



September 13, 2013

#5122434

Karen L. Spray, PG
Colorado Oil & Gas Conservation Commission
P.O. Box 2651
Durango, CO 81302

**RE: STATUS REPORT: CACHE SPILL #1 (REM #7786) AND #2 (REM #7787)
MONUMENT GLOBAL RESOURCES, INC. (OPER #10430)
CACHE FIELD, MONTEZUMA COUNTY, COLORADO**

Dear Ms. Spray:

As requested, following is a status report of remedial activities that have occurred for the referenced spills. Souder, Miller & Associates (SMA) has prepared this report on behalf of Monument Global Resources, Inc. (MGRI). As per the approved remediation workplans, both spills have been treated with a solution of Simple Green soap and a high nitrogen fertilizer in water, followed by scarification where feasible. The following table summarizes remedial activities chronologically:

Date	Spill #	Activities Conducted
Aug 18, 2013	2	Sprayed ~8 gallons of solution, followed by hand-raking
Aug 19, 2013	2	Sprayed ~8 gallons of solution, followed by hand-raking
Aug 24, 2013	2	Sprayed ~8 gallons of solution, followed by hand-raking
Aug 25, 2013	2	Sprayed ~8 gallons of solution, followed by hand-raking
Aug 25, 2013	<i>Flash-flooding occurred overnight in both washes</i>	
Aug 29, 2013	MGRI personnel walked both spill paths to determine whether flooding had spread or washed out either spill. Following are observations:	
	1	Spill area primarily covered up by sediment; no stained soil observed in wash from spill source to the Navajo Nation boundary; observed numerous pools of standing water, but none with any sheen on them
	2	Small wash overflowed down to the main creek bed, and in the process cleaned most of the contaminated dirt out from under rocks below cliff face; closer to main creek bed, flow slowed down and is now covered with silt.



8/29/13: View of spill #1, just below fence near source



8/29/13: View downstream, near end of spill #1

Date	Spill #	Activities Conducted
Sept 3, 2013		SMA personnel collected soil samples at previously-determined end of spill pathways (will submit to COGCC upon receipt of results)
	1	PID reading collected approximately 180 ft. downstream of end-of-spill indicated 3 ppm hydrocarbons; at road intersection (approximately 240 ft. downstream), PID indicated 7 ppm hydrocarbons; soil samples collected at road intersection at 6" at 12" depths; no hydrocarbon staining observed at or below road intersection
	2	No visual hydrocarbons observed at end of spill; no field screening conducted; soil samples collected at 6" and 12" depths



9/3/13: View of spill #1, at intersection w/road



9/3/13: View of standing water in spill #1 area;
no hydrocarbon sheen observed



9/3/13: View of stained soil in wash near source of
spill #1



9/3/13: View of spill #1 from below intersection
w/road



9/3/13: View of excavated sediment trap at end of spill #2; no hydrocarbon staining observed



9/3/13: View of erosion log below sediment trap at spill #2; no hydrocarbon sheen observed

Date	Spill #	Activities Conducted
Sept 5, 2013	2	Tilled up lower spill area, sprayed ~11 gallons of solution, followed by hand-raking and shoveling
Sept 6, 2013	2	Tilled up lower spill area, sprayed ~7 gallons of solution, followed by hand-raking and shoveling
Sept 7, 2013	2	Sprayed ~4 gallons of solution, followed by raking around boulders at base of cliff Sprayed ~4 gallons of solution, followed by raking at source to top of cliff
Sept 8, 2013	1	Sprayed ~10 gallons of solution, followed by hand-raking and shoveling from source to 250 ft. east of road



9/6/13: Tilled area near fenceline of spill #2



9/6/13: MGRI personnel tilling in spill #2



9/6/13: MGRI personnel spraying solution in spill #2



9/6/13: View of spill #2 after tilling and spraying activities



9/7/13: MGRI personnel spraying solution in boulder area of spill #2



9/7/13: Raking near source area of spill #2



9/8/13: MGRI personnel spraying solution near spill #1



9/8/13: MGRI personnel spraying solution in source of spill #1

According to MGRI staff, remedial spraying and raking/shoveling is expected to occur until weather prohibits the activities. For the activities described, which employed only hand tools and small machinery, no issues with the surface owner have been encountered.

If you have any questions regarding this report or related items, please feel free to contact either Shawna Chubbuck or Reid Allan at (505) 325-7535 or at the email addresses below.

A handwritten signature in blue ink that reads "Shawna Chubbuck". The script is cursive and fluid.

Shawna Chubbuck
Project Scientist
shawna.chubbuck@soudermiller.com

A handwritten signature in blue ink that appears to read "Reid S. Allan". The script is cursive and stylized.

Reid S. Allan, P.G.
Vice President/Principal Scientist
reid.allan@soudermiller.com