

Rio Algom Mining Corp.

William Paul Goranson, P.E.
Manager, Radiation Safety, Regulatory Compliance and Licensing

November 22, 1999

Federal Express Tracking No.: 810387424516

John Surmeier
Branch Chief
U.S. Nuclear Regulatory Commission
Uranium Recovery Branch
Division of Waste Management
Mail Stop 8A23
Rockville MD 20850

**Subject: Amendment to Wyoming Underground Injection Control Permit
UIC 99-347 for Class I Non-Hazardous Injection Wells
Smith Ranch Facility
License No.: SUA-1548; Docket No.: 40-8964**

Dear Mr. Surmeier:

Rio Algom Mining Corp. has applied and received approval to modify its Underground Injection Control Permit to operate two Class I non-hazardous waste disposal wells at its Smith Ranch Facility from the Wyoming Department of Environmental Quality – Water Quality Division. One Class I injection well, WDW #1, is currently receiving process effluents and wellfield bleed for operations at the facility. The second well, WDW #2, is under construction, and once completed will be operated as WDW #1.

Rio Algom is requesting the NRC to review and approve this amendment to its UIC permit to allow the disposal of process solutions from the operations at the ISL facility. Attached to this letter is the approved permit from the State of Wyoming and the application for WDW #2. The permit and application have been subjected to EPA review and public comment through the UIC permitting process.

If you have any questions, please call me at (405) 858-4807. You can also contact me by email at pgoranson@ramc.net.

Sincerely,



William Paul Goranson, P.E.
Manager, Radiation Safety, Regulatory
Compliance and Licensing

Enclosures

CC: Marvin Freeman, RAMC w/o attachment
Bill Ferdinand, RAMC w/o attachment
Dennis Stover, RAMC w/o attachment
John Cash, RAMC w/o attachment
John McCarthy, RAMC w/o attachment
Steve Hatten, RAMC w/o attachment

4405

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE OF WYOMING
UNDERGROUND INJECTION CONTROL PERMIT
ISSUED UNDER CHAPTER XIII
WYOMING WATER QUALITY RULES AND REGULATIONS
CLASS I INJECTION WELL

() New
(XX) Modified

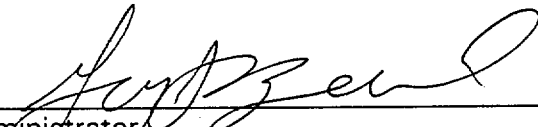
Permit Number UIC 99-347
Reference old permit: UIC 95-324

In compliance with the Wyoming Environmental Quality Act (W.S. 35-11-101 through 1104, specifically 301(a)(i) through 301 (a) (iv), Laws 1973, Ch. 250, Section 1) and Water Quality Rules and Regulations Chapter XIII (1993),

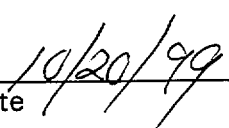
Applicant: Rio Algom Mining Corp.
6305 Waterford Blvd., Suite 325
Oklahoma City, OK 73118
(405) 848-1190

is authorized to operate the Smith Ranch Disposal Well #1 located in the center of the NE¼, Section 35, and Disposal Well #2 located 2407 feet from the south line and 1923 feet from the east line, Section 27, Township 36 North, Range 74 West, of the 6th Principal Meridian, Converse County; according to the procedures and conditions of application 99-347 and requirements and other conditions of this permit as found on pages 1 through 15.

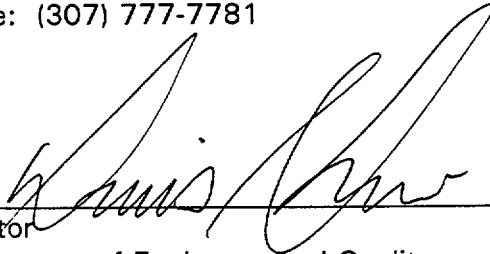
This permit shall become effective on date of issuance.



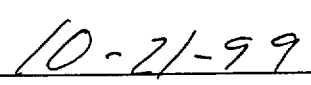
Administrator
Water Quality Division
Herschler Building, 122 West 25th Street
Cheyenne, WY 82002
Phone: (307) 777-7781



Date 10/20/99



Director
Department of Environmental Quality
Herschler Building, 122 West 25th Street
Cheyenne, WY 82002



Date 10-21-99

TABLE OF CONTENTS

A. Discharge Zone 3

B. Area of Review 3

C. Groundwater Classification 4

D. Authorized Operations 4

E. Hazardous Waste 6

F. Proper Operation and Maintenance 6

G. Entry and Inspection 7

H. Environmental Monitoring Program for Groundwaters of the State 7

I. Requirements for Monitoring the Discharge 7

J. Test Procedures 8

K. Records and Reports 9

L. Permit Actions 10

M. Mechanical Integrity 10

N. Abandonment 11

O. Duties of the Rio Algom Mining Corp. 12

P. Financial Responsibility 13

Q. Special Conditions 13

R. Signatories Requirement 13

S. Noncompliance 14

T. Permit Transfer 14

U. Property Rights 14

V. Severability 15

A. Discharge Zone

This injection well is authorized to inject into the Parkman, Teapot, and Teckla Formations which are found in the well bore of disposal well #1 from 9,475 to 9,919 feet, 9,137 to 9,371 feet, and 8,559 to 8,671 feet below the ground surface respectively and in disposal well #2 from 9,463 to 9,843, 9,123 to 9,281, and 8,267 to 8,655. Additional perforations may be installed within the above named interval of the authorized formations with the prior approval of the Water Quality Division. The initial perforations in well #1 are as follows:

Parkman Formation: from 9,528 to 9,551; from 9,487 to 9,503; from 9,461 to 9,483; from 9,432 to 9,448; and from 9,358 to 9,428 feet below the ground surface.

Teapot Formation: from 9,070 to 9,188 feet below the ground surface.

Teckla Formation: from 8,834 to 8,841; from 8,823 to 8,831; from 8,810 to 8,816; from 8,787 to 8,798; from 8,743 to 8,776; and from 8,712 to 8,737 feet below the ground surface.

The packer set on the bottom of the tubing shall be set within 500 feet of the top of the authorized discharge zone, in well #1 between 8,059 and 8,559 feet.

The initial perforations in well #2 are as follows:

Parkman Formation: from 9,463 to 9,843 feet below the ground surface.

Teapot Formation: from 9,123 to 9,281 feet below the ground surface.

Teckla Formation: from 8,267 to 8,655 feet below the ground surface.

The packer set on the bottom of the tubing shall be set within 500 feet of the top of the authorized discharge zone, in well #2 between 7,767 and 8,267 feet.

B. Area of Review

The wells authorized by this permit is/are located in:

Township 36 North, Range 74 West, 6th Principal Meridian

Section 27: 2407 feet from the south line and 1923 feet from the east line

Section 35: Center of the NE $\frac{1}{4}$

The Area of Review around these wells is legally described as:

Township 35 North, Range 73 West, 6th Principal Meridian

Section 6: NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$

Township 35 North, Range 74 West, 6th Principal Meridian

Section 1: All

Section 2: All

Section 3: All

Section 4: N $\frac{1}{2}$, SE $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$

Section 9: N $\frac{1}{2}$ NE $\frac{1}{4}$

Section 10: N $\frac{1}{2}$

- Section 11: N½
- Section 12: NW¼, N½NE¼
- Township 36 North, Range 73 West, 6th Principal Meridian
- Section 19: S½NW¼, NW¼NW¼, SW¼, W½SE¼
- Section 30: All
- Section 31: All
- Township 36 North, Range 74 West, 6th Principal Meridian
- Section 13: S½NW¼, S½
- Section 14: S½N½, S½
- Section 15: S½N½, S½
- Section 16: E½SE¼, E½W½SE¼, SW¼SW¼SE¼, SE¼SW¼SW¼
- Section 20: E½SE¼
- Section 21: NE¼NE¼, S½NW¼, NE¼NW¼, S½
- Section 22: All
- Section 23: All
- Section 24: All
- Section 25: All
- Section 26: All
- Section 27: All
- Section 28: All
- Section 29: E½
- Section 32: E½
- Section 33: All
- Section 34: All
- Section 35: All
- Section 36: All

C. Groundwater Classification

The groundwater in the Parkman, Teapot, and Teckla Formations is classified as class VI under Chapter VIII of Wyoming Water Quality Rules and Regulations (April 9, 1980.) This classification was made because:

- a. The groundwater in this formation contains between 3,000 and 10,000 mg/l of Total Dissolved Solids, but cannot be reasonably expected to provide a source of drinking water because of its extreme depth of burial;

and/or

- b. The groundwater in this formation is situated at such a depth that recovery of this water and treatment for drinking water purposes is not practical;

D. Authorized Operations

The Rio Algom Mining Corp. is authorized to inject 10,286 barrels per day, (432,000 gallons per day) of industrial processing wastes from the Smith Ranch In Situ Mine as described:

DESCRIPTION OF PROCESSING WASTE:
Process area wash down water
Eluate solution as decanted from the uranium precipitation circuit
Wash waters decanted from yellowcake settling (thickening)
Sand filter backwash waters
Ion Exchange screening wash waters
Laboratory wastes from a laboratory located on the Smith Ranch Project.
Reverse Osmosis or Electrodialysis Brine Concentrate from Aquifer Restoration Efforts

The Rio Algom Mining Corp. is authorized to inject at a pressure of no more than 1,566 psig as measured at the wellhead. The pressure of injection shall be continuously monitored and recorded on a chart recorder.

Within the first year of operation, the Rio Algom Mining Corp. shall conduct a step injection test on well #2 to determine the actual fracture pressure of the formation. After this test, and subsequent approval by the Administrator, the injection pressure shall be limited to 90% of the fracture pressure as measured at the surface. The Rio Algom Mining Corp. may conduct additional step injection tests at a later time to determine changes in the fracture pressure as the injection continues. After acceptance by the Administrator of these tests, the Rio Algom Mining Corp. shall limit the injection pressure to 90% of the new fracture pressure as measured on the surface.

The Rio Algom Mining Corp. shall monitor continuously the pressure on the casing/tubing annulus and shall maintain a positive pressure on that annulus. The pressure maintained shall be not less than 200 psig nor more than 800 psig as measured at the wellhead.

The wastes injected are from operations described by the following SIC codes: 03 and 109. The Rio Algom Mining Corp. is authorized to accept and dispose of fluids from other similar in situ leaching operations with prior WQD approval.

Produced water from oil and gas operations may be accepted for disposal with prior WQD approval. Fluids from other industrial operations may be accepted for disposal with prior WQD approval. Analyses will be required prior to injection of any waste not produced on the project covered by LQD Permit to Mine 633. The exact parameters to be analyzed will be determined prior to accepting any such waste. The Rio Algom Mining Corp. shall contact WQD for guidance prior to ordering analyses. For any waste which is not exempt from RCRA regulation at the time of injection, the Rio Algom Mining Corp. shall provide at a minimum, tests for EP corrosivity, EP Toxicity using the Toxicity Characteristic Leaching Procedure (TCLP), EP Ignitability, and EP Reactivity. The Water Quality Division may waive in writing the requirement for individual tests based on the source and nature of the waste to be disposed of. Injection shall not commence until such time as an approval has been issued in writing by the Water Quality Division for that particular waste. The Water Quality Division may issue approvals under this permit for injection of industrial waste from a single source for up to three years from the date of the original analyses. Such approvals may require additional analyses during their term.

The composite injection stream may also contain a small amount of Nalco 7801 corrosion inhibitor. Nalco 7801 is an aqueous solution of alkaline amine phosphate ester and ethylene glycol. The composite injection stream may also contain a small amount of Betz GCP-188 deposit control additive. The composite injection stream may also contain a small amount of Tretolite SP-200 scale inhibitor. The composite injection stream may also contain a small amount of Tretolite NC-370 Biocide added to control bacterial growth in the injection system. The use of other additives is authorized provided that the Rio Algom Mining Corp. shall provide MSDS sheets for all such additives, the amounts to be used, and shall obtain written approval from the Water Quality Division prior to using any other additive.

E. Hazardous Waste

This permit does not allow for the injection of any hazardous waste as defined by 40 CFR 261. Injection of any substance defined as hazardous waste, whether hazardous by listing or by characteristic is a violation of this permit. The wastes to be injected from the Smith Ranch project are exempt from RCRA regulation under the Beville Amendment to RCRA.

F. Proper Operation and Maintenance

The Rio Algom Mining Corp. shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

The Rio Algom Mining Corp. shall operate and maintain all facilities and systems of treatment and control which are installed or used by the Rio Algom Mining Corp. to achieve compliance with the conditions of the permit. Proper operation and maintenance includes mechanical integrity of the well, effective performance, adequate funding and operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

The injection well covered by this permit shall meet all construction requirements outlined in Chapter XIII, Section 11 of the Wyoming Water Quality Rules and Regulations.

The Rio Algom Mining Corp. is required to conduct the operation in accordance with statements, representations, and procedures presented in the complete permit application and supporting documents, as accepted and approved by the Administrator.

Any modifications which will result in a violation of permit conditions shall be reported by submission of a new or amended permit application and shall not be implemented until a new or modified permit has been issued.

Injection into a well may not commence until construction is complete.

G. Entry and Inspection

The Rio Algom Mining Corp. shall allow the Administrator, or an authorized representative for the Administrator, upon presentation of credentials and during normal working hours, to enter the premises where a regulated facility is located, or where records are kept under the conditions of this permit, and inspect the discharge and related facilities, review and copy reports and records required by this permit, collect fluid samples for analysis, measure and record water levels, and perform any other function authorized by law or regulation.

H. Environmental Monitoring Program for Groundwaters of the State

A monitoring program is required to establish baseline water quality of the receiving formation and to insure knowledge of migration and behavior of the discharge. The Rio Algom Mining Corp. is required to provide detailed information concerning the quality of the groundwater in the receiver of this injection well. At a minimum, the groundwater in the receiving formation shall be sampled prior to the injection of any fluid under this permit. This sample shall be analyzed for the following parameters at a minimum:

PARAMETERS		
Calcium	Magnesium	Sodium
Sulfate	Chloride	Potassium
Carbonate and Bicarbonate	Total Dissolved Solids	pH
Conductivity	Specific Gravity	Viscosity

Because of the depth of injection and the amount of groundwater sampling already required in the general vicinity of this facility, no groundwater monitoring for the near surface groundwaters (USDW's) is required.

I. Requirements for Monitoring the Discharge

The Rio Algom Mining Corp. shall monitor the injection pressure continuously and record those readings on a strip chart recorder, a circular chart recorder, or digitally by computer interface with the pressure transducer on the well or in the injection plant. A high pressure kill switch shall also be installed on the injection tubing. These devices shall be set to preclude violations of the maximum injection pressure.

The Rio Algom Mining Corp. shall monitor the injection volume continuously and record those readings on a strip chart recorder, a circular chart recorder, or digitally by computer interface with the pressure transducer on the well or in the injection plant.

The Rio Algom Mining Corp. shall monitor continuously the pressure on the casing/tubing annulus and shall maintain a positive pressure on that annulus. The pressure maintained shall be not less than 200 psig nor more than 800 psig. The Rio Algom Mining Corp. shall record the annulus pressure continuously on a strip chart recorder, a circular chart recorder, or digitally by computer interface with the pressure transducer on the wellhead. A High/Low pressure kill switch shall also be installed on the casing/tubing annulus. This device shall be set to preclude violations of the permit for annulus pressure.

The Rio Algom Mining Corp. shall shut the wells covered by this permit in annually for a period of time long enough to observe a valid pressure falloff curve. This test shall be considered complete when the pressure curve becomes asymptotic to a straight line. This test shall be analyzed by the Rio Algom Mining Corp. using either the Miller Dyes Hutchinson (MDH) method or the Horner Method. In either case, graphs of this test shall be submitted to include either the MDH or Horner Plot and a Log-Log Plot after injection. From these plots, the Transmissivity in md-ft/cp, the permeability in md, and the dimensionless skin factor shall be calculated and submitted to WQD with the next quarterly report after the test is done.

The first pressure falloff curve described above shall be run within the first 90 days of operation. This first pressure falloff curve shall be run using gauges with an accuracy of .01 psi and shall continue until ambient reservoir pressure has been reached, even if this requires the use of down hole gauges to measure pressures of less than atmospheric. In addition, the Administrator may require the use of similar gauges on any subsequent test after the first test, if this procedure is deemed necessary to make proper interpretations of the data.

The Rio Algom Mining Corp. shall monitor the quality of the injected water on an approved schedule. The following parameters shall be analyzed by the listed methods and reported quarterly:

SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	PERMIT LIMIT OR (UCL)*
Quarterly	EPA Method 160.1	Total Dissolved Solids	No Limit
	EPA Method 310.1	Total Alkalinity	No Limit
	EPA Method 350.3	Ammonia as N	No Limit
	EPA Method 908.1	Natural Uranium As U	65.0
	EPA Method 903.1	Radium 226	No Limit
	EPA Method 150.1	pH	>2.0, <11.0

*All chemical parameters listed in this permit are expressed in mg/l unless otherwise shown. pH is always expressed in standard units, and Conductivity is always expressed in mmhos/meter or umhos/cm. The Rio Algom Mining Corp. shall use the above listed methods unless an alternate method is first approved by the WQD. The above analyses shall be done on samples which are composited from at least four samples taken over a period of at least two weeks.

The above Upper Control Limit (UCL) is not to be exceeded in any sample. Exceedance of this value is a violation of this permit and shall require notification under section K of this permit. Failure to perform and report analyses in accordance with the prescribed schedule and method is also a violation of this permit.

J. Test Procedures

All samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples taken shall include a trip blank of distilled water for each sampling date and a duplicate sample at least once per year.

All required analyses shall be conducted in compliance with Chapter 8, Section 7, Wyoming Water Quality Rules and Regulations.

K. Records and Reports

The Rio Algom Mining Corp. shall furnish to the Administrator, within a specified time, any information which the Administrator may request relating to the operation of the facility, including copies of records required to be kept by this permit.

The Rio Algom Mining Corp. shall retain copies of all records and reports required by this permit, for a period of three (3) years following permanent well abandonment. After that time, those same records shall be delivered to the Administrator for disposal or archive at his sole discretion.

Reports of compliance or noncompliance with, and any progress reports on, interim and final requirements contained in any compliance schedule shall be submitted no later than thirty (30) days following each schedule date.

Confirmed noncompliance resulting in the migration of injected fluid into any zone outside the permitted receiver shall be reported to the Administrator orally within twenty-four (24) hours, and a written submission shall be provided within five (5) days of the time the Rio Algom Mining Corp. becomes aware of the excursion. The written submission shall contain: a description of the noncompliance; the period of noncompliance, including exact dates and times, and if the noncompliance has not been controlled, the anticipated time it is expected to continue; and a list of the steps taken or planned to reduce, eliminate, and prevent the recurrence of the noncompliance.

Confirmed noncompliance not already reported under this section shall be reported at the time monitoring reports are submitted. The reports shall contain the same information as required by the paragraph above.

The Rio Algom Mining Corp. shall notify the administrator thirty (30) days in advance of any planned alteration, conversion, or abandonment of the well covered by this permit.

The quarterly report of operations for this well shall include the following information:

- a. The minimum, average, and maximum daily injection rate for each month of the quarter. The page showing the maximum injection rate shall also show the maximum permitted injection rate for comparison.
- b. The minimum, average, and maximum daily injection pressure for each month of the quarter. The page showing the maximum injection pressure shall also show the maximum permitted injection pressure for comparison.
- c. The total injection volume in gallons for each month of the quarter, the total for the quarter, the total cumulative injected to date.
- d. The maximum and minimum annulus pressure for each month of the quarter.
- e. Any permit exceedances within the quarter.
- f. Any tests run during the quarter. This includes, but is not limited to, the results on any Mechanical Integrity Tests, Pressure Falloff Tests, Step Injection Tests, or any well workovers.
- g. The analytical results for sampling for the injected water and any groundwater sampling results required under Section H.
- h. Quarterly reports are due in the Cheyenne office of the Water Quality Division no later than 30 days after the end of each calendar quarter.

The annual report of operations on these wells shall be filed at the time when the fourth quarterly report is due and shall include the fourth quarterly report and the following additional information:

- a. A graphical representation of the injection pressure and volume for over time the previous five year's operation. This graph shall have the dates of the year on the abscissa and the pressure and volume as the ordinate.
- b. Graphical representations of the quality of the injected water over time. These graphs shall show the injected quality for the previous five year's operation and shall be prepared on appropriate scales to show the variation.
- c. Monitoring results shall be reported in the annual reports unless otherwise specified.

L. Permit Actions

This permit is issued for a period of ten (10) years. If the Rio Algom Mining Corp. wishes to continue injection after the expiration date of this permit, it shall apply to the Administrator and obtain a new permit prior to the expiration date of this permit.

It shall not be a defense for a Rio Algom Mining Corp. in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

The filing of a request by the Rio Algom Mining Corp., or at the instigation of the Administrator, for permit modification, revocation, termination, or notification of planned changes or anticipated noncompliance shall not stay any condition of this permit.

After notice and opportunity for a hearing, a permit may be modified, suspended, or revoked in whole or part during its term for cause which includes, but is not limited to, any of the following:

1. Violation of this permit;
2. Obtaining a permit by misrepresentation of facts in the application; or
3. Failure of the casing, cement, or the confining layer.

This permit will be reviewed at least once every five (5) years, and may be reviewed more frequently. A permit may be modified at any time as may be required, including for conformity with changes in regulations or standards which occur after the permit was issued. A permit may be modified in whole or part in order to apply more or less, stringent standards; or prohibitions for toxic or other substance present in the Rio Algom Mining Corp.'s discharge, as may be ordered by the council.

M. Mechanical Integrity

Mechanical Integrity shall be maintained continuously and reviewed at least once every five (5) years. The test used to determine mechanical integrity shall be a two part test approved by the Administrator.

Part I of the Mechanical Integrity test shall demonstrate the absence of leaks through the packer, tubing, casing, and wellhead. Prior to injection and at least once every five years, and more frequently if required by the Administrator, the casing tubing annulus of each of these wells shall be pressure tested to 2,000 psig. A successful test shall show that there has been negligible pressure loss after 15 minutes at 2,000 psig.

Part II of the Mechanical Integrity test shall demonstrate the absence of fluid movement behind the casing. Prior to injection and at least once every five years, and more frequently if required by the administrator, each of these wells shall be logged using a radioactive tracer log and a temperature log and the results and their interpretation shall be reported to the Water Quality Division along with the next quarterly report.

Other types of logs may be substituted for Part II of the Mechanical Integrity Test with the prior written approval of the Water Quality Division.

Prior to injection a cement bond log shall be run. This log shall include a micro-seismogram section. This log shall be submitted to the Water Quality Division along with the first quarterly report on the injection. The cement bond log must show good quality bond to a point no deeper than 200 feet above the top of the Lewis Shale and extending downward to at least the bottom of the Lewis Shale.

Should any of the above tests show a lack of mechanical integrity, the Water Quality Division shall be notified by telephone within 24 hours and with a written report within 7 days. In the case of a failed mechanical integrity test, the well shall be immediately shut-in. Injection shall not resume until the well has been repaired and a complete mechanical integrity test has been passed and the Water Quality Division has approved these tests.

If at any time injection occurs in any zone not within the permitted receiver, a permit violation has occurred. The operator shall prepare an estimate of the volume and quality of all wastewaters which were injected outside of the permitted receiver. In the case where any aquifer meeting the standards for class I through IV under Chapter VIII has been contaminated due to out of zone injection, the operator shall prepare and implement a plan to recover these solutions and inject them into the proper receiver.

N. Abandonment

The Rio Algom Mining Corp. shall notify the administrator at such times as the permit requires before conversion or abandonment of the well.

Within thirty (30) days after plugging and abandonment of the well covered by this permit, the Rio Algom Mining Corp. shall submit a plugging and abandonment report, detailing the compliance abandonment procedures outlined in the original permit application, and describing any deviation from the original plan. The abandonment plan shall include reclamation of the well location.

At the time of permanent abandonment, the following procedure shall be followed: A minimum of 200 sacks of cement shall be squeezed through the perforations using a cement retainer set at the approximate depth of the production packer. The casing above the retainer shall then be filled with cement to a level 200 feet above the top of the Lewis Shale. A 50 sack plug shall be placed at the top of each of the following formations: Fox Hills, Lance, and Fort Union Formations. The entire surface casing shall then be filled with cement with a standard dry hole marker welded to a blind flange to be bolted to the exposed casing flange. Regardless of the above procedure, the abandonment procedure used shall not be less stringent than the procedure required by the Oil and Gas Conservation Commission for abandoned oil wells at the time of abandonment.

These wells shall be properly abandoned within six months of the end of operation. These wells shall be considered temporarily abandoned any time there has been no injection for six full months. If these wells are temporarily abandoned at any time, the operator may retain them in this status so long as all monitoring equipment is maintained in working order and all pumps are also maintained. During the period of temporary abandonment, all reports shall be filed as for an active well, but monitoring of the injected fluid is waived. Should the operator remove any of the required equipment from service, other than for maintenance, then the wells shall be permanently abandoned within six months of that time.

O. Duties of the Rio Algom Mining Corp.

The Rio Algom Mining Corp. shall give advance notice to the Administrator as soon as possible of any planned physical alteration or additions, other than authorized operation and maintenance, to the permitted facility and receive authorization prior to implementing the proposed alteration or addition.

The Rio Algom Mining Corp. shall furnish to the Administrator within a reasonable time, any information which the Administrator may request to determine whether cause exists for modifying, revoking, or reissuing, or terminating this permit, or to determine compliance with this permit; and to furnish to the Administrator upon request, copies of records required to be kept by this permit.

Any modification which may result in a violation of a permit condition shall be reported to the Administrator, and any modification that will result in a violation of any permit conditions shall be reported to the administrator through the submission of a new or amended permit application.

The Rio Algom Mining Corp. shall report all instances where it becomes aware that it failed to submit any relevant facts in the permit application, or where it submitted incorrect information in a permit application or in any report to the Administrator, and shall promptly submit such facts or information.

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

P. Financial Responsibility

The Rio Algom Mining Corp. has demonstrated financial responsibility as required by Chapter XIII of Wyoming Rules and Regulations in the form of a financial test demonstrating sufficient resources to plug and abandon the non-hazardous waste injection well covered by this permit. This requirement has been met by self bond number SBNC-049 covering facilities included in Land Quality Division Permit to Mine 633. SBNC-049 includes \$71,342.00 to cover the cost of plugging, abandonment, and post closure care for these wells. The Rio Algom Mining Corp. shall maintain the above instrument or a replacement instrument for the duration of this permit and until all post-closure care requirements have been satisfied.

Q. Special Conditions

In addition to the conditions required of all permits, the administrator has established conditions as required for monitoring, schedules of compliance, and such additional conditions as are necessary to prevent the migration of fluids into underground sources of drinking water. These conditions are established in conformance with Chapter XIII, Section 9(e).

The long string casing shall be cemented in place essentially from top to bottom. This will require that a second stage cement job be conducted with a sliding sleeve set within the Fox Hills Formation.

R. Signatories Requirement

All reports filed in conjunction with this permit shall contain the following certification:

"I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

All reports required by this permit and other requested information shall be signed as follows:

For a corporation -- by a principal executive officer of at least the level of vice-president;

For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively;

For a municipality, state, federal, or other public agency -- by either a principal executive officer or ranking elected official;

or

By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

1. The authorization is made in writing by one of the described principals;
2. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
3. The written authorization is submitted to the Administrator.

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Administrator prior to or together with any reports or information, to be signed by the new authorized representative.

S. Noncompliance

The Rio Algom Mining Corp. shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter XIII of the Wyoming Water Quality Rules and Regulations and is grounds for enforcement action, permit termination, revocation, or modification. Conformed noncompliance resulting in an excursion shall be reported to the Administrator orally within twenty-four (24) hours, and a written submission shall be provided within five (5) days of the time the Rio Algom Mining Corp. becomes aware of the excursion. The written report shall contain the sections specified in Section K of this permit. Any permit non-compliance constitutes a violation of this permit.

The filing of any request by the Rio Algom Mining Corp. for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

T. Permit Transfer

Any transfer of this permit shall be accomplished by the submission of the proper forms for permit transfer to the Administrator. Transfer of this permit must first be approved by the Administrator, and the Director, and no transfer shall be approved unless the proposed Rio Algom Mining Corp. agrees to bring any and all non compliance issues into compliance with this permit.

The Rio Algom Mining Corp. is alone responsible for the operation of the facility covered by this permit. Sale of the facility and subsequent operation of this facility by another is a violation of this permit unless a transfer of this permit has first been accomplished.

U. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. This permit does not authorize injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws, or regulations.

V. Severability

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the Rio Algom Mining Corp. from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation.

The provisions of this permit are severable, and if any provision of the permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

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STATEMENT OF BASIS FOR A UIC PERMIT

I. General information.

A. Permit Number: 99-347

B. Facilities Covered: The Smith Ranch Class I Disposal Wells

C. Class of Facility: 1 Non Hazardous (Under Chapter 13)

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter 8 Yes

D. Chapter 12. No

B. Chapter 9 No

E. Chapter 13. Yes

C. Chapter 11. No

F. Chapter 16. No

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

No

B. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

NOT Applicable

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. Note that sediment ponds, public water supplies, sewerage systems, and small wastewater systems are exempt from the requirements of Section 15. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

Applicable. A groundwater review has been conducted to insure that no groundwater will be impacted by this system.

VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

VII. Applicant and Public Participation

- A. The applicant has been provided with a draft permit prior to the permit being issued.
- B. A Public Notice has been issued with a public notice period starting September 15, 1999 and ending on October 15, 1999 (30 day notice as required by Chapter 13.) This notice was published in Casper Star Tribune on or before the start of the public comment period.

CERTIFICATION

The issuance of this permit is based upon a review of the application package submitted in accordance with the requirements of Section 5, Chapter 16, Wyoming Water Quality Rules and Regulations. This review was performed by Robert F. Lucht, P.E. and P.G., UIC Program Supervisor, and completed on September 1, 1999 Permit issuance is recommended based upon statements, representations, and procedures presented in the permit application and supporting documents, permit conditions, and the items identified in this "Statement of Basis."

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