

State of Utah GARY R. HERBERT Governor

GREG BELL Lieutenant Governor Department of Environmental Quality

> Amanda Smith Executive Director

DIVISION OF RADIATION CONTROL Dane L. Finerfrock Director FILE

DRC-2009-0070

December 28, 2009

David C. Frydenlund Vice President, Regulatory Affairs and Counsel Denison Mines (USA) Corp. 1050 17th Street, Suite 950 Denver, Colorado 80265

RE: Renewal Application for Radioactive Material License (RML) No. UT1900479

Dear Mr. Frydenlund:

On February 28, 2007, Denison Mines Corp. (DUSA) submitted an application to renew the State of Utah RML No. UT1900479 for the White Mesa Uranium Mill located near Blanding Utah. The Division of Radiation Control (DRC) has reviewed the documentation that you provided according to NUREG 1556. On November 24, 2008, additional information was requested by the DRC and was later provided by DUSA. On June 29, 2009 another round of interrogatories containing two sections was sent to DUSA, one section containing the 2nd round of Health Physics Interrogatories and the other section containing the 1st round of Engineering Interrogatories. DUSA responded to these interrogatories in a documented dated August 14, 2009. DUSA stated in that document that the *Reclamation Plan Revision 4.0* would be forthcoming. Revision 4.0 of the plan was sent by DUSA by letter dated November 24, 2009. After reviewing the additional information provided, it has been determined that additional information is still required before the renewal of your RML (UT1900479) can proceed.

Only one remaining item remains with the Health Physics Interrogatories. Nearly half of the items in the Round 1 Engineering Interrogatories have been satisfied by DUSA responses. Some other items require minor adjustments to be made such as changes to appendix indexes, new tabs for submitted items, and small changes to drawings or texts. Interrogatory items 1C, 1D, and 1E will need some engineering design effort in order to be completed. These are discussed further below:

Pertaining to the discharge channel from Cell 1, interrogatory item 1C provides justification and requests an entry apron design for this channel. Plans and specifications for the rip-rap for that apron will need to be provided. We are also requesting a drawing, correcting the width of the Cell 1 discharge channel. Further details are given in the interrogatory.

We are also requesting design, plans and specifications for the east and west side rock aprons for

Page 2

the tailing cells dike outslope in interrogatory 1D. We believe this item will be further refined by DUSA in the ICTM study. We have determined that this issue must be addressed and resolved now as a part of the License Renewal Application. Further details are given in the interrogatory.

Similar to the above, we are requesting current design, plans and specifications for filter blanket material for the rip-rap cover involved in the project. This item is discussed in interrogatory 1E.

Per our telephone conversation with you and Mr. Harold Roberts on December 22, 2009, DUSA agreed to respond fully to the above items on or before 60-days after receipt of this letter.

Attached you will find a list of Interrogatory Statements outlining the information requiring further explanation. This list is divided into two sections. The first section is the 3rd round of Health Physics Interrogatories and the second section is the 2nd Engineering Interrogatories. Environmental issues regarding this RML renewal were addressed during the last Groundwater Quality Discharge Permit Amendment of March 17, 2008. The DRC requests a response to these Interrogatory Statements by February 28, 2010. Please contact Ryan Johnson (Health Physics) or Dave Rupp (Engineering) at (801) 536-4250 if you have any questions or concerns.

UTAH RADIATION CONTROL BOARD

whoe

Dane Finerfrock, Executive Secretary

Cc: David Turk, Radiation Safety Officer (w/enclosure) Harold Roberts, Executive Vice President, U.S. Operations (w/enclosure)

enclosure DLF/RJ/rj

SECTION 1

UTAH DIVISION OF RADIATION CONTROL DENISON MINES (USA) CORPORATION WHITE MESA URANIUM MILL BLANDING, UTAH

HEALTH PHYSICS INTERROGATORIES – ROUND 3

DECEMBER 28, 2009

TABLE OF CONTENTS

SectionPage

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT-RELEASE SURVEYS: HEALTH PHYSICS ROUND 3 INTERROGATORY STATEMENT-RELEASE SURVEYS:
HEALTH PHYSICS ROUND 3 INTERROGATORY STATEMENT-RELEASE SURVEYS:
HEALTH PHYSICS ROUND 3 INTERROGATORY STATEMENT-RELEASE SURVEYS:
HEALTH PHYSICS BOUND 2 INTERPOGATORY STATEMENT-ALABA:
TERETTI TITOIOS TOOND 2 INTERROGATORT STATEMENT-ACARA
HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT- EMPLOYEE
TRAINING:4
HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT-REVISIONS AND
UPDATES:

ACRONYMS AND ABBREVIATIONS

ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
DOT	US Department of Transportation
NRC	Nuclear Regulatory Commission
OSL	Optically Stimulated Luminesence
RML	Radioactive Materials License
RPP	Respiratory Protection Program
RSO	Radiation Safety Officer
RWP	Radiation Work Permit
SOP	Standard Operating Procedures
URCR	Utah Radiation Control Rules

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT-ALTERNATE FEED:

Round One Interrogatory Statements 1 through 3 were answered appropriately and to the satisfaction of the DRC.

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT-RELEASE SURVEYS:

Round One Interrogatory Statements 4, 5, 6 and 7 were answered appropriately and to the satisfaction of the DRC.

HEALTH PHYSICS ROUND 3 INTERROGATORY STATEMENT-RELEASE SURVEYS:

1. Round One Interrogatory statements 14-17 "Explain how the survey techniques, the release standards used and documentation of surveys of Equipment are sufficient to demonstrate regulatory compliance and maintain public health and safety. Explain why surveying techniques such as the use of Large Area Wipes and swipes to look for removable contamination are not being used on all items being surveyed for release"

Round Two Interrogatory statement 8 "In response to the method outlined in 49 CFR 173.443(a)(1) Denison Mines states "Using portable alpha detection equipment that measures the combined fixed and removable contamination is therefore "another method" contemplated by paragraph 2. (49CFR 173.443(a)(2) "equal or greater efficiency"), because the Mill applies the removable contamination standard to a combined reading of fixed and removable contamination." Provide efficiency calculations to determine the efficiency of this method. Include the survey procedure used, the efficiency of the meters and probes used in relation to U-238. Show that the meters and probes that are/will be used has the appropriate sensitivity to provide a small enough reading to measure the required release limits."

Based on manufacturer calibration sheets and information provided by the site RSO, Cs-137 is used to calibrate the Ludlum Model-3 meters with the 44-9 GM pancake probes, thus they are not calibrated for Alpha radiation. Also Sr-90 is used to perform a function check on the Model-3 meters with 44-9 GM pancake probes. Both Cs-137 and Sr-90 are high energy Beta emitters and will produce a higher efficiency than U-238, thus they are inappropriate to use for calibration or function tests. Re-evaluate the efficiency for the Ludlum Model-3 survey meters with the 44-9 GM pancake probe using U-238 or equivalent alpha source.

BASIS FOR INTERROGATORY:

During the review of the calculations provided by Denison Mines, the reviewer requested additional information from the Site RSO. The reviewer requested copies of the calibration information and what sources were used when performing function checks on survey instruments. In addition the reviewer contacted Ludlum to find out what the typical efficiency for U-238 for Ludlum Model-3 survey meters with the 44-9 GM pancake probe. Ludlums response was 15%. Using 15% in the same calculations that Denison Mines used in their response, the Ludlum Model-3 survey meters with the 44-9

GM pancake probe is not sensitive enough to detect U-238 at the applicable regulatory levels. A different meter and/or probe may need to be used to do release surveys for ore trucks. (See attached emails)

Example: Using 15% efficiency and background used in Denison example.

 $MDC = \frac{3 + 4.65 \text{ x } \sqrt{180}}{(1)(0.15)(0.15)} = 2906 \text{ dpm}/100 \text{ cm}^2 \text{ Alpha}$

APPLICALBE RULE(S) OR REGULATION(S):

R313-24-1(3). Purpose and Authority R313-15-101. Radiation Protection Programs R313-15-501(1). Survey and Monitoring-General

REFERENCES:

Radioactive Materials License Renewal Application for RML UT1900479: Appendix E:
Radiation Protection Manual Section 2.6 *Equipment Release Surveys*.
U.S. Nuclear Regulatory Commission Regulatory Guide 1.86: Decontamination of
Facilities and Equipment Prior to Release for Unrestricted Use.

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT-ALARA:

Round One Interrogatory Statement 9 was answered appropriately and to the satisfaction of the DRC.

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT- EMPLOYEE TRAINING:

Round One Interrogatory Statements 10 and 11 were answered appropriately and to the satisfaction of the DRC.

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT- STANDARD OPERATING PROCEDURES:

Round One Interrogatory Statement 12 was answered appropriately and to the satisfaction of the DRC.

HEALTH PHYSICS ROUND 2 INTERROGATORY STATEMENT-REVISIONS AND UPDATES:

Round One Interrogatory Statement 13 was answered appropriately and to the satisfaction of the DRC.

Page 1

From:Kent BoTo:Ryan JoDate:8/21/200Subject:Re: Que

Kent Boatright <kboatright@ludlums.com> Ryan Johnson <rmjohnson@utah.gov>, Rhonda Harris <rharris@ludlums.com> 8/21/2009 7:45 AM Re: Question on the efficiency of a Model 3

Howdy Ryan,

I am forwarding your email to Rhonda Harris, our RSO. She has the info you need. She will email you back today. Tell Kevin hey.

Thanks,

Kent Boatright, Manager Ludium Measurements, Inc. Repair/Calibration Department 325/235-5494 ext 3396 tel 325/235-4672 fax kboat@ludiums.com

Ryan Johnson wrote:

> Kent,

>

> A colleague (Kevin Carney) gave me your name an email address. I have a licensee who uses a Model 3 meter with a Model 44-9 probe to survey for U-238. What is the typical efficiency for U-238 for that meter and probe type. By the way Kevin says Hi.

> Thanks for your help

>

> Ryan Johnson

> Environmental Scientist

- > Utah Division of Radiation Control
- > >

From:Rhonda HaTo:Ryan JohnsDate:8/21/2009 1Subject:Model 3 eff

Rhonda Harris <rharris@ludlums.com> Ryan Johnson <rmjohnson@utah.gov> 8/21/2009 10:45 PM Model 3 eff

Hello Ryan, the efficiency should be around 15% 4Pi. That is for alpha emmission only. We do not have a source that we could run an eff for the gammas although it would be less than 1%. Any gamma will always have less than 1% eff with a pancake detector.

If you have any questiuons please let me know. Thanks

Rhonda

Mr. Johnson,

Attached are the Ludlum Measurements semi-annual calibration sheets for the Model 177 w/43-1 probe and the Model 3 w/44-9 pancake probe. At the White Mesa Mill the instruments are checked daily before use utilizing a Th-230 source (33,000 dpm) for alpha instruments and a Sr/Y-90 source (39,300 dpm) for beta instruments. That information is recorded on the various scan sheets that pertain to their usage.

David

David Turk Radiation Safety Officer

t: 435-678-2221 x113 | 1: 435-678-2224 6425 S. Highway 191, PO Box 809, Blanding, UT 84511 DENISON MINES (USA) CORP www.denisonmines.com

This e-mail is intended for exclusive use the person(s) mentioned as the recipient(s). This message and any attached files with it are confidential and may contain privileged or proprietary information. If you are not the intended recipient(s) please delete this message and notify the sender. You may not use, distribute print or copy this message if you are not the intended recipient(s).

From: Ryan Johnson [mailto:Rmjohnson@utah.gov]
Sent: Wednesday, August 19, 2009 5:24 PM
To: David Frydenlund; David Turk; John Hultquist
Subject: Denison's Response to question #8 2nd round of interrogatories

David,

What model of pancake probe do you use?

What type of Calibration sources are used?

Can you email me copies of the calibration paper work? Just one from each type of meter(Model 3 with pancake probe and Model 177 with the 43-1 alpha detection probe)

Thanks,

Ryan Johnson

M	Scientific and Indus Instruments	trial (GERTIFICATE	OF CALIB	RATION	.,	POST OFFIC 501 OAK STI SWEETWATE	MEASUR E BOX 810 REET R, TEXAS 7	PH. 325 FAX NG 9556, U.S.	5, INC. -235-5494): 325-23 A.	1 15-4672
CUSTOMER	DENISON MINES	CORPORATION	1					DER NO	20132	2422/3371	60
Mfg	Ludium Measurem	ents, Inc.	Model		177		Serial No.	4176	L		
Mfg	Ludium Measurem	ents, Inc.	Model	4	13-1		Serial No.	ANO1	12833	• •	
Cal. Date _	23-Apr-0	<u>9</u> Cal	Due Date	23-Oc	:t-09	_ Cal. Inte	rval <u>6 M</u>	onths_Me	terface_	202-0	020
Check mark (applies to application	able instr. and/	or detector IAW	mfg. spec.	T7	7 <u>9</u> °F	RH	<u> 27 </u> %	Alt	<u>697.8</u> п	ım Hg
New Inst	trument Instrume	nt Received	🛛 Within Toler. +	-10% 🔲 10-2	20% 🗌 Out	t of Tol. 📋	Requiring R	epair 📋	Other-See	comme	nts
Mechar F/S Resp	nical ck.). ck k.	Meter Zei Reset ck. Alarm Set	roed rting ck.	☐ Bac ☐ Win ☑ Batt	kground Su dow Opera . ck. (Min.)	btract ition /olt)5	.97_VDC	☐ Input : ☑ Geotr	Sens. Line opism	arity	
🗹 Calibrate	d in accordance wi	th LMI SOP 14.8	rev 12/05/89.	🗌 Calib	rated in ac	cordance	with LMI SO	P 14.9 rev	02/07/97.		
Instrument Vol	t Set650 \	/ Input Sens	<u>35</u> mV [Det. Oper	650	V at <u>3</u>	<u>15 </u>	Dial Ratio	·		\$11¥
	eadout (2 points)	Ref./Inst	500/	· 	V	Ref./Inst	1000	/			_ v
COMMENT Calibrated	S: With Subtract	in "OFF" p	osition.								

Alarm Checked but not set.

Gamma Calibration: GM datectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

يستعد والأسريك والمتعارية العرابي والمستعد

	REFERENCE RANGE/MULTIPLIER CAL. POINT X1K 400kcpm X1K 100kcpm X100 40kcpm X100 10kcpm X10 10kcpm X10 10kcpm X10 1kcpm X10 1kcpm X10 1kcpm			INSTRUMENT REC'D "AS FOUND READING" 			INSTRUMENT METER READING* <u>400</u> Jus <u>400</u> <u>400</u> <u>400</u> <u>100</u> <u>100</u> <u>100</u>		
	X1	l	00cpm		/w			100	
	*Uncertainty within ± 10%	C.F. within ± 209	ő				ALL	Range(s	;) Calibrated Electronically
Digital Readout	REFERENCE CAL. POINT		INSTRUMENT METER READING*	Log Scale	REFEREN CAL. PC		JNSTR RECE 	UMENT	INSTRUMENT METER READING*
udium Meas other Internal The calibratio	urements, Inc. certifies that the lonal Standards Organization n in system conforms to the requi	obove instrument h nembers, or have be rements of ANSI/NC	as been calibrated by slandards Ir sen derived from accepted values SL Z540-1-1994 and ANSI N323-1975	aceable to of natural p	lhe National hysical const	Inslitute o tants or ho	f Standards and ave been deriver State	Technolog d by the ra of Texas (y, or to the calibration facilities of No type of collbration techniques. Calibration License No. LO-1963
Reference	ce Instruments and/a	r Sources:	S-394/1122	781	059	280	60646	• •	
Cs-137 Ga	ha S/N Pu239	2928-01	Beta S/N	_]E552 [E551 [_]720 [[734 [16] Other _	16	
🗹 m 5	500 S/N6389	3	Oscilloscope S/N	<u>.</u>		[Multimet	er \$/N	93870637
Calibrate	By Jevany 7	thompson			[Date 2	3. Apr.00	1	·
Reviewe	ed By:Rhowh	Han	·			Date _	ZJA PA	<u>0</u>	
This certifico FORM C224	até shall not be reproduced ex A 10/15/2008	cept in Iull, without I	he written approvol of Ludium Mer	asurements,	inc.	AC Ins Only	t. Passed	Dielectri	c (Hi-Pot) and Continuity Test

M	Designer and Manufacturer of Scientific and Industriat Instruments		ICATE OF CALIBRATION	ST OFFICE BOX 810 501 OAK STREET SWEETWATER, TEXAS	REMENTS, INC. PH. 325-235-5494 FAX NO. 325-235-4672 79556, U.S.A.
CUSTOMER	DENISON MINES	<u> </u>		ORDER NO	20136685/339746
Mfg	Ludium Measurements, Inc.	Model	3	Serial No58	587
Mfg.	Ludium Measurements, Inc.	Model	44-9	Serial No. PRIG	3578
Cal. Date	6-Aug-09	Cal Due Date	6-Aug-10 Ca	I. Interval <u>1 Year</u> Mete	rface202-608
Check mark	Tapplies to applicable instr. and/	or detector IAW	mfg. spec. T. <u>74</u> °	FRH <u>47</u> %A	lt698.2_mm Hg
🔲 New Inst	rument Instrument Received	Within T	oler. +-10% 🔲 10-20% 📋 Out of To	I. 🔄 Requiring Repair 📋 Ol	her-See comments
Mechanic	cal ck. 📈 Mete	r Zeroed	Background Subtract	🔲 input Se	ns. Linearity
F/S Resp	o. ck 📈 Reso	ət ck.	Window Operation	👿 Geotropi	sm
Audio ck.	, 🗌 Alarr	n Setting ck.	Batt. ck. (Min. Volt)	2.2_VDC	
Calibrated	I in accordance with LMI SOP 14	.8 rev 12/05/89.	Calibrated in accordance	e with LMI SOP 14,9 rev 02/07/	97.
Instrument Volt	Set900 V Input Se	ns. <u>33</u>	mV Det. Oper, <u>900</u> V at	<u>33</u> mV Dial Ratio	mV
	eadout (2 points) Ref./inst.		/V Ref./	/inst//	v

COMMENTS:

Gamma Calibration: GM delectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

		R	FERENCE		INSTRU	MENT	REC'D	INS	TRUMEN	NT.
	RANGE/MULTIPL	IER CA	AL. POINT		"AS FOL	JND R	EADING	" MET	ER REA	DING*
	X 100	150 m	nR/hr			1.5			1.5	÷
	X 100		1R/hr	-		5.5			0.5	
	X 10	15 m	nR/hr			1.5			1.5	
	X 10	. <u> </u>	nR/hr	-		25			0.5	
	X1	1.5 mR	hr = 5100 cmm		e	1.5		·	1.5	
	X 1	1.0 m	1R/hr	-		10			1.0	
	X 0.1	510	CDM	-		1.5			1.5	······································
	X 0.1	170	com			0.5			0.5	
		·		- ·		······			····	·····
										······································
	*Uncertainty within ± 10% (C.F. within ± 20%					X 0	.1 Range	s) Calibrat	ted Electronically
	REFERENCE	INSTRUMENT	INSTRUMENT	Γ	REFE	RENCE		NSTRUMEN	π	INSTRUMENT
	CAL. POINT	RECEIVED	METER READING*		CAL. F	OINT	F	ECEIVED		METER READING*
Digital				Log						
Readout				Scale	,		<u> </u>			
	·	<u> </u>								
	······································	i							— —	
	·····			[
· · · · · · · · · · · · · · · · · · ·										
Ludium Meas other internal	urements, Inc. certifies that the abo tional Standards Organization mem	ive instrument has been ca bers, or have been deriver	alibrated by siandards traceable t d from accepted values of natural	lo the Nat physical	tional Institute constants or h	of Standar lave been t	ds and Techno lerived by the	logy, or to the c ratio type of cal	allbration facili	liles of ques.
The calibratio	in system contorms to the requirem	ents of ANSI/NCSL 2540-	1-1994 and ANSI N323-1978			<u> </u>			Calibration	ICENSE NO. 20-1903
Referen	ice instruments and/oi	r Sources: US-	394/1122	_]781	059	280	60646		<u></u> .	
Ċs-137 Ga	amma S/N [1162 [✔] G1	12 [_] M565 [_] 51	05 [] T1008 [] T879 [_] E552	🖌 E551	720	734 L	_] 1616	[] Neutron	Am-241 Be S/N T-304
	oha S/N	, C	Beta S/N				C Other			
∭ m.	500 S/N79641	<u> </u>] Oscilloscope S/N				🖌 Multir	neter S/N	8	39880241
Calibrate	ed By: Mul .	J Ilion	M			Date	6-A	ua-	09	
		^					1 1	5		
Reviewe	ed By: Khande	Hann				Date	Le AI	10 D9		······
This certific	cate shall not be reproduced except	t in full, without the written	approval of Lucium Measuremen	its, inc.		ACI	nst. 📋 Pa	ssed Dielectri	c (Hi-Pot) an	d Continuity Test
FURM 022	A 10/13/2008						IY [_] Fai	ed:		

SECTION 2

UTAH DIVISION OF RADIATION CONTROL DENISON MINES (USA) CORPORATION WHITE MESA URANIUM MILL BLANDING, UTAH

ENGINEERING COMMENT INTERROGATORIES – ROUND 2

DECEMBER 28, 2009

TABLE OF CONTENTS

Section/Page

INTERROGATORY STATEMENTS ON THE RECLAMATION PLAN	3
Plan Revision Numbers, Statement I-A	
Plan to be included in License Renewal Application, Statement I-B	4
Discharge Channel from Cell 1, Statement I-C	
Rock Apron at Base of Outslope of Tailings Cells, Statement I-D	7
Filter Blanket below Rip-Rap of Tailings Cells, Statement I-E	8
Map showing Mill Buildings and Tankage, Statement I-F	10
Illegible copy of a Rainfall Duration Curve, Statement I-G	11
References of NRC to DRC, Statement I-H	12
Changes to Final Construction Report, Statement I-I	13
Outdated Reclamation Plan Table of Contents, Statement I-J	14
Addition of Provisions for Cell 4A to the Plan, Statement I-K	15
Amend Plan to Conform to Final Approved ICTM, Statement I-L	16

INTERROGATORY STATEMENT II-A: LICENSE VIOLATIONS:17INTERROGATORY STATEMENT II-B: CORRECT MODELING INFERENCES:18INTERROGATORY STATEMENT II-C: CORRECT VERSION OF DOCUMENTS:19INTERROGATORY STATEMENT II-D: OMISSION OF DMT DOCUMENT.20INTERROGATORY STATEMENT II-E: OMISSION OF O&M DOCUMENT21

ACRONYMS AND ABBREVIATIONS

ALARA	As Low As Reasonably Achievable
CFR	Code of Federal Regulations
DRC	Utah Division of Radiation Control
DUSA	Denison Mines (USA) Corp.
NRC	Nuclear Regulatory Commission
NUREG-XXXX	Reports and Books Prepared by the NRC
NUREG/CR-XXXX	Reports and Books Prepared by NRC Contractors
PMF	Probable Maximum Flood
RWP	Radiation Work Permit
UAC R313	Utah Administrative Code, Rule 313
MILDOS	MILDOS Computer Code
	-

Preface to Engineering Comment Interrogatories Round 2:

Original Interrogatories Round I are given in italics. However, often not the entire original interrogatory, i.e. the Basis for Interrogatory, Regulatory Basis, and References are given in the following interrogatories.

If parts of the original interrogatory have been omitted from the Round 1 version, a dotted line trailer (...) has been inserted, to alert the reader to this fact. If further information is required please review Engineering Comment Interrogatories Round 1.

I-A DRC Round 1 dated July 2, 2009:

The currently approved, latest Reclamation Plan needs to receive a unique identifying number the as to the version of the plan it is. We request that DUSA assign a version number (e.g. 4.0) to the currently approved reclamation plan. If there are iterative changes necessary to the plan as a result of these License Renewal Application comments, each DUSA proposed revision to the plan must be identified by a unique reference number, e.g. a suffix to the number, such as proposed Revision 4.1, 4.2, etc.

The updates to the Reclamation Plan conveyed by DUSA letter dated July 25, 2008 were not included in the License Renewal Application. They need to be included...

DUSA Responded by Submitting a Letter dated August 14, 2009, stating Revision 4.0 of the Reclamation Plan would be forthcoming. Revision 4.0 of the plan was sent by DUSA by letter dated November 24, 2009: This update to the Reclamation Plan is now included as part of the License Renewal Application.

DRC Response:

,

The newly submitted Reclamation Plan Revision 4.0 renumbering and updates to include information from the DUSA letter of July 25, 2008 has been reviewed, and is acceptable. This matter is closed.

For additional DRC comments on the November, 2009 DUSA Reclamation Plan, see below.

I-B DRC Round 1 dated July 2, 2009:

Please update and complete the Section 8 of the License Renewal Application, regarding the Reclamation Plan. Please include the current approved version of the Reclamation Plan as an Appendix to the License Renewal Application.

DUSA Responded by Submitting a Letter dated August 14, 2009, stating Revision 4.0 of the Reclamation Plan would be forthcoming. Revision 4.0 of the plan was sent by DUSA by letter dated November 24, 2009:

The DUSA letter of November 24, 2009 supplied a revised Section 8 to the License Renewal Application as replacement pages. This letter states the Reclamation Plan is submitted as a new Appendix P to the original License Renewal Application.

DRC Response:

The replacement pages to Section 8 of the License Renewal Application are acceptable, and have been incorporated into the License Renewal Application.

The DUSA letter of November 24, 2009 states, "Denison is hereby submitting the enclosed Revision 4.0 as a new Appendix P to the February 28, 2007 renewal application..."

However, the Index to Appendices in the February 28, 2007 License Renewal Application (i.e. page vi) needs to be revised to add Appendix P. Also, a tab sheet and a place holder sheet, stating the location of the new Appendix P, should be submitted to place in the License Renewal Application appendices volume.

For additional DRC comments on the November, 2009 DUSA Reclamation Plan, see the additional interrogatories below.

I-C DRC Round 1 dated July 2, 2009:

Regarding the Cell 1 Discharge Channel, on Figure A-2.2.4-1 Sedimentation Basin Detail :

- 1. The potential need for or absence of rip-rap protection for the Cell 1 discharge channel, entry and exit platform aprons must be explained and justified. An adequate demonstration will include, but is not limited to analysis according to NUREG-1623.
- 2. The need to join or not join (the existing configuration) the discharge channel to the toe of the new south dike of Cell 1 must be explained and justified.
- 3. Drawing details are needed to show the outcome of the above analyses to describe the sections of the discharge channel, its lining, appurtenant entry, exit apron zones, dike alignment and lining.

Basis for the Interrogatory:

- 1. The need for using rip-rap protection for the Cell 1 discharge channel, entry and exit aprons need to be analyzed under Potential Maximum Precipitation and Flood.
- 2. It appears advantageous to connect the discharge channel to the toe of the new south dike of Cell 1 to ensure entry flow path longevity, and to possibly eliminate need for riprap armor south of the discharge channel on the west dike of Cell 1.
- 3. The construction requirements for the discharge channel, its lining, appurtenant entry, exit apron zones, dike alignment and lining need to be specified....

References:

Reclamation Plan, Revision 3.0, Figure A-2.2.4-1 Sedimentation Basin Detail NUREG-1623, Design of Erosion Protection for Long-Term Stabilization Chow, V.T. 1959, Design of Channels for Uniform Flow, Open Channel Hydraulics, McGraw-Hill Book Company, p. 164-179.

DUSA Response dated August 14, 2009:

"The Cell Discharge Channel is intended to divert the water accumulated from the PMP storm event from a 143 acre area, which includes the sedimentation basin created from the Cell area, the reclaimed Mill area, and the area to the north of the Cell area but south of the existing diversion ditches. The channel is created by excavation of the undisturbed ground to the west of Cell 1 to maximum depth of approximately 17 feet. The lower 10 feet of the channel is excavated in Dakota Sandstone to an elevation matching the lowest point on the west end of the Cell 1 sedimentation basin. The channel will be excavated at slope of 1% and will daylight in the Dakota Sandstone cliffs in Westwater Canyon. A cross section of the area to be excavated is included in Appendix P to this letter."

"The maximum discharge volume through the channel will be 1344 cubic feet per second resulting in flow velocity of 7.45 feet per second assuming bottom channel width of 120 feet The channel design proposed in the reclamation plan is actually 150 feet wide at the bottom, which will further reduce the flow velocity. The allowable flow velocity for bedrock channel is 8-10 feet per second; therefore no riprap is required in the channel bottom. The entrance to the channel will match the bottom elevation of the sedimentation basin; so no riprap will be necessary at that point. The channel discharge will be on to the cliffs of Westwater Canyon; therefore no riprap will be necessary at that point. The discharge calculations are included in Attachment G to the Reclamation Plan, and also included in Appendix P to this letter.

"We do not believe that the discharge channel should be joined with the toe of the new fill area on the north slope of the Cell 1 dike. The flows off the dike slope will be very small and the rip rap toe will easily protect the slope and the reclamation cover. The flow velocities at the entrance to the discharge channel could possibly impact the rip rap toe, or require additional rip rap, and should therefore be avoided. Water potentially backing up from the entrance to the discharge channel would be very low velocity in the area near the toe of the Cell 1 north slope and would not impact the stability of the slope."

DRC Response:

Interrogatory 1C Item 1:

It appears the approach velocity at entry to the channel may exceed the scouring resistance of the existing Cell 1 soil upstream of the channel, creating erosion prior to flow on the in-situ rock lined channel bed.

To support your claim that this is not a problem for the Cell I floor:

Please analyze the dimensions, area of extent, and anticipated channel entry scour velocities in accordance with methods outlined in NUREG-1623, and submit quantitative calculations for DRC review.

If said calculations indicate soil scour will occur, please submit design for an appropriate channel entryway rip-rap apron, to accommodate the area of scouring velocities, for revision to the current Reclamation Plan Version 4.0. This calculation and/or the design change, plans and specifications will need to be included as part of this License Renewal Application.

Interrogatory 1C Item 2:

The response from DUSA is satisfactory and that matter closed.

Interrogatory 1C Item 3:

The dimensions shown on the Reclamation Plan drawings for the Cell 1 outlet channel need to be corrected to indicate the dimensions discussed by DUSA above. The Reclamation Plan drawings currently show a 200-foot wide channel bottom. In contrast, your August 14, 2009 response said it would be 150-feet wide.

Please submit revised calculations (above) and corrected drawings of the channel dimensions with plans and specifications for the rip-rap entry apron provision mentioned above for revision to the current Reclamation Plan Version 4.0. This change will need to be included as part of this License Renewal Application.

I-D DRC Round 1 dated July 2, 2009:

This interrogatory is being provided for DUSA's information only. This item will be pursued concurrent with DRC review of the Infiltration and Contaminant Transport Modeling Report, White Mesa Mill Site, Blanding Utah (ICTM) prepared by DUSA. Last correspondence on the report was furnished by DUSA on April 30, 2009.

Is installation of a rock apron at the base of all the final covered tailings cell outslope intended for the entire perimeter of the final covered tailings cell system? If so, please clarify by specifying on the drawings that such is required. If not, please demonstrate that the absence of such will be adequate for the 1,000-year design period or at minimum a 200-year period.

Basis for the Interrogatory:

The reclamation plan drawings only distinctly specify rock aprons on the south outslope of Cell 4A. It is unclear if installation of a rock apron at the base or toe of all dike outside side slopes is intended. That is, are rock aprons to be installed for the entire perimeter of the tailings cell system? Reclamation Plan figures A-5.1-1, -2, -3 and -4 show a plan view and cross-sections of the tailings cells. The section A-A' on Figure A-5.1-2 on the left side refers to Fig. A-5.1-4, which is a drawing of the "Rock Apron at Base of the Toe of the Cell Outslope." None of these plan views or cross-sections specifically shows rock aprons, other than the south side of Cells 4A...

<u>References</u>:

Reclamation Plan, Revision 3.0, Figures A-5.1-1, -2, -3 and -4. Reclamation Plan, Revision 3.0, Figure A-2.2.4-1 Sedimentation Basin Detail NUREG-1623, Design of Erosion Protection for Long-Term Stabilization Chow, V.T. 1959, Design of Channels for Uniform Flow, Open Channel Hydraulics, McGraw-Hill Book Company, p. 164-179.

DUSA Response dated August 14, 2009:

"The questions raised in Interrogatory Statement I-D will be addressed in the re-design of the tailings cover system in accordance with the approved ICTM."

DRC Response:

We agree that the need for rock aprons discussed above will be addressed by DUSA in the ICTM study. However, we have determined that this issued must be addressed and resolved now as a part of the License Renewal Application.

Due to the uncertain timeline for the ICTM study completion on this item, DUSA must submit design analysis, plans and specifications for rock aprons for the tailings cells perimeter outslope as discussed above.

The design for the rock aprons, as appropriate, will need to be included as part of this License Renewal Application, and must comply with the engineering guidelines found in NRC NUREG 1623.

However, we realize the final design of appurtenant rock aprons for the outslope of the tailings cells may be in accordance with an approved ICTM design, and will need to be included in the future revision to the White Mesa Mill Reclamation Plan to be submitted for approval after completion and approval of the ICTM study.

I-E DRC Round 1 dated July 2, 2009:

Please demonstrate that for final reclamation of the tailings cells a filter blanket is necessary or unnecessary to be installed below the riprap cover, for the top, side slopes, and rock aprons of the tailings cells.

Basis for the Interrogatory:

There is no filter blanket shown or specified in the Reclamation Plan. A demonstration of layer stability is needed to justify the omission of a filter blanket in the cover design.

Also, we recognize that different engineering design has been proposed by DUSA in the November 21, 2007 Infiltration and Contaminant Transport Modeling Report, White Mesa Site, Blanding, Utah, prepared by MWH Americas Inc. Erosion stability issues and radon controls must considered in the final reclamation plan and must be closely coordinated with ICTM report that may be approved later.

Regulatory Basis:

- 1. R313-24-4. Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements -Clarifications or Exceptions incorporate 10CFR40 Appendix A with some exceptions and substitutions.
- 2. 10CFR40, Appendix A, Criterion 9 requires an Executive Secretary approved reclamation plan for the White Mesa Mill.

References:

- 2002, T.L. Johnson, NUREG-1623, Design of Erosion Protection for Long-Term Stabilization, Appendix D, Designing Riprap Erosion Protection, Paragraph 2.1.1, Filter Requirements: "It is generally recommended that a filter or bedding layer comprised of well-graded rock material be placed on the cover or in locations where rock riprap is to be placed for erosion protection. Locations recommended for filter placement include impoundment side slopes, toes of slopes, transition areas, diversion ditches and channels, stilling areas, and flow impact areas. The purpose of the filter is to bed the riprap and prevent stone penetration into the cover and/or radon barrier, prevent soil erosion from flow at the stone/soil interface, and to prevent the pooling of precipitation and/or tributary runoff from infiltrating into the cover and waste materials. Filter sizing criteria are presented in NUREG/CR-4620 (Nelson, 1986)."
- 2. Same Drawing References, per the interrogatory immediately above this one.

DUSA Response dated August 14, 2009:

"It is not clear why filter blanket was not included in the original cover design. As noted by DRC, Denison is proposing revised cover design as part of the Infiltration Analysis [ICTM] which will eliminate the rip rap on the top surface of the reclaimed tailings. The need for a filter blanket on the embankment side slopes and toe areas will be evaluated at that time."

DRC Response:

We agree that the need for the filter blanket discussed above will be addressed by DUSA in the ICTM study. However, we have determined that this issued must be addressed and resolved now as a part of the License Renewal Application.

Due to the uncertain timeline for the ICTM study completion on this item, DUSA must submit design analysis, and plans and specifications for a filter blanket to be installed below all riprap cover, including but not limited to the top, side slopes, channel lining aprons and dike outslope rock aprons of the tailings cells.

The design for the filter blankets will need to be included as part of this License Renewal Application, and must comply with the engineering guidelines found in NRC NUREG 1623.

However, we realize the final design of the filter blanket for the rip/rap system may be in accordance with an approved ICTM design, and will need to be included in the future revision to the White Mesa Mill Reclamation Plan to be submitted for approval after completion and approval of the ICTM study.

I-F DRC Round 1 dated July 2, 2009:

Reclamation Plan Fig. 3.2.3-1, Site Map Showing Locations of Buildings and Tankage needs to be updated to current conditions....

<u>DUSA Responded by Submitting a Revision 4.0 of the Reclamation Plan on November 24, 2009</u>: The DUSA letter of November 24, 2009 conveyed a revised Figure 3.2.3-1 in Reclamation Plan Version 4.0.

DRC Response:

The revised Figure 3.2.3-1 provided has been reviewed. This figure does not provide a current map of the tanks and the tank solutions that are depicted by the DUSA letter dated July 15, 2009, subject: Tank Layout and Update. Please revise and update Figure 3.2.3-1 in accordance with this latest information, to ensure that it is complete and representative of current site conditions.

I-G DRC Round 1 dated July 2, 2009:

In the DRC copy of the Reclamation Plan, Appendix [Attachment] G, Attachment 9, Rainfall-Duration Curve for One-Hour PMP at White Mesa Mill is illegible. Please provide a readable copy of the graph....

DUSA Response dated August 14, 2009:

"A readable copy of Reclamation Plan, Appendix [Attachment] G, Attachment 9, Rainfall-Duration Curve for One-hour PMP at White Mesa Mill is attached as Appendix Q to this letter."

DRC Response:

We note this submittal. The response is acceptable. The subject rainfall duration curve has been integrated into the submitted Reclamation Plan Version 4.0 as well as the current Reclamation Plan.

Per Appendix F, Table 1C of the *Tailings Cover Design White Mesa Mill* 1996, by Titan Environmental Corporation, the minimum D_{50} for the rip-rap diameter for top portion of the cover is to be 3.4 inches.

Drawing A-5.1-3 in the Reclamation Plan Rev 4.0 lists the D_{50} as 0.3 inches. Please correct this error on the drawing.

I-H DRC Round 1 dated July 2, 2009:

Numerous references to the NRC in the Reclamation Plan must be changed to the Utah Division of Radiation Control (DRC). A general overriding amendment to the Reclamation Plan may best satisfy this need...

DUSA Responded by Submitting a Revision 4.0 of the Reclamation Plan on November 24, 2009: The DUSA letter of November 24, 2009 supplied a revised Section of the License Renewal Application.

DRC Response:

This information has been reviewed, and checked for coordination within the new Reclamation Plan Revision 4.0 text, and is acceptable. This matter is closed.

I-I DRC Round 1 dated July 2, 2009:

In the Reclamation Plan on pp. B-2 and B-16, the Final Construction Report is referred to. This report is important to independently document the completion of the reclamation and decommissioning work. In that regard, please revise the Reclamation Plan to include the following:

- 1. Please remove any reference to NRC/DRC field presence in the Reclamation Plan.
- 2. The report must be submitted to the DRC within 180 calendar days after the apparent completion of Construction, for Executive Secretary review and approval.

Basis for the Interrogatory:

There is no current distinct requirement in the license for a Final Closure Report. There are many regulatory and administrative needs for such a report.

Regulatory Basis:

- 1. R313-24-4. Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements -Clarifications or Exceptions incorporate 10CFR40 Appendix A with some exceptions and substitutions.
- 2. 10CFR40, Appendix A, Criterion 9 requires an Executive Secretary approved reclamation plan for the White Mesa Mill.
- 3. R313-24-1(3)
- 4. R313-22-36(10)
- 5. R313-22-34(7)
- 6. R313-22-34(1)

<u>References:</u>

Reclamation Plan, Attachment B, Quality Plan for Construction Activities White Mesa Project Blanding, Utah.

DUSA Responded by Submitting a Revision 4.0 of the Reclamation Plan on November 24, 2009: The Reclamation Plan, Revision 4.0 made most of the appropriate changes to the specified verbiage.

DRC Response:

References to the NRC appear to be removed from the Reclamation Plan, Revision 4.0. However, the verbiage on the last sentence on page B-2 needs correction. Please correct this sentence and resubmit this page as a revision to the current Reclamation Plan Version 4.0. This change will need to be included as part of this License Renewal Application.

I-J DRC Round 1 dated July 2, 2009:

It appears the current Table of Contents (TOC) in the Reclamation Plan (Revision 3.0) is taken directly from Revision 2.0, which is now outdated. The actual content and page numbers of the plan were revised in Revision 3.0. Additional content changes to the plan as a result of review of the current license renewal application are expected.

Adjustments to the current TOC in the Reclamation Plan are needed to bring the table up to date. A final adjustment will need to be done at the end of the review iterations for the license renewal application.

Regulatory Basis:

- 1. R313-24-4. Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements -Clarifications or Exceptions incorporate 10CFR40 Appendix A with some exceptions and substitutions.
- 2. 10CFR40, Appendix A, Criterion 9 requires an Executive Secretary approved reclamation plan for the White Mesa Mill.

References:

Reclamation Plan, Table of Contents.

<u>DUSA Responded by Submitting Revision 4.0 of the Reclamation Plan on November 24, 2009:</u> Revision 4.0 of the Reclamation Plan has a revised Table of Contents.

DRC Response:

This information has been reviewed, and checked for coordination within the new Reclamation Plan Revision 4.0 text, and is acceptable. This matter is closed.

I-K DRC Round 1 dated July 2, 2009:

The Reclamation Plan refers to work in Tailings Cells 1, 2, 3 and sometimes Cell 4A. However the plans and specifications for the reclamation of Cell 4A are not always included in the Reclamation Plan written text and drawings.

Additions to the Reclamation Plan are needed to include provisions, for the reclamation of Cell 4A, into the plans and specifications. Provisions for Cell 4A needs to be incorporated into the Reclamation Plan Table of Contents (TOC), as well as the plans and specifications.

Basis for the Interrogatory:

Provisions in the existing Reclamation Plan for the tailings cell system do not always include Cell 4A in the written text and drawings, as well as the TOC. Provisions for Cell 4A must be included in the Reclamation Plan.

Regulatory Basis:

- 1. R313-24-4. Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements -Clarifications or Exceptions incorporate 10CFR40 Appendix A with some exceptions and substitutions.
- 2. 10CFR40, Appendix A, Criterion 9 requires an Executive Secretary approved reclamation plan for the White Mesa Mill.

References:

Reclamation Plan, Table of Contents, Sections 2.0, and 3.0, List of Tables, List of Attachments, etc.

DUSA Responded by Submitting Revision 4.0 of the Reclamation Plan on November 24, 2009: Revision 4.0 of the Reclamation Plan addresses the reclamation of Cell 4A.

DRC Response:

This information has been reviewed, and checked for coordination of reclamation of Cell 4A within the new Reclamation Plan Revision 4.0 plans and specifications, TOC and text, and is acceptable. This matter is closed.

I-L DRC Round 1 dated July 2, 2009:

"The tailings cell cover design found in the Reclamation Plan provided with the February 28, 2007 License Renewal Application is not the same as that provided in the November 21, 2007 Infiltration and Contaminant Transport Modeling (ICTM) Report, White Mesa Site, Blanding, Utah, prepared by MWH Americas Inc. It will be DUSA's responsibility to amend the License Renewal Application and the Reclamation Plan to ensure that the tailings cells cover design, plans, specifications and construction ultimately authorized conforms to the approved ICTM Report."

Basis for the Interrogatory:

Provisions in the existing License Renewal Application and Reclamation Plan will need to be adjusted to ensure that the tailings cells cover design, plans, specifications and construction conforms to the approved ICTM...

DUSA Response:

The Reclamation Plan, and to the extent applicable the 2007 License Renewal Application, will be amended to ensure that the tailings cell cover design, plans, specifications and construction ultimately authorized conform to the approved ICTM. Denison expects that the resulting changes to the Reclamation Plan may be significant, and may justify the creation of Revision 5.0 of the Reclamation Plan in order to properly incorporate the changes into the Plan.

DRC Response:

We agree that depending on the approval date for the ICTM Report, DUSA will probably need to issue a future revision to the Reclamation Plan for approval, incorporating the approved ICTM plan provisions, rather than incorporate such provisions in the submitted Reclamation Plan Revision 4.0. So, at a future date, an approved Reclamation Plan incorporating the approved ICTM study would then need to be included as part of next license amendment after approval of the current License Renewal Application.

However, it is imperative that Revision 4.0 of the Reclamation Plan be reviewed and approved by DRC to reflect the most currently available design for closure conditions. To this end, it is important DUSA complete all present issues in this Interrogatory, so that DRC review of the License Renewal Application can move forward.

INTERROGATORY STATEMENT- License Violations:

II-A DRC Round 1 dated July 2, 2009:

The application states that license violations identified during NRC or State of Utah site inspections are listed. However, not all violations are listed. The application states that license violations identified during NRC or State of Utah site inspections are listed. However, not all violations are listed. Please include a listing of all violations of your Ground Water Quality Protection Permit.

<u>Basis for the Interrogatory</u>: The above regulatory basis document states that license violations identified during NRC or Agreement State site inspections should be listed in License Renewal Applications. The State Ground Water Quality Protection Rules are incorporated by reference in the Uranium Mills and Source Material Mill Tailings Disposal Facility Requirements in UAC R313-24.

Regulatory Basis:

- 1. NUREG-1569 Appendix A: Guidance for Reviewing Historical Aspects of Site Performance for License Renewals and Amendments;
- R313-24-4(1)(b) including exclusion of 10 CFR 40, Appendix A, Criterion 5(B)(1) thru 5H, Criterion 7A, and Criterion 13; and replacement with Utah Administrative Code R317-6 [Ground Water Quality Protection Rules]
- 3. License Renewal Application paragraph 1.2.6: Listing and Description of Violations, etc.

References:

- 1. License Renewal Application, Section 9, Table 9.2-1: NRC and UDEQ Inspections at White Mesa Mill since March 31, 1997.
- 2. NUREG-1569 Appendix A: Guidance for Reviewing Historical Aspects of Site Performance for License Renewals and Amendments;

DUSA Response dated August 14, 2009:

"Denison disagrees with the foregoing statement. All violations including violations under the Mills State of Utah Groundwater Discharge Permit Air Approval Order and Radioactive Materials License as of February 28 2007, the date of submittal of the 2007 License Renewal Application, are listed in Table 9.2-1 of Volume I of the Application. These violations are also discussed in Sections 9.2.1, 9.2.2 and 9.2.3 of Volume I of the Application. Specifically, Section 9.2.3, entitled "Water Quality Notices of Violation" addresses the 11 violations issued on or before February 28 2007 under the Mills Groundwater Discharge Permit."

"There have been number of violations under the Mills Radioactive Materials License, Groundwater Discharge Permit and Air Approval Order since February 28, 2007. However, since the disclosure in the 2007 License Renewal Application is as of February 28 2007, these have not been addressed here."

DRC Response:

We have reviewed this response and find it acceptable. This matter is closed.

INTERROGATORY STATEMENT- Correction of Modeling Inferences

II-B DRC Round 1 dated July 2, 2009:

- 1. There is no paragraph 3.13.1.6 in the Environmental Report (ER). This reference must be corrected.
- 2. License Renewal Application Paragraph 6.5.8 should clearly state that the statement is based on modeling predictions.
- 3. License Renewal Application Paragraph 6.5.9 should also clearly state that the statement in the paragraph is based on modeling predictions.

Basis for the Interrogatory:

- 1. The above basis paragraph 6.5.8 currently states that, "Section 3.13.1.6 of the ER... concludes that even running at full capacity in high-grade ... ores the maximum ... doses to the public are well within ... applicable regulatory standards and ALARA goals."
- 2. In License Renewal Application, paragraph 6.5.9 it states that, "The MILDOS Area Modeling confirms that the current design and operation controls at the Mill are sufficient to result in operations at full capacity processing high-grade ores that are within the regulatory standards and applicable ALARA goals."

Regulatory Basis:

- 1. The Environmental Report (ER), Vol. 4 of the License Renewal Application, paragraph 3.13.1.6. of the ER is referenced in paragraph 6.5.8 of the application.
- 2. License Renewal Application,
 - a. Paragraph 6.5.8, MILDOS Area Modeling
 - b. Paragraph 6.5.9, Summary of Effectiveness of Environmental Controls and Monitoring.
- 3. Utah Administrative Code R317-6, Ground Water Quality Protection.

<u>References:</u>

- 1. License Renewal Application, paragraph 6.5.8, MILDOS Area Modeling
- 2. Ibid., paragraph 6.5.9, Summary of Effectiveness of Environmental Controls and Monitoring.

DUSA Response dated August 14, 2009:

"The requested changes have been made to page 65 of the 2007 License Renewal Application. A revised page 65, marked to indicate the changes, and clean copy, are attached as Appendix R to this letter."

DRC Response:

We have reviewed this response and find it acceptable. The replacement page has been incorporated into the License Renewal Application. This matter is closed.

INTERROGATORY STATEMENT- Correct Version of Documents

II-C DRC Round 1 dated July 2, 2009:

The SWBMPP provided as tab 1 in Appendix C of the License Renewal Application is not the approved version. Please replace with the June 2008 edition, that was approved by the DRC on July 1, 2008....

DUSA Response dated August 14, 2009:

"Attached as Appendix S is the June 2008 edition of the Storm Water Best Management Practices Plan that was approved by the DRC on July 1, 2008."

DRC Response:

We have reviewed this response and find it acceptable. The DUSA document dated June 13, 2008 has been incorporated into the License Renewal Application. This matter is closed.

INTERROGATORY STATEMENT- Correct Version of Documents

II-D DRC Round 1 dated July 2, 2009:

The edition of the White Mesa Mill Tailings Management System and Discharge Minimization Technology (DMT) Monitoring Plan (DMT Plan) provided as tab 3.1 of Appendix A of the License Renewal Application, is not the approved version. Please replace it with the approved "09/08 Revision: Denison-6" version of the plan and attachments...

DUSA Response dated August 14, 2009:

"Attached as Appendix E is the approved 09/08 Revision Denison-6 version of the White Mesa Mill Tailings Management System and Discharge Minimization Technology (DMT) Monitoring Plan."

DRC Response:

We have reviewed this response, and find the correct document was submitted, and is acceptable. The currently approved DMT Plan, approved by the DRC on September 17, 2008 has been incorporated into the License Renewal Application.

INTERROGATORY STATEMENT- Omission of Document

II-E DRC Round 1 dated July 2, 2009:

The License Renewal Application appears to not contain the Cell 4A BAT Monitoring, Operations and Maintenance Plan (O&M Plan). Please include the latest approved edition in the application...

DUSA Response dated August 14, 2009:

"Attached as Appendix L is version 09/08 Revision Denison 1.3 of the Cell 4A BAT Monitoring Operations and Maintenance Plan which is the latest approved edition of that plan."

DRC Response:

We have reviewed this response and find the document submitted acceptable.

However, the Index to Appendices in the February 28, 2007 License Renewal Application need to be added for the O&M Plan. A tab sheet should be submitted to place the O&M Plan into the appropriate License Renewal Application appendix volume.

F:\drupp\DUSA\LRA\Engrg InterrogsRnd2b 12-22-09.doc