M/035/0009
Task 6348

Leslie Heppler <lheppler@utah.gov>
cc: Leslie

Monthly Clay Hollow Cleanup Update

Lindsay, Thiess (RTKC) <Thiess.Lindsay@riotinto.com> Fri, Jan 16, 2015 at 2:24 PM
To: "paulbaker@utah.gov" <paulbaker@utah.gov>
Cc: "LHEPPLER@utah.gov" <LHEPPLER@utah.gov>, "dhall@utah.gov" <dhall@utah.gov>, "bhamos@utah.gov" <bhamos@utah.gov>, "DBACON@utah.gov" <DBACON@utah.gov>, "rstonestreet@utah.gov" <rstonestreet@utah.gov>, "dverbica@utah.gov" <dverbica@utah.gov>, "Fiedler.Kerri@epa.gov" <Fiedler.Kerri@epa.gov>, "wendellr@wjordan.com" <wendellr@wjordan.com>, "jhoggan@slco.org" <jhoggan@slco.org>, Mike Bradley <mbradley@utah.gov>

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JAN 16 2015
Div. of Oil, Gas & Mining

Mr. Baker

Attached is the monthly update report and inspection sheet for the Clay Hollow Cleanup (12/15 – 1/15). If you have any questions, please let me know.

Thank you

Thiess Lindsay

Principal Advisor - Land Quality

Rio Tinto Kennecott

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From: Lindsay, Thiess (RTKC)
Sent: Wednesday, December 17, 2014 2:49 PM
To: 'Paul Baker (paulbaker@utah.gov)'
Cc: 'Leslie Heppler (LHEPPLER@utah.gov)'; 'dhall@utah.gov'; 'bhamos@utah.gov'; 'Douglas Bacon (DBACON@utah.gov)'; 'rstonestreet@utah.gov'; 'dverbica@utah.gov'; 'Fiedler, Kerri (Fiedler.Kerri@epa.gov)'; 'Wendell Rigby (wendellr@wjordan.com)'; 'jhoggan@slco.org'; 'Mike Bradley'
Subject: Monthly Clay Hollow Cleanup Update

Mr. Baker

Attached is the monthly update report for the Clay Hollow Cleanup (11/15 – 12/15). If you have any questions, please let me know.

Thank you

Thiess Lindsay

Principal Advisor - Land Quality

Rio Tinto Kennecott

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Monthly Clay Hollow Update & Inspection - Jan.pdf
477K

Table 1 Cleanup Response Activities

ID	Work Area	Activity	Planned Target		Status	Comments
			Start	Finish		
1A	Segment 1	Additional sampling on the West Jordan property	4/1/2014	5/16/2014	Complete	The distribution of mine waste sediment shall be based on visual observation, XRF analysis of soils for arsenic and lead, and laboratory analysis on select confirmation samples for arsenic and lead.
1B	Segment 1	Draft a Characterization/Removal work plan	4/1/2014	4/17/2014	Complete	Plan provided as dictated in the DOGM Division Directive
1C	Segment 1	Site visit with DWQ, DOGM and DERR	4/9/2014			Allow regulators an opportuntiy to see the site in person and and ask questions.
1D	Segment 1	Regulatory review of Cleanup Plan - Segment 1	4/18/2014	4/30/2014	Complete	Submission of joint review between the three agencies
1E	Segment 1	Obtain comments from DOGM, DWQ and DERR	4/22/2014	4/30/2014	Complete	Obtain comments from the agencies on Cleanup plan
1F	Segment 1	Revise work plan and address Agencies comments	4/22/2014	5/14/2014	Complete	Resubmittal for joint review between the three agencies
1G	Segment 1	Obtain Regulatory approval of Cleanup Plan - Segment 1	4/21/2014	7/3/2014	Complete	Regulatory approval of recommended action levels for arsenic, excavation and removal of material, transportation of material, final deposition of removed material, and restoration of the drainage.
2A	Segment 1	Increase desilting capacity at the Kennecott property line	7/7/2014	7/8/2014	Complete	Initial step is to prevent additional mine waste sediment from migrating off Rio Tinto property.
2B	Segment 1	Remove sediments from - Segment 1	7/9/2014	7/15/2014	Complete	The removal of mine waste sediment will commence just downstream of the desilting basins that are to be constructed. From this point the removal will continue downstream to the property line, thus preventing further migration of mine waste sediment off of Rio Tinto property.
1F	Segments 2-4	Submission of Cleanup plan for - Segments 2 - 4	7/18/2014	11/20/2014	Complete	Plan provided as dictated in the DOGM Division Directive.
2C	Segment 1	Reconstruct riprapped channel in - Segment 1	9/15/2014	9/23/2014	Complete	Replacement of Riprap material will be further portect the stream bottom from erosion and restore the site to its previous condition.
1G	Segments 2-4	Obtain Regulatory approval of work plan				Regulatory approval of recommended action levels for arsenic, excavation and removal of material, transportation of material, final deposition of removed material, and restoration of the drainage.
2D	Segment 1	Reseed impacted areas in - Segment 1	9/23/2014	9/23/2014	Complete	Revegetating immediately downstream of the desilting basins will minimize offsite migration of fines during a storm event.
3A	Segments 2-4	Remove sediments from - Segments 2-4	7/21/2014	9/11/2014	Complete	Removal of sediments found upstream of the desilting basins will minimize the loading and the maintenance of the basins.
3B	Segments 2-4	Reconstruct drainage channel - Segments 2-4	7/28/2014	11/26/2014	Complete	Regrading of the distrubed area will allos for natural water flow and will be done concurrent with removal.
3C	Segments 2-4	Reseed impacted areas in - Segments 2-4	11/18/2014	11/26/2014	Complete	Revegetation of the drainage found upstream of the desilting basins will minimize the loading and the maintenance of the basins.
4	Segments 1-4	Post removal report	11/27/2014	1/30/2015	In Process	Detailed report giving removal quantities as well as the test results of the cleaned surface. - This work is in process and progressing on time.

Projected dates

* Monthly project updates will be provided on the 15th of each month, until the cleanup is complete. If Barneys deviates from the attached schedule, Barneys and Agencies will discuss any needed action at the agencies request.

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KENNECOTT BARNEYS CANYON MINING CO

HEAP AND DRAINAGE INSPECTION

Nov. 2014

	HEAPS: SLOPES AND CONTAINMENTS						PROPERTY CONTAINMENT				
DATE	BC-1	BC-2	BC-3	BC-4	BC-5	B&G	NORTH	SOUTH	EAST	COMMENTS	
1											
2											
3	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
4	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
5	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
6	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
7	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
8											
9											
10	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
11	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
12	ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
13	ok ok	ok	ok	ok	ok	ok	ok	ok	ok		MA
14	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
15		ok	ok								
16											
17	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
18	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
19	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
20	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
21	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
22											
23											
24	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
25	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
26	ok	ok	ok	ok	ok	ok	ok	ok	ok		G.M.
27											
28	ok	ok	ok	ok	ok	ok	ok	ok	ok		RK
29											
30											
31											

NC = No Change in Conditions

KENNECOTT BARNEYS CANYON MINING CO

HEAP AND DRAINAGE INSPECTION

Oct. 2014

	HEAPS: SLOPES AND CONTAINMENTS						PROPERTY CONTAINMENT				
DATE	BC-1	BC-2	BC-3	BC-4	BC-5	B&G	NORTH	SOUTH	EAST	COMMENTS	
1	α	α	α	α	α	α	α	α	α		MA
2	α	α	α	α	α	α	α	α	α		MA
3	α	α	α	α	α	α	α	α	α		G.M.
4	α	α	α	α	α	α	α	α	α		G.M.
5											
6	α	α	α	α	α	α	α	α	α		MA
7	α	α	α	α	α	α	α	α	α		MA
8	α	α	α	α	α	α	α	α	α		MA
9	α	α	α	α	α	α	α	α	α		MA
10	α	α	α	α	α	α	α	α	α		G.M.
11											
12											
13	α	α	α	α	α	α	α	α	α		MA
14	α	α	α	α	α	α	α	α	α		MA
15	α	α	α	α	α	α	α	α	α		MA
16	α	α	α	α	α	α	α	α	α		MA
17	α	α	α	α	α	α	α	α	α		G.M.
18											
19											
20	α	α	α	α	α	α	α	α	α		MA
21	α	α	α	α	α	α	α	α	α		MA
22	α	α	α	α	α	α	α	α	α		MA
23	α	α	α	α	α	α	α	α	α		MA
24	α	α	α	α	α	α	α	α	α		G.M
25											
26											
27	α	α	α	α	α	α	α	α	α		MA
28	α	α	α	α	α	α	α	α	α		MA
29	α	α	α	α	α	α	α	α	α		MA
30	α	α	α	α	α	α	α	α	α		MA
31	α	α	α	α	α	α	α	α	α		G.M

NC = No Change in Conditions

KENNECOTT BARNEYS CANYON MINING CO

HEAP AND DRAINAGE INSPECTION

DEC 2014

	HEAPS: SLOPES AND CONTAINMENTS					PROPERTY CONTAINMENT					
DATE	BC-1	BC-2	BC-3	BC-4	BC-5	B&G	NORTH	SOUTH	EAST	COMMENTS	
1	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
2	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
3	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
4	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
5	OK	OK	OK	OK	OK	OK	OK	OK	OK		GM
6											
7											
8	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
9	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
10	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
11	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
12	OK	OK	OK	OK	OK	OK	OK	OK	OK		G.M.
13											
14											
15	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
16	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
17	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
18	OK	OK	OK	OK	OK	OK	OK	OK	OK		MA
19	OK	OK	OK	OK	OK	OK	OK	OK	OK		G.M.
20											
21											
22	OK	OK	OK	OK	OK	OK	OK	OK	OK		G.M.
23	OK	OK	OK	OK	OK	OK	OK	OK	OK		G.M.
24	OK	OK	OK	OK	OK	OK	OK	OK	OK		TMN
25	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	No inspection-holiday	
26	OK	OK	OK	OK	OK	OK	OK	OK	OK		TN
27											
28											
29	OK	OK	OK	OK	OK	OK	OK	OK	OK		PL
30	OK	OK	OK	OK	OK						WB
31	OK	OK	OK	OK	OK						MB

NC = No Change in Conditions

January 2015

KENNECOTT BARNEYS CANYON MINING CO

HEAP AND DRAINAGE INSPECTION

	HEAPS: SLOPES AND CONTAINMENTS						PROPERTY CONTAINMENT				
DATE	BC-1	BC-2	BC-3	BC-4	BC-5	B&G	NORTH	SOUTH	EAST	COMMENTS	
1	—	—	—	—	—	—	—	—	—	Holiday. No one on site.	TN
2	okay	okay	okay	okay	okay	okay	okay	okay	okay	Snow packed roads.	TN
3	—	—	—	—	—	—	—	—	—	Weekend, no inspection.	TN
4	—	—	—	—	—	—	—	—	—	Weekend, no inspection.	TN
5	okay	okay	okay	okay	okay	okay	okay	okay	okay	Snow packed.	TN
6	okay	okay	okay	okay	okay	okay	okay	okay	okay	Thaw underway	TN
7	okay	okay	okay	okay	okay	okay	okay	okay	okay	Thaw continues	TN
8	okay	okay	okay	okay	okay	okay	okay	okay	okay	Thaw continues	TN
9	okay	okay	okay	okay	okay	okay	okay	okay	okay	Thaw continues	TN
10	—	—	—	—	—	—	—	—	—	Weekend, No inspection	TN
11	—	—	—	—	—	—	—	—	—	Weekend, No inspection	TN
12	okay	okay	okay	okay	okay	okay	okay	okay	okay	Snowing	TN
13	okay	okay	okay	okay	okay	okay	okay	okay	okay	Snow packed roads	TN
14	okay	okay	okay	okay	okay	okay	okay	okay	okay	Snow packed roads	TN, JH
15	okay	okay	okay	okay	okay	okay	okay	okay	okay	Snow packed roads	TN
16											
17											
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