certain situations.) The failure of the licensee to ensure that the contractor was provided with function-specific training prior to signing bills-of-lading on behalf of the licensee was a violation of the training requirements of 49 CFR 172.702 and 172.704 (NOV 040-006622/0901-02).

3.3 Conclusions

Radiation protection training was provided to site workers as required by regulations and the license from 2006-2007. The licensee suspended radiation protection refresher training at the beginning of 2008 as allowed by the license application. The licensee's failure to conduct bimonthly safety meetings during 2008 and the first seven months of 2009 was a violation of the license. Further, the licensee's failure to provide function-specific training for the onsite contractor was a violation of DOT training regulations.

4 **Maintenance and Surveillance Testing (88025)**

4.1 Inspection Scope

The inspection objectives were to determine whether instrument calibrations were being conducted in accordance with license requirements and site procedures.

4.2 Observations and Findings

License Conditions 33 and 34 include requirements for annual instrument calibrations. All survey instruments are sent to a vendor for annual calibrations. The alpha swipe counter used by the licensee was calibrated on a semi-annual basis by the licensee in accordance with the site operating procedure. All instruments in use appeared to be in good working order, up-to-date, and functional during the inspection.

During November 2008, the licensee identified that it has used a survey meter after its calibration had expired. The meter was used for the release of 45 shipment vehicles and trailers between June 2008 and November 2008. Upon discovery of the out-of-calibration meter, the licensee immediately sent the meter out for recalibration. The licensee determined that the cause of the event was attributed to human error—site staff failed to note the calibration expiration date. The licensee's failure to use a calibrated survey meter for release of equipment and vehicles from the site was violations of License Condition 18, release of equipment, and License Condition 34, annual calibrations (NCV 040-06622/0901-03).

This non-repetitive, licensee-identified and corrected violation is being treated as a Non-Cited Violation, consistent with Section VI.A.8 of the NRC Enforcement Policy. The licensee conducted a review of the safety significance of the incident. The licensee noted that the instrument had been functionally tested each day using a check source, and the meter continued to operate as expected. Further, the meter was found to be functional during the as-found test of the meter during the November 2008 recalibration suggesting that the meter was functional during the time frame that the meter was used with an expired calibration. Therefore, the licensee concluded that the 45 shipments most likely did not have external surface contamination in excess of DOT limits. Corrective actions planned by the licensee include recalibrating all meters during the winter months to ensure that the meters will be calibrated and available for use when waste shipment deliveries commence during the springtime.

4.3 Conclusions

At the time of the inspection, survey meters were being calibrated as required by the license and site procedures. Survey meters in service appeared operable with up-to-date calibrations. The licensee failed to conduct vehicle and equipment release surveys with a calibrated survey meter during June-November 2008, a violation of the license. The licensee self-identified and self-corrected the violation.

5 Effluent Control and Environmental Protection (88045)

5.1 Inspection Scope

The environmental and effluent monitoring programs were reviewed to assess the effectiveness of the licensee to monitor the impacts of site activities on the local environment.

5.2 Observations and Findings

Amendment 52 to the license dated February 13, 2003, removed the environmental monitoring program requirements with the exception of groundwater and surface water sampling. The licensee implemented a new sampling program during August 2005, concurrent with the approval of Amendment 57 to the license. The current sampling program, specified in License Condition 47, includes sampling of 14 wells and five surface waters.

License Condition 22 specifies that the results of all effluent and environmental monitoring required by the license shall be reported to the NRC in semi-annual reports. The inspectors reviewed the semi-annual effluent reports for 2007-2008. Based on the information provided in these reports and the original records, the inspectors concluded that the licensee collected the required number of water samples and analyzed the samples for the required chemical and radiological constituents, with one minor exception. According to the licensee, well RPI-18A was not sampled during the first quarter of 2008 because it was not accessible due to an encompassing snow drift.

License Condition 47.B lists the groundwater protection standards for the point-of-compliance wells. The inspectors compared the sample results for 2007-2008 to the protection standards. None of the sample results reviewed by the inspectors exceeded the protection standards.

An annual survey of land use is required by License Condition 21. The annual surveys for 2006-2008 were reviewed during the inspection. The reports provided a summary of land use within five miles of the site. The nearest residence continued to be located three miles southeast of the site. The inspectors concluded that the 100-millirem dose limit to members of the public, as specified in 10 CFR 20.1301(a), had not been exceeded.

5.3 Conclusions

The licensee implemented the environmental and groundwater monitoring programs in accordance with the license. The licensee had not released licensed material into the environment in quantities exceeding regulatory or licensed limits. The routine groundwater and environmental monitoring program reports were submitted to the NRC as required by the license.

6 Transportation of Radioactive Materials and Radioactive Waste Management (86740 and 88035)

6.1 Inspection Scope

The objectives of this portion of the inspection were to determine if transportation and waste disposal activities were being conducted in compliance with license and regulatory requirements.

6.2 Observations and Findings

a. Radioactive Waste Management

Security requirements are discussed in Section 5.4 of the license application. Buildings, fences, gates, and operating equipment were observed during the site tour. The access gates were functional, and fences were posted. The inspectors determined that licensed material was adequately secured within the site property as required by 10 CFR 20.1801 and the license application.

The licensee conducted radon flux measurements of the tailings impoundments for compliance with the requirements of 10 CFR Part 40, Appendix A, Criterion 6. The licensee estimated that it has conducted radon flux measurements at 107 of 116 possible sample points. Based on preliminary information, the average radon emanation rate was approximately one-fifth of the limit specified in Criterion 6 to Appendix A. The remaining sample points are located within the Pond 3 area, an area that is currently being used for disposal of waste material. This area will be tested after waste disposal operations have been discontinued and the area had been remediated. The licensee indicated to the inspectors that it was contemplating the idea of submitting an interim completion report to the NRC to document the status of the site. The licensee indicated that it may include the radon flux measurements that have been collected to date in this interim report.

The NRC conducted a site visit to the facility on June 4, 2008. The purpose of this site visit was to observe the status of the licensee's reclamation construction activities. At that time, the NRC staff questioned the licensee's placement rock along the side of the

diversion channels. Specifically, the NRC staff questioned whether the rock placement provided sufficient freeboard. This issue was discussed with the licensee during this inspection. In response to these concerns raised by the NRC staff, the licensee plans to measure the channels at various locations, from top of rock to bottom of channel, to verify that sufficient freeboard exists in the channels. The licensee plans to submit this information to the NRC in the future as part of the reclamation completion report.

b. Transportation of Radioactive Material

License Condition 46 authorizes the licensee to dispose of byproduct material generated onsite or at other licensed facilities. The licensee was actively disposing of in-situ leach wastes from five other sites. The licensee continues to receive shipments during the May-November time frame. The inspectors observed the licensee's waste disposal area, and the inspectors reviewed selected shipping records. The licensee described the shipping and disposal process, and the process agreed with site procedure requirements. The shipping records reviewed by the inspectors met the intent of DOT requirements.

- c. (Closed) Unresolved Item 04006622/0601-01: Determine who was responsible for shipping empty containers and verifying compliance with DOT requirements.

As part of the disposal process, the licensee allows tractors and trailers to enter its radiologically restricted area to dispose of wastes. During the previous inspection, the inspectors questioned whether the licensee was free-releasing the waste disposal containers in compliance with License Condition 18 requirement. Alternatively, the inspectors questioned whether the licensee was supposed to ship the containers back to the point of origin as DOT "empty" containers as allowed by 49 CFR 173.428 requirements. This issue was previously determined to be an Unresolved Item by the NRC pending further review.

The inspectors reviewed the status of the Unresolved Item during this inspection. License Condition 46.D states that written procedures shall be established to describe the inspection and disposal of byproduct material. Further, procedures shall assign specific responsibilities for all activities, including program oversight. The licensee implemented procedures entitled "ISL Waste Disposal" to satisfy License Condition 46.D requirements. The procedures were supplemented by additional instructions dated January 18, 2008, entitled "ISL Waste Paper Trail." This procedure, issued after the previous inspection, states, in part, that the licensee's representative is to sign the bills of lading as the shipper for the empty containers. In summary, the licensee's procedures established the protocol of shipping the empty containers back to the originators as DOT "empty" containers. Accordingly, this procedure revision resolves the Unresolved Item.

The inspectors were unable to verify licensee compliance with DOT "empty" container regulations because the licensee was not shipping empty containers during the site inspection. This program area will be reviewed during a future inspection.

6.3 Conclusions

The licensee was conducting transportation and waste disposal operations in accordance with license requirements and site procedures. A previous NRC Unresolved Item related to the release or shipment of empty containers was closed.

7 **Emergency Preparedness (88050)**

7.1 Inspection Scope

The objective of this portion of the inspection was to determine the status of the licensee's emergency preparedness program.

7.2 Observations and Findings

Amendment 52 to the license allowed the licensee to discontinue the Emergency Response Plan. However, employees and contractors are instructed in responding to medical and/or fire emergencies. The inspectors found the program to be adequate for the limited type of work being conducted.

7.3 Conclusions

The licensee had adequate procedures, equipment, and training needed to respond to emergencies.

8 **Exit Meeting Summary**

The inspectors presented the preliminary inspection results to the licensee's representatives at the conclusion of the onsite inspection on July 30, 2009. Representatives of the licensee acknowledged the findings as presented. The NRC staff conducted a final exit briefing with the licensee by telephone on September 9, 2009. During the inspection, the licensee did not identify any information reviewed by the inspectors as proprietary.

SUPPLEMENTAL INSPECTION INFORMATION

PARTIAL LIST OF PERSONS CONTACTED

T. Hardgrove, Operations Manager
K. Hurley, Contractor

INSPECTION PROCEDURES USED

IP 83822	Radiation Protection
IP 86740	Transportation of Radioactive Material
IP 88005	Management Organization and Control
IP 88010	Operator Training/Retraining
IP 88025	Maintenance and Surveillance Testing
IP 88035	Radioactive Waste Management
IP 88045	Effluent Control and Environmental Protection
IP 88050	Emergency Preparedness

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

040-06622/0901-01	VIO	Failure to conduct bi-monthly safety meetings during 2008-2009
040-06622/0901-02	VIO	Failure to provide function-specific transportation training
040-06622/0901-03	NCV	Release of vehicles and equipment using survey meter with expired calibration

Closed

040-06622/0601-01	URI	Determine who was responsible for shipping empty containers and verifying compliance with DOT requirements
040-06622/0901-03	NCV	Release of vehicles and equipment using survey meter with expired calibration

Discussed

None

LIST OF ACRONYMS

ALARA	As Low As Is Reasonably Achievable
DOT	U.S. Department of Transportation
IP	Inspection Procedure
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
URI	Unresolved Item
VIO	NRC Notice of Violation