BUCKSKIN MINING COMPANY
P.O. BOX 3027
GILLETTE, WYOMING 82717

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

Re: Reply to a Notice of Violation

Dear NRC:

Pursuant to Notification of Violation, Docket No. 030-36659/09-01 the following is our response to the Notification of Violation issued by Mr. Gains on January 5, 2010:

Root cause of the violation:

Mr. Gains I have been the acting RSO here at Buckskin Mine for the last 11 months. I will be taking responsibility for the three violations we were issued. After I received my training I had visited with Thermo Electron Corporation about our licenses and they told me that everything they were doing was all we need to be doing to meet the requirements of our license. Well if I would have conducted the annual audit myself maybe I would have caught the other two violations. So the root cause of our violations: (1) Failure to conduct annual audits; (2) perform a public dose determination, and (3) perform an occupational dose evaluation, is the failure to do the annual audits. Thermo Electron Corporation still does all our maintenance, leak test and inventories on the unit and no one at the Buckskin Mine does any work directly with the gauge.

Corrective Action Taken:

I will be conducting annual audits going forward. We have performed the public dose determination and the occupational dose evaluation. These have been mailed to Martha Brown and I have sent copies of the evaluations to you. The evaluations and audit documentation will be filed with our license. If you have any questions please call me at 1-307-686-5454.

Respectfully yours,

Wade Burr

Wade Burr
Safety Manager

c/Regional Administrator, Region IV

January 25 2010

Gama Metrics Radation Exposure
Using only worst case data taken at location 8 in the Thermo Fisher survey
Also note that the unit only runs when coal is on the belt and that exposure is 0mRem at all other times.

Employees authorized to access the structure:

Distance	Gama	Neutron	Total
30.00-cm	0.14-mRem/Hr	0.20-mRem/Hr	0.34-mRem/Hr

* Maximum employee time inside structure would be 1-hour.
* Maximum employee exposure would be **0.34-mRem/day.**
* The structure is only entered if something is hung up and needs to be reset by an electrician. The typical time to perform such maintenance is 20-minutes, and the frequency is rare.

Employees or visitors who approach the outside of the structure:

Distance	Gama	Neutron	Total
152.40-cm	0.005-mRem/Hr	0.008-mRem/Hr	0.013-mRem/Hr

* The closest the employee could get to the emission source is 5'
* The Formula $I_1 \bullet D_1^2 = I_2 \bullet D_2^2$ was used to calculate the exposure at 5'
* Note: there are 30.48cm/ft
* Assuming there would be reason for an employee or visitor to be directly against the outside of the structure for 12-hours, then that person would have an exposure of **0.1581mRem/day**. This is a worst case assessment as there is typically no reason for a person to remain in this area for an extended period of time.

Occupational dose.
Electrician would spend aproximatley 1 hour a month around the sources. They average 15 work shifts a month.(Rotating 12 hour schedule)
They would be with in 30cm of the source.

(.34 mrem/hr)(.232hr/week)(52 weeks/yr)= 4.101 mrem/yr

Public dose.
Only public that would be around unit would be a inspector of some kind or a contractor. I will use a contractor for this example as they would have more time around unit then anybody else from the public.

(.013mrem/hr)(.0167 hr/day)(365 days/yr)= .079 mrem/year

ThermoFisher SCIENTIFIC

Radiation Device Survey

Date: 12/8/2009
Company: Kiewit Mining Group
Site: Buckskin
Site RSO: Wade Burr
Device Mod: 2000
Device S/N: 800029

Radiation Detection Equipment		
Model	**S/N**	**Cal Due Date**
Eberline E600	2353	2/14/10
NRD	725593	2/14/10
Eberline SHP270	599	2/14/10

Source Info	
Isotope	**S/N**
Cf-252	FTC-CF-Z1857
Cf-252	FTC-CF-Z2988
Cf-252	FTC-CF-Z3370
Cf-252	FTC-CF-Z3371
Cs-137	6868GS
Cs-137	6139GS

Physical access to location 2 not possible

No Material On Belt							Standard or Material On Belt					
30cm		100cm		TOTALS		Location	30cm		100cm		TOTALS	
Gamma	Neutron	Gamma	Neutron	30 cm	100 cm		Gamma	Neutron	Gamma	Neutron	30 cm	100 cm
				0.00	0.00	1	0.03	0.00	0.02	0.00	0.03	0.02
				0.00	0.00	2	0.00	0.00	0.00	0.00	0.00	0.00
				0.00	0.00	3	0.04	0.00	0.03	0.00	0.04	0.03
				0.00	0.00	4	0.07	0.16	0.05	0.03	0.23	0.08
				0.00	0.00	5	0.08	0.00	0.02	0.00	0.08	0.02
				0.00	0.00	6	0.08	0.00	0.02	0.00	0.08	0.02
				0.00	0.00	7	0.08	0.23	0.04	0.06	0.31	0.10
				0.00	0.00	8	0.14	0.20	0.05	0.05	0.34	0.10
				0.00	0.00	9					0.00	0.00
				0.00	0.00	10					0.00	0.00

NOTE: Use Device Map for survey point locations. Data results in mRem/Hr. Conversion: 1 mSv = 100 mRem

Surveyed By: Rob G. Belnap **Signature:** [redacted] **Date:** 12/8/2009

BMA Survey Map