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September 16, 2005

Gary Janosko, Chief,
Fuel Cycle Facilities Branch
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington DC 20555

RE: Groundwater Monitoring Results; First Half 2005
Docket No. 40-8102
License No. SUA-1139
Highland Reclamation Project

Dear Mr. Janosko:

Pursuant to the semiannual reporting requirements of Source Material License No. SUA-1139, Conditions 22 and 33, attached are the semiannual environmental monitoring results covering the Highland Reclamation Project for the period 1/1/2005 through 6/30/2005. This report was prepared on behalf of ExxonMobil by MFG, Inc.

A summary of the groundwater elevation data is found in Attachment 1. Summaries of the water quality data are found in Attachment 2. Sampling of environmental media other than groundwater is not required by the license and is not performed. The results indicate that no significant trends or deviations in groundwater elevations or constituent concentrations, compared with previous monitoring results.

In the groundwater compliance wells in the first half of 2005, constituents are in compliance except for uranium in well 175. Since 1999, two constituents (nickel and uranium) in two of the compliance wells have occasionally exceeded the groundwater protection standards in the current license. These constituents are discussed below.

Nickel

Well 175. The license standard for well 175 is 1.8 mg/L. The measured nickel concentrations for TDSS compliance well 175 were near 1.0 mg/L during 2003, and the concentration was below 1.0 in the first and third quarters of 2004 (0.879 and 0.929 mg/L). The nickel concentration was 0.942 mg/L in the first quarter of 2005.

Well 176. The license standard for well 176 is the groundwater standard of 0.02 mg/L. Nickel concentrations for well 176 have exceeded 0.02 mg/L occasionally since July 1999. The nickel

concentrations for well 176 were below 0.02 mg/L in 2004 (<0.005 and 0.00515 mg/L), and was 0.00662 mg/L in the first quarter of 2005.

Uranium

TDSS compliance wells 175 and 176 have license standards of 0.43 pCi/L (0.0006 mg/L) for uranium. The license standard for TDSS compliance well 125 is 59 pCi/L (0.087 mg/L), and the license standard for TDSS compliance well 177 is 71 pCi/L (0.105 mg/L).

Well 175. For well 175, the license standard was exceeded in 2003 (0.566 and 0.850 pCi/L), in 2004 (1.35 and 2.64 pCi/L), and in the first quarter of 2005 (4.7 pCi/L).

Well 176. For well 176, the uranium activity concentrations for 2003, 2004 and the first quarter of 2005 were below detection limits.

Well 177. Well 177 continues to be dry.

Discussion of standards. The uranium standards in the license were set using background values prior to the promulgation of the current uranium standard. Given that there is an accepted groundwater standard for uranium, it is appropriate to change the uranium standard for wells 175 and 176. The current MCL for uranium is 30 µg/L, which is equivalent to approximately 20 pCi/L.

Due to the relatively low concentrations of these anomalies, the remoteness of the site, and the absence any potential immediate or near future adverse impacts associated with these concentrations, ExxonMobil continues to assert that no immediate actions or changes in the monitoring program or frequency are warranted. ExxonMobil is currently developing a site-wide groundwater and geochemical model to help predict future groundwater conditions. Once the modeling effort is complete, ExxonMobil will consider alternate concentration levels for the compliance wells or other methods to address groundwater quality. ExxonMobil proposes to continue monitoring these conditions pursuant to the sampling frequency outlined in the license until the modeling effort is complete. Should significant changes in these conditions occur, ExxonMobil proposes to consult with NRC at that time to determine the appropriate course of action.

If there are any questions or comments regarding the groundwater monitoring results, please contact me at (970) 223-9600 or Dan Burnham with ExxonMobil.

Sincerely,

Clint L. Strachan, P.E.
Project Manager

cc: Dan Burnham – ExxonMobil

Attachment 1
Water Level Data * - 1st Half of 2005

Well Number	Well Name	02/2005	03/2005	05/2005	06/2005
015	TDM DR	Dry			Dry
112	TDM VII	5,121.80		5,113.80	
114	TDM IX	5,088.53		5,100.87	
116	TDM XI	5,056.18		5,056.26	
117	TDM XII		Dry		Dry
120	TDM XXI	5,084.82		5,114.37	
125	TDM XXVI	5,122.17		5,122.27	
127	TDM XXVIII	Dry			Dry
128	TDM XXIX	5,069.80			
129	TDM XXX	5,062.36		5,062.12	
134	RM-4	5,123.90		5,124.30	
148	TDM XXXII	Dry			Dry
171	TDM XXXVIII	5,043.30			5,048.30
172	EM-5		5,081.59	5,081.25	
173	TDM XXXIX		5,064.69		5,064.57
174	TDM XL		5,083.82		5,082.29
175	TDM XLI	5,105.80		5,106.45	
176	TDM XLII	5,311.33		5,311.50	
177	TDM XLIII		Dry		Dry
178	TDM XLIV		5,113.94	5,112.77	
179	TDM XLV		5,114.37		5,114.50
180	TDM XLVI		Dry		Dry
181	TDM XLVII	5,118.27		5,117.86	
182	TDM XLVIII	5,114.23		5,113.90	
183	TDM XLIX		5,105.90		5,106.20

* Static water levels shown as elevations in feet.

Attachment 1
Water Level Data * - 2nd Half of 2004

Well Number	Well Name	03/2004	05/2004	06/2004	08/2004	09/2004	10/2004	11/2004
015	TDM DR	Dry	Dry		Dry			Dry
112	TDM VII	5,122.62		5,122.40	5,032.80		5,122.00	
114	TDM IX	5,101.68	5,101.33		5,097.43		5,101.13	
116	TDM XI	5,054.94	5,055.88		5,055.51		5,056.07	
117	TDM XII	Dry	Dry		5,120.10			5,119.35
120	TDM XXI	5,114.97		5,115.19	5,115.02			5,114.47
125	TDM XXVI	5,122.20		5,120.40	5,122.66			5,122.38
127	TDM XXVIII	Dry	Dry		Dry			Dry
128	TDM XXIX	5,070.80	5,070.58		5,069.80			5,069.80
129	TDM XXX	5,061.36	5,061.14		5,061.66			5,061.72
134	RM-4		5,124.20		5,122.75			5,123.40
148	TDM XXXII	Dry	Dry			Dry		Dry
171	TDM XXXVIII	5,042.30	5,043.40			5,048.00		5,047.56
172	EM-5	5,082.09	5,082.09			5,081.52		5,081.54
173	TDM XXXIX	5,061.09	5,061.18			5,064.09		5,063.97
174	TDM XL	5,083.14	5,084.89			5,084.39		5,084.27
175	TDM XLI	5,107.13	5,107.38		5,107.00			
176	TDM XLII	5,313.40		5,312.65	5,312.50			5,312.08
177	TDM XLIII	Dry	Dry			Dry		Dry
178	TDM XLIV	5,113.64		5,113.64		5,113.84		5,113.92
179	TDM XLV	5,109.60		5,115.65		5,114.84		5,114.55
180	TDM XLVI	Dry		Dry		Dry		Dry
181	TDM XLVII	5,120.60		5,118.77		5,118.70		5,118.53
182	TDM XLVIII	5,115.90		5,114.75		5,115.70		5,115.48
183	TDM XLIX	5,107.37		5,107.40		5,106.29		5,105.83

* Static water levels shown as elevations in feet.

Attachment 2
Water Quality Data - 1st Half 2005

		As mg/L	Cd mg/L	Cl mg/L	Cr mg/L	Grs Alpha pCi/L	Na mg/L	Ni mg/L	NO2+NO3 mg/L	Pb mg/L	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/L	SO4 mg/L	TDS mg/L	Th230 pCi/L	U-Nat mg/L
Backfill Monitor																			
171	TDM XXXVIII																		
	2/24/2005	<0.001	<0.0005	30	<0.001	1.7+/-1.1	112	<0.005	<0.5	<0.001	6.94	<0.2	<1.7	1.5+/-1.0	<0.001	499	857	<0.2	0.0025
	6/3/2005			29			103		<0.1		7.61					400	936		
173	TDM XXXIX																		
	3/4/2005	<0.001	<0.0005	86	<0.001	2.2+/-1.2	79.9	<0.005	<0.5	<0.001	7.79	1.1+/-0.5	<2.1	<1	<0.001	340	819	<0.2	0.0035
	6/3/2005			88			87.6		<0.1		8.18					241	984		
180	TDM XLVI																		
	3/4/2005				Dry														
	6/3/2005				Dry														
116	TDM XI																		
	2/18/2005	<0.001	<0.0005	54	<0.001	1.8+/-1.2	82.8	<0.005	<0.5	<0.001	7.46	1+/-0.4	<2	<1	<0.001	589	1240	<0.2	0.0103
	5/20/2005			59			91.1		<0.1		7.43					458	1290		
128	TDM XXIX																		
	2/16/2005	<0.001	<0.0005	17	<0.001	<1	110	<0.005	0.235	<0.001	7.28	<0.2	<1.2	<1	<0.001	204	600	<0.2	0.0028
	5/20/2005			23			111		<0.1		7.08					508	1090		
129	TDM XXX																		
	2/21/2005	<0.001	<0.0005	38	<0.001	1.5+/-1.2	152	<0.005	<0.1	<0.001	7.52	0.2+/-0.3	1.8+/-1.04	1.6+/-1.0	<0.001	270	696	<0.2	0.0003
	5/25/2005			41			181		14		7.94					944	1830		
148	TDM XXXII																		
	2/17/2005				Dry														
	6/3/2005				Dry														

Attachment 2
Water Quality Data - 1st Half 2005

		As mg/L	Cd mg/L	Cl mg/L	Cr mg/L	Grs Alpha pCi/L	Na mg/L	Ni mg/L	NO2+NO3 mg/L	Pb mg/L	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/L	SO4 mg/L	TDS mg/L	Th230 pCi/L	U-Nat mg/L
TDSS																			
132	RM-2																		
	2/28/2005			Pump in Casing, no sample.															
134	RM-4																		
	2/28/2005		<0.0005	17	<0.001	1.2+/-1.1	186	<0.005	<0.5	<0.001	7.66	<0.2	<1.7	1.5+/-1.0	<0.001	593	1120	<0.2	0.001
	5/25/2005			19			198		<0.1		7.6					311	622		
172	EM-5																		
	3/2/2005	0.00129	<0.0005	7.9	<0.001	2.6+/-1.3	115	<0.005	<0.5	<0.001	7.56	1.5+/-0.5	4.1+/-1.12	2.6+/-1.0	<0.001	291	612	<0.2	0.0003
	5/26/2005			8			123		<0.1		8.23					420	1130		
174	TDM XL																		
	3/2/2005	<0.001	<0.0005	4.7	<0.001	1.4+/-1.1	57.8	<0.005	<0.5	<0.001	7.9	<0.2	<1.2	<1	<0.001	77.8	323	<0.2	<0.0003
	6/2/2005			4.9			69.3		<0.1		8.44					90.4	369		
182	TDM XLVIII																		
	2/22/2005	0.00145	<0.0005	9.2	<0.001	<1	113	<0.005	<0.1	<0.001	8.33	<0.2	<1.2	<1	<0.001	195	443	<0.2	<0.0003
	5/26/2005			10			108		<0.1		8.56					187	436		

Attachment 2
Water Quality Data - 1st Half 2005

		As mg/L	Cd mg/L	Cl mg/L	Cr mg/L	Grs Alpha pCi/L	Na mg/L	Ni mg/L	NO2+NO3 mg/L	Pb mg/L	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/L	SO4 mg/L	TDS mg/L	Th230 pCi/L	U-Nat mg/L
TDSS Compliance Monitor Well																			
125	TDM XXVI																		
	2/18/2005	<0.001	<0.0005	22	<0.001	3.4+/-1.5	99.1	<0.005	<0.5	<0.001	7.58	<0.2	<1.2	<1	<0.001	519	1090	<0.2	0.0185
	5/20/2005			17			97.4		0.252		7.58					176	646		
175	TDM XLI																		
	2/22/2005	0.00182	<0.0005	280	0.0015	2.2+/-1.2	288	0.942	<0.1	<0.001	6.4	2+/-0.6	5.9+/-1.25	3.9+/-1.1	<0.001	3340	4880	<0.2	0.007
	5/25/2005			300			283		<0.1		6.49					3470	5390		
176	TDM XLII																		
	2/22/2005	0.00158	<0.0005	220	0.00115	1.3+/-1.1	227	0.00662	<0.1	<0.001	7.11	1+/-0.4	4.1+/-1.08	3.1+/-1.0	0.00105	2020	3960	<0.2	<0.0003
	5/26/2005			230			231		<0.1		7.24					2290	4050		
177	TDM XLIII																		
	3/4/2005				Dry														
	6/3/2005				Dry														
Ground Water Protection Standards:		0.05	0.01	--	0.05	15	--	0.02	--	0.05	--	--	5	--	0.01	--	--	0.55	0.000635

Note: Alternate Concentration Limits (ACL) apply:
Well 125 U-nat = 59 pCi/L (0.087 mg/L)
Well 175 Ni = 1.8 mg/L and Ra226+Ra228 = 25 pCi/L
Well 177 U-Nat = 71 pCi/L (0.105 mg/L)

Attachment 2
Water Quality Data - 1st Half 2005

		As mg/L	Cd mg/L	Cl mg/L	Cr mg/L	Grs Alpha pCi/L	Na mg/L	Ni mg/L	NO2+NO3 mg/L	Pb mg/L	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/L	SO4 mg/L	TDS mg/L	Th230 pCi/L	U-Nat mg/L
TDSS Monitor																			
015	TDM DR																		
	2/16/2005				Dry														
	6/3/2005				Dry														
112	TDM VII																		
	2/15/2005	<0.001	<0.0005	130	0.00129	1.4+/-1.2	248	0.00773	<0.1	<0.001	7.14	0.6+/-0.3	2.6+/-1.04	2+/-1.0	0.00128	2030	3730	<0.2	0.0381
	5/20/2005			140			250		<0.1		6.88					1970	3670		
114	TDM IX																		
	2/18/2005	<0.001	<0.0005	280	<0.001	2.5+/-1.3	292	1	<0.5	<0.001	6.15	0.6+/-0.3	7.5+/-1.14	6.9+/-1.1	0.00147	3440	5820	<0.2	<0.0003
	5/19/2005			260			306		<0.1		5.65					3600	5950		
117	TDM XII																		
	3/4/2005				Dry														
	6/3/2005				Dry														
120	TDM XXI																		
	2/16/2005	0.00305	<0.0005	360	0.00194	1.7+/-1.2	277	0.00814	<0.1	<0.001	6.65	<0.2	<1.9	1.7+/-1.0	0.00205	2240	4650	<0.2	<0.0003
	5/19/2005			380			279		<0.1		6.56					2110	4700		
127	TDM XXVIII																		
	2/16/2005				Dry														
	6/3/2005				Dry														
178	TDM XLIV																		
	3/2/2005	0.00152	0.000914	220	0.00109	2.3+/-1.2	216	0.146	1.67	0.00176	7.09	0.9+/-0.4	3+/-1.08	2.1+/-1.0	<0.001	2110	4220	<0.2	0.0018
	5/26/2005			260			259		1.54		7.34					2340	4310		

Attachment 2
Water Quality Data - 1st Half 2005

		As mg/L	Cd mg/L	Cl mg/L	Cr mg/L	Grs Alpha pCi/L	Na mg/L	Ni mg/L	NO2+NO3 mg/L	Pb mg/L	pH-field stnd	Ra226 pCi/L	Ra226+228 pCi/L	Ra228 pCi/L	Se mg/L	SO4 mg/L	TDS mg/L	Th230 pCi/L	U-Nat mg/L
TDSS Monitor																			
179	TDM XLV																		
	3/4/2005	<0.001	<0.0005	140	<0.001	2+/-1.2	217	<0.005	<0.5	<0.001	7.55	0.6+/-0.4	<1.6	<1	0.00103	1250	2460	<0.2	<0.0003
	6/2/2005			150			267		<0.1		7.91					1030	2430		
181	TDM XLVII																		
	2/22/2005	<0.001	<0.0005	39	0.00122	1.4+/-1.1	212	<0.005	<0.1	<0.001	7.52	0.6+/-0.4	<2.2	<1.6	<0.001	666	1350	<0.2	<0.0003
	5/26/2005			44			219		<0.1		7.75					423	1420		
183	TDM XLIX																		
	3/4/2005	<0.001	<0.0005	120	<0.001	<1	195	<0.005	<0.5	<0.001	7.51	<0.2	<1.2	<1	<0.001	748	1870	<0.2	<0.0003
	6/2/2005			120			222		<0.1		7.86					821	1980		