

OGMCOAL DNR <ogmcoal@utah.gov>

0070005 Skyline Task 4817- FWD: UT DWQ comments

Priscilla Burton <priscillaburton@utah.gov> To: OGMCOAL DNR <ogmcoal@utah.gov> Mon, Apr 27, 2015 at 4:38 PM

------ Forwarded message ------From: **Joseph Helfrich** <joehelfrich@utah.gov> Date: Mon, Apr 27, 2015 at 4:24 PM Subject: Fwd: Task 4817- UT DWQ To: Priscilla Burton <priscillaburton@utah.gov>

------ Forwarded message ------From: **Benjamin Holcomb** <bholcomb@utah.gov> Date: Thu, Apr 16, 2015 at 12:21 AM Subject: Task 4817- UT DWQ To: Lisa Reinhart <lreinhart@utah.gov> Cc: Jodi Gardberg <Jgardberg@utah.gov>, Joseph Helfrich <JOEHELFRICH@utah.gov>

Hi Lisa,

I have a few comments regarding Skyline Mine's application to discontinue biological monitoring on three creeks (Eccles, Winter Quarters, and Woods Canyon) potentially affected by Skyline mining activities:

First, I want to thank UT DOGM for utilizing biological monitoring when evaluating potential impacts to waterways when permitting mining operations. As you know, evaluating biological assemblages of fish and macroinvertebrates can reveal impacts that discrete water quality sampling may miss or never detect.

First, I'll provide some overarching comments that may help DOGM determine whether "baseline" conditions have been adequately measured and finally, I'll provide some recommendations for future considerations.

Overall, the Skyline Mine biological monitoring <u>should</u> have provided an excellent baseline understanding of those communities including the seasonal and annual changes. However, I cannot comment sufficiently on specifics because the reports provided are general in nature and left to the interpretation of the consultant and further interpreted by the compiler. This includes the survey collection and laboratory methods which could have considerable variability between the empirical data collected and reality. In other words, were the empirical data generated through monitoring truly representative of the conditions within the stream? It was never mentioned in the reports that proper qa/qc was implemented in the collection or laboratory processing of samples.

DWQ recommends that DOGM/Skyline Mine collect and process all future macroinvertebrate data in a manner detailed on UT DWQ's website which incorporates methods approved under an approved Quality Assurance Plan:

http://www.deq.utah.gov/Compliance/monitoring/water/docs/2014/06June/SOP_StreamBMI_5.1.14_Rev0.pdf This method is practiced by US EPA, UT BLM offices, and several US Forests within Utah. Such consistency is critical in comparing and sharing these data.

Eccles Creek:

It appears this creek receives the most direct impacts from the mining operation. As such, and identified by the conclusions of the report provided, the biota in the creek continue to undergo change. Thus, I can't agree with any of the three statements specified in the second paragraph of the memo in regards to Eccles Creek. Also, due to changes in mining locations (as revealed through the recent UPDES permit application), mine

discharge may increase in the near future. It was discussed in the report the significance of increased mine discharge affecting the physical, chemical, and biological components of Eccles Creek. In order to continue to understand these changes, continued monitoring of the macroinvertebrate and fish communities should be continued.

Woods Canyon Creek: It was stated in page one of the memo that undermining had begun in 2014. It's not known what effects may occur to the water resources of Woods Canyon Creek due to this activity. However, since there are water quality and quantity monitoring ongoing at this location and currently no mine water discharge, those requirements should be sufficient. However, DWQ would recommend that if any mine water is discharged into Woods Canyon Creek or mine-related disturbance, then macroinvertebrate and fish monitoring should occur to compare against the baseline.

Winter Quarters Canyon: It appears the conclusions drawn for Woods Canyon Creek similarly apply to Winter Quarters Canyon. DWQ would recommend that if any mine discharge or disturbance occurs in this creek, then appropriate macroinvertebrate and fish monitoring should occur to compare against the baseline.

In short, DWQ would recommend to continue macroinvertebrarte and fish monitoring in Eccles Creek; however, using established UT DWQ macroinvertebrate collection and laboratory protocols. The fish and macroninvertebrate monitoring in Woods Canyon and Winter Quarters Canyon could be eliminated (reduced) until any discharge or disturbance occurs, then it should be reinstituted to compare against baseline.

Thank you for the opportunity to review and comment on your permitting process. Please feel free to contact me if you have any questions. Sincerely,

Ben

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