



Rio Algom

Rio Algom Mining Corp.
P.O. Box 1390
Glenrock, Wyoming 82637 307.358.3744 tel
762 Ross Road 307.266.2449 tel
Douglas, Wyoming 82633 307.358.9201 fax

Certified Mail - 7099 3220 0002 1632 3586
Return Receipt Requested

February 28, 2001

Mr. Phillip Ting
Acting Branch Chief
U.S. Nuclear Regulatory Commission
Division of Low Level Waste Mgt. & Decommissioning
Mail Stop T7J8
11555 Rockville Pike
Rockville, MD 20850

RE: Smith Ranch Facility
NRC License SUA-1548, Docket 40-8964
Semi-Annual Effluent Monitoring Report, July 1-December 31, 2000

Dear Mr. Ting:

Please find attached the Semi-Annual Effluent Monitoring Report for July 1, 2000 through December 31, 2000, as required pursuant to Smith Ranch License condition 11.5 and 12.2.

During this reporting period there were no areas of concern. If you have any questions regarding this report, please feel free to contact me at (307) 358-3744, ext. 62.

Sincerely,

John W. Cash
Manager EHS & Regulatory Affairs

cc: B. Ferdinand-w/attachments (RAMC/SRP)
M. Freeman-w/ attachments (RAMC/OKC)
P. Goranson-w/attachments (RAMC/OKC)
S. Ingle-w/attachments (WDEQ/Cheyenne)-**Certified Mail - 7099 3220 0002 1632 3593**
NRC (Director, Division of Radiation Safety and Safeguards/Arlington)
w/attachments-**Certified Mail - 7099 3220 0002 1632 3609**
file

IE17

**RIO ALGOM MINING CORP.
SEMI-ANNUAL EFFLUENT MONITORING REPORT
SMITH RANCH FACILITY
JULY 1 THROUGH DECEMBER 31, 2000**

**NRC - LICENSE SUA-1548, DOCKET 40-8964
WDEQ/LQD - PERMIT TO MINE #633**

RIO ALGOM MINING CORP.- SMITH RANCH FACILITY
SEMI-ANNUAL EFFLUENT MONITORING REPORT
JULY 1 THROUGH DECEMBER 31, 2000

=====

EFFLUENT MONITOR REPORT

The Smith Ranch license, specifically condition 12.2, describes the effluent and environmental monitoring program for the facility. Accordingly, pursuant to 10 CFR §40.65, license condition 12.2, and the parameters from Table 5.3 from the March 31, 1988, license application as amended, the effluent and monitoring results for this semi-annual period are provided.

I. Commercial Operation Data-Injection Rates, Recovery Rates and Injection Manifold Pressures

Presented in the table below are the average injection rates, recovery rates and injection manifold pressures as required by condition 12.2.

Item	Wellfield #1	Wellfield #3	Wellfield #4	Total
Injection Rate Ave. (gpm)	741	2,309	2,222	5,272
Recovery Rate Ave. (gpm)	745	2,321	2,234	5,300
Injection Manifold Pressure Ave. (psi) ⁽¹⁾	101	87	130	---

II. Air Sampling

A. Particulates

Pursuant to license condition 12.2 as defined by Table 5.3, air particulates monitoring is performed by continuous air samplers at the nearest downwind residence (Vollman Ranch), downwind of the restricted area boundary (fence line), and an upwind location (Dave's Water Well). Monitoring is required to be conducted quarterly.⁽²⁾ The results from this quarterly monitoring are presented below.

⁽¹⁾ This is the injection pressure at the manifold. Injection pressure at the individual wellhead is less due to pressure loss through manifold system, pipelines and filters.

⁽²⁾ Samples collected monthly and composited quarterly.

Vollman Ranch

	3 rd Quarter			4 th Quarter		
Parameter	Conc. ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Error Estimate ($\mu\text{Ci/ml}$)	Conc. ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Error Estimate ($\mu\text{Ci/ml}$)
U_{nat}	2.98E-15	1.00E-16	N/A	6.55E-15	1.00E-16	N/A
Th-230	1.70E-16	1.00E-16	0.00E+0	4.71E-16	1.00E-16	0.00E+0
Ra-226	7.63E-16	1.00E-16	3.39E-16	4.71E-15	1.00E-16	0.00E+0
Pb-210	5.03E-13	2.00E-15	1.97E-14	1.43E-12	2.00E-15	5.73E-14

Dave's Water Well⁽³⁾

	3 rd Quarter			4 th Quarter		
Parameter	Conc. ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Error Estimate ($\mu\text{Ci/ml}$)	Conc. ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Error Estimate ($\mu\text{Ci/ml}$)
U_{nat}	3.37E-15	1.00E-16	N/A	6.13E-15	1.00E-16	N/A
Th-230	1.01E-15	1.00E-16	5.06E-16	1.01E-15	1.00E-16	0.00E+0
Ra-226	2.62E-15	1.00E-16	4.22E-16	1.01E-15	1.00E-16	0.00E+0
Pb-210	5.83E-13	2.00E-15	2.10E-14	1.02E-12	2.00E-15	7.84E-14

Fence Line

	3 rd Quarter			4 th Quarter		
Parameter	Conc. ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Error Estimate ($\mu\text{Ci/ml}$)	Conc. ($\mu\text{Ci/ml}$)	LLD ($\mu\text{Ci/ml}$)	Error Estimate ($\mu\text{Ci/ml}$)
U_{nat}	3.40E-14	1.00E-16	N/A	2.62E-14	1.00E-16	N/A
Th-230	2.38E-15	1.00E-16	6.81E-16	1.56E-16	1.00E-16	0.00E+0
Ra-226	3.15E-15	1.00E-16	4.26E-16	1.25E-15	1.00E-16	3.12E-16
Pb-210	5.50E-13	2.00E-15	2.05E-14	4.84E-13	2.00E-15	1.92E-14

(3) Daves Water Well is the upwind or background monitoring location. The elevated Pb-210 values are likely caused by a nearby coal-fired power plant as well as an active strip coal mine.

B. Radon

Pursuant to license condition 12.2 as defined by Table 5.3, radon is monitored by continuous samplers (track etch) at the nearest downwind residence (Vollman Ranch), downwind of the restricted area boundary (fence line), and an upwind location (Dave's Water Well). Monitoring is required to be conducted quarterly. The results indicate the values continue to be indistinguishable and within the sphere of background. Accordingly, Rio Algom to show compliance with the provisions of 10 CFR §1301, uses the provisions provided in 10 CFR §1302(b)(1).

Vollman Ranch⁽⁴⁾

	3 rd Quarter	4 th Quarter
Parameter	Conc. (μCi/ml)	Conc. (μCi/ml)
Radon	2.1E-9	1.4E-9

Dave's Water Well

	3 rd Quarter	4 th Quarter
Parameter	Conc. (μCi/ml)	Conc. (μCi/ml)
Radon	8.0E-10	1.2E-9

Fence Line

	3 rd Quarter	4 th Quarter
Parameter	Conc. (μCi/ml)	Conc. (μCi/ml)
Radon	1.6E-9	1.1E-9

III. Water

A. Groundwater

The groundwater monitoring program requires operating livestock or domestic wells within 1 kilometer of operating wellfields be sampled quarterly for natural uranium and radium-226. Vollman's Pond and Smith Windmill #1 are within 1 kilometer of wellfield #1 and Smith's Windmill #2 and the Solar Pump are within 1 kilometer of wellfield #3. There are no livestock or domestic wells within 1 kilometer of wellfield #4. The results of the quarterly samples for the operating livestock wells are presented in the table below.

⁽⁴⁾ NVLAP Vendor does not provide percent error or lower level of detection.

Local Groundwater Wells

	3 rd Quarter		4 th Quarter	
Location	Unat (μ Ci/ml)	Ra-226 (μ Ci/ml)	Unat (μ Ci/ml)	Ra-226 (μ Ci/ml)
Vollman Pond	No Water	No Water	No Water	No Water
Smith Pond	No Water	No Water	No Water	No Water
Smith's Windmill #1	2.78E-8	1.5E-9	2.91E-8	7.0E-10
Smith's Windmill #2	6.43E-8	8.0E-10	6.16E-8	4.0E-10
Solar Pump	6.77E-9	4.0E-10	No Water	No Water

B. Surface Water

The surface water monitoring program requires two (2) samples from Sage Creek and one (1) sample from the outfall of the treatment plant. Each is on a quarterly basis. The Sage Creek samples are to be taken upstream and downstream from the restricted areas when flow is available in the creek.

During the 3rd and 4th quarter of the report period, there was no flow in Sage Creek and therefore, no analytical results are available. There was no flow above the restricted area during either quarter. In regards to the outfall from the treatment plant, upon commencement of commercial operations, the discharge is routed to the facility's central processing plant and disposed through the UIC permitted disposal well. Thus, there was no discharge from the outfall during the report period. The NPDES reporting for this outfall is presented in Appendix A.

Sage Creek Sample Results

	3 rd Qtr.		4 th Qtr.	
Sample Location	Unat (μ g/ml)	Ra226 (μ Ci/ml)	Unat (μ g/ml)	Ra226 (μ Ci/ml)
Below Restricted Area	No Flow	No Flow	No Flow	No Flow
Above Restricted Area	No Flow	No Flow	No Flow	No Flow

IV. Soil

Soil sampling is conducted annually at the downwind air sampling station. A sample was taken during the second half of the calendar year with the results presented in the following chart.

Soil Sample Result

Location	U _{nat} pCi/g	Ra ₂₂₆ pCi/g	Pb ₂₁₀ pCi/g
Downwind of Air Sampling Station	0.45	0.71	<0.05

V. Vegetation

Vegetation sampling is performed annually at the downwind air sampling station. The sampling was performed during the second half of the calendar year with the results reported in the following chart.

Vegetation Sample Result

Location	U _μ Ci/Kg	Ra _{226μ} Ci/Kg	Th _{230μ} Ci/Kg	Pb _{210μ} Ci/Kg
Downwind of Air Sampling Station	6.2E-8	4.3E-5	2.4E-6	2.9E-4

VI. Direct Radiation

Direct radiation readings are measured at the three (3) air monitoring stations, downwind of the evaporation pond, and at each wellfield using dosimeters on a quarterly basis. Provided in the table below are the results from those measurements.

Direct Radiation (μR/hr)

Location	3 rd Quarter	4 th Quarter
Vollman Ranch	10.1	9.6
Fence Line	12.0	12.6
Dave's Water Well	10.3	10.2
Wellfield #1	11.1	13.0
Wellfield #3	9.9	10.6
Wellfield #4	11.3	10.2
Wellfield #4A	NA	10.2
Pond	11.9	11.3

VII. Stack Sampling

As constructed, there are no effluent stacks from the yellowcake vacuum dryers. Accordingly, there is no stack sampling of the yellowcake dryer.

VIII. Other Effluent Monitoring Results

A. Gamma Radiation Survey

During "Deferred Production Status" of the O-Sand Pilot area, gamma radiation was measured quarterly at the following four (4) locations. Please note that with the initiation of commercial operations in wellfield #3 on August 10, 1998, the "Deferred Production Status" monitoring requirements are no longer required. Although, not required, measurements obtained during the 3rd and 4th quarter are presented in the table below.

**Deferred Production Status
Direct Radiation Measurements**

Location	3 rd Quarter (μ R/Hr)	4 th Quarter (μ R/Hr)
Downwind of Radon Sampling Location	5	20
Upwind of Process Plant	5	18
Process Leach Tank	10	22
Evaporation Ponds	6	26

APPENDIX A



Rio Algom

Rio Algom Mining Corp.
P.O. Box 1390
Glenrock, Wyoming 82637 307.358.3744 tel
762 Ross Road 307.266.2449 tel
Douglas, Wyoming 82633 307.358.9201 fax

October 9, 2000

Certified Mail - 7099 3220 0002 1631 1071
Return Receipt Requested

Mr. Chris Abernathy
Department of Environmental Quality
Water Quality Division
Herschler Building
122 West 25th street
Cheyenne, WY 82002

Re: Third Quarter 2000 NPDES Report

Dear Mr. Abernathy:

Attached are the Discharge Monitoring Reports for the Smith Ranch Facility, Permit Number WY-0022411 for the third quarter ending September 30, 2000.

There was "No Discharge" from either discharge point during the quarter.

Sincerely,

John Cash
Manager, EHS and Regulatory

xc: B. Ferdinand w/attachments
M. Freeman w/o attachments
P. Goranson w/attachments
File w/attachments

PERMITTEE NAME/ADDRESS (Include
Facility Name/Location if different)

NAME RIO ALGOM MINING CORPORATION

ADDRESS P O BOX 1390

GLENROCK

WY 82637-1390

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

WY0022411

PERMIT NUMBER

001 Q

DISCHARGE NUMBER

(SUBR 04)

F - FINAL

MINOR

Form Approved

OMB No. 2040-10045

Expires 9-30-91

FACILITY Smith Ranch Project

LOCATION 762 Ross Road, Douglas, WY 82633

ATTN: ~~XXXXXXXXXXXXXXXXXXXX~~ Bill Ferdinand

MONITORING PERIOD

FROM

YEAR	MO	DAY
<u>2000</u>	<u>07</u>	<u>01</u>

 TO

YEAR	MO	DAY
<u>2000</u>	<u>09</u>	<u>30</u>

(20-21) (22-23) (24-25)

(26-27) (28-29) (30-31)

*** NO DISCHARGE ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)			UNITS (54-61)	NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM				
PH	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	*****	NO DISCHARGE	(12)	10		Grab
00400 1 0 0	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	GRAB
ZINC, TOTAL (AS ZN)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)	0		Grab
01092 1 0 0	PERMIT REQUIREMENT	*****	*****	****	0.5 MX MO AV	REPORT MX WK AV	1.0 DAILY MX	MG/L		QTRLY	GRAB
EFFLUENT GROSS VALUE				****							
SELENIUM, TOTAL (AS SE)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)	0		Grab
01147 1 0 0	PERMIT REQUIREMENT	*****	*****	****	0.05 MX MO AV	REPORT MX WK AV	0.10 DAILY MX	MG/L		QTRLY	GRAB
EFFLUENT GROSS VALUE				****							
	SAMPLE MEASUREMENT				NO DISCHARGE	NO DISCHARGE	NO DISCHARGE		0		
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

R.P. Luke/President

TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$100,000 and/or maximum imprisonment of between 6 months and 5 years.)

Bill Ferdinand

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

307
AREA
CODE

358-3744
NUMBER

00 10 09
YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

SAMPLES SHALL BE TAKEN FROM THE FINAL TREATMENT UNIT AND PRIOR TO ADMIXTURE WITH DILUENT WATER.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
NAME RIO ALGOM MINING CORPORATION
ADDRESS P O BOX 1390
GLENROCK WY 82637-1390

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) WY0022411
PERMIT NUMBER
(17-19) 003 Q
DISCHARGE NUMBER

(SUBR 04)
F - FINAL
MINOR

Form Approved
OMB No. 2040-10045
Expires 9-30-91

FACILITY Smith Ranch Project
LOCATION 262 Ross Road, Douglas, WY 82633
ATTN: ROBERT XXX BLACKSTONE BILL FERDINAND

MONITORING PERIOD
FROM YEAR 2000 MO 07 DAY 01 TO YEAR 2000 MO 09 DAY 30
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** NO DISCHARGE ***
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)						
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS									
PH	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	*****	NO DISCHARGE	(12)		Grab							
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY GRAB							
BICARBONATE ION- (AS HCO3)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		Grab							
00440 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	4500 DAILY MX	MG/L		QTRLY GRAB							
OIL AND GREASE FREON EXTR-GRAV METH	SAMPLE MEASUREMENT	*****	*****		*****	*****	NO DISCHARGE	(19)		Cont. Grab							
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	*****	*****	10 DAILY MX	MG/L		CONTINUOUS VISUAL							
SODIUM, TOTAL (AS NA)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		Grab							
00929 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	1500 DAILY MX	MG/L		QTRLY GRAB							
CHLORIDE (AS CL)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		Grab							
00940 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	750 DAILY MX	MG/L		QTRLY GRAB							
ARSENIC, TOTAL (AS AS)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		Grab							
01002 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	REPORT DAILY MX	MG/L		QTRLY GRAB							
SELENIUM, TOTAL (AS SE)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		Grab							
01147 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	REPORT DAILY MX	MG/L		QTRLY GRAB							
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)				SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE		DATE							
R.F. Luke/President						Bill Ferdinand		307 358-3744		00 10 09							
TYPED OR PRINTED						OFFICER OR AUTHORIZED AGENT		AREA CODE		NUMBER		YEAR		MO		DAY	

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

SAMPLES SHALL BE TAKEN FROM THE FINAL TREATMENT UNIT AND PRIOR TO ADMIXTURE WITH DILUENT WATER.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME RIO ALGOM MINING CORPORATION

ADDRESS P O BOX 1390

GLENROCK WY 82637-1390

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

WY0022411

PERMIT NUMBER

003 Q

DISCHARGE NUMBER

(SUBR 04)

F - FINAL
MINOR

Form Approved

OMB No. 2040-10345

Expires 9-30-91

FACILITY Smith Ranch Project

LOCATION 762 Ross Road, Douglas, WY 82433

ATTN: ROBERT E. BLACKSTONE BILL FERDINAND

MONITORING PERIOD							
FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2000	07	01		2000	09	30
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

*** NO DISCHARGE ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		QUANTITY OR LOADING (3 Card Only) (46-53)			QUALITY OR CONCENTRATION (4 Card Only) (38-45)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE	(03)	*****	*****	*****	7	Cont.	Total Grab
	PERMIT REQUIREMENT	REPORT MX MO AV	REPORT DAILY MX	MGD	*****	*****	*****			
	SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	7		
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
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	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

R.P. Luke/President

TYPED OR PRINTED

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Bill Ferdinand

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

307
AREA
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00
YEAR

10
MO

09
DAY

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SAMPLES SHALL BE TAKEN FROM THE FINAL TREATMENT UNIT AND PRIOR TO ADMIXTURE WITH DILUENT WATER.



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Rio Algom Mining Corp.
P.O. Box 1390
Glenrock, Wyoming 82637 307.358.3744 tel
762 Ross Road 307.266.2449 tel
Douglas, Wyoming 82633 307.358.8201 fax

January 5, 2000

Certified Mail - 7099 3220 0008 5206 1651
Return Receipt Requested

Mr. Chris Abernathy
Department of Environmental Quality
Water Quality Division
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

RE: 4th Quarter 2000 NPDES Discharge Monitoring Report

Dear Mr. Abernathy:

Attached are the Discharge Monitoring Reports for the Smith Ranch Facility, Permit Number WY-0022411 for the fourth quarter of 2000.

There was **"No Discharge"** from either discharge point during the quarter.

Sincerely,

John W. Cash
Manager EHS and Regulatory

xc: B. Ferdinand-w/ attachments
M. Freeman-w/o attachments
P. Goranson-w/ attachments
file-w/ attachments

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)

NAME RIO ALGOM MINING CORPORATION

ADDRESS P O BOX 1390

GLENROCK

WY 82637-1390

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16)

(17-19)

WY0022411

PERMIT NUMBER

003 Q

DISCHARGE NUMBER

Form Approved

OMB No. 2040-0045

Expires 9-30-91

(SUBR 04)

F - FINAL
MINOR

FACILITY Smith Ranch Project

LOCATION 712 Ross Road, Douglas, WY 82633

ATTN: ROBERT E. BLACKSTONE Bill Ferdinand

MONITORING PERIOD

FROM	YEAR	MO	DAY	TO	YEAR	MO	DAY
	2000	10	01		2000	12	31
	(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)

*** NO DISCHARGE (XXX) ***

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS				
PH	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	*****	NO DISCHARGE	(12)		ND	ND	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	6.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	GRAB	
BICARBONATE ION- (AS HCO3)	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		ND	ND	
00440 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	4500 DAILY MX	MG/L		QTRLY	GRAB	
OIL AND GREASE	SAMPLE MEASUREMENT	*****	*****		*****	*****	NO DISCHARGE	(19)		ND	ND	
FREON EXTR-GRAV METH	PERMIT REQUIREMENT	*****	*****	****	*****	*****	10 DAILY MX	MG/L		CONTIN	VISUAL	
00556 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		ND	ND	
SODIUM, TOTAL (AS NA)	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	1500 DAILY MX	MG/L		QTRLY	GRAB	
00929 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		ND	ND	
CHLORIDE (AS CL)	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	750 DAILY MX	MG/L		QTRLY	GRAB	
00940 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		ND	ND	
ARSENIC, TOTAL (AS AS)	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	REPORT DAILY MX	MG/L		QTRLY	GRAB	
01002 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		ND	ND	
SELENIUM, TOTAL (AS SE)	PERMIT REQUIREMENT	*****	*****	****	REPORT MX MO AV	REPORT MX WK AV	REPORT DAILY MX	MG/L		QTRLY	GRAB	
01147 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)		ND	ND	
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)							TELEPHONE		DATE		
R.P. Luke/President	Bill Ferdinand							307	254-3744	11	01	01
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT							AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
SAMPLES SHALL BE TAKEN FROM THE FINAL TREATMENT UNIT AND PRIOR TO ADMIXTURE WITH DILUENT WATER.

GLENROCK WY 82637-13

DISCHARGE NUMBER

Expires 9-30-91

F - FINAL
MINOR

ATTN: ~~ROBERT~~ ~~XXXX~~ ~~BLACKSTONE~~ Bill Ferdinand

FROM			TO		
YEAR	MO	DAY	YEAR	MO	DAY
2000	10	01	2000	12	31
(20-21)	(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

*** NO DISCHARGE (XXX) ***
NOTE: Read instructions before completing this form.

ATTN: ROBERT XXXX BLACKSTONE Bill Ferdinand												
PARAMETER (32-37)		X		(3 Card Only) QUANTITY OR LOADING (46-53) (54-61)			(4 Card Only) QUALITY OR CONCENTRATION (38-45) (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
				AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE		SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE	(03)	*****	*****	*****	**** ****	CONTIN	TOTALZ	
		PERMIT REQUIREMENT	REPORT MX MO AV	REPORT DAILY MX		*****	*****	*****				
		SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE		ND	ND	
		PERMIT REQUIREMENT										
		SAMPLE MEASUREMENT										
		PERMIT REQUIREMENT										
		SAMPLE MEASUREMENT										
		PERMIT REQUIREMENT										
		SAMPLE MEASUREMENT										
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		SAMPLE MEASUREMENT										
		PERMIT REQUIREMENT										
		SAMPLE MEASUREMENT										
		PERMIT REQUIREMENT										
		SAMPLE MEASUREMENT										
		PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
R.P. Luke/President
TYPED OR PRINTED

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

Bill Ferdinand
Bill Ferdinand
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

307 358-3744
AREA CODE NUMBER
TELEPHONE

01 01 01
YEAR MO DAY
DATE

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

SAMPLES SHALL BE TAKEN FROM THE FINAL TREATMENT UNIT AND PRIOR TO ADMIXTURE WITH DILUENT WATER.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if different)
NAME RIO ALGOM MINING CORPORATION
ADDRESS P O BOX 1390
GLENROCK WY 82637-1390

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
(2-16) (17-19)
WY0022411
PERMIT NUMBER
001 Q
DISCHARGE NUMBER

Form Approved
OMB No. 2040-0045
Expires 9-30-91
(SUBR 04)
F - FINAL
MINOR

FACILITY Smith Ranch Project
LOCATION 742 Ross Road, Douglas, WY 82633
ATTN: ROBERT XXX BLACKSTONE Bill Ferdinand

MONITORING PERIOD
FROM YEAR 2000 MO 10 DAY 01 TO YEAR 2000 MO 12 DAY 31
(20-21) (22-23) (24-25) (26-27) (28-29) (30-31)

*** NO DISCHARGE !XXX! ***
NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (38-45)			(46-53)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS					
PH		*****	*****		NO DISCHARGE	*****	NO DISCHARGE	(12)					
00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	****	8.0 MINIMUM	*****	9.0 MAXIMUM	SU		QTRLY	GRAB		
ZINC, TOTAL (AS ZN)		*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)					
01092 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	****	0.5 MX MO AV	REPORT MX WK AV	1.0 DAILY MX	MG/L		QTRLY	GRAB		
SELENIUM, TOTAL (AS SE)		*****	*****		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE	(19)					
01147 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	****	0.05 MX MO AV	REPORT MX WK AV	0.10 DAILY MX	MG/L		QTRLY	GRAB		
	SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE						
	PERMIT REQUIREMENT												
	SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE						
	PERMIT REQUIREMENT												
	SAMPLE MEASUREMENT	NO DISCHARGE	NO DISCHARGE		NO DISCHARGE	NO DISCHARGE	NO DISCHARGE						
	PERMIT REQUIREMENT												
	SAMPLE MEASUREMENT												
	PERMIT REQUIREMENT												

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)	<i>Bill Ferdinand</i> Bill Ferdinand SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
R.P. Luke/President			377	358-3744	71	71	75
TYPED OR PRINTED			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
SAMPLES SHALL BE TAKEN FROM THE FINAL TREATMENT UNIT AND PRIOR TO ADMIXTURE WITH DILUENT WATER.