



OGMCOAL DNR <ogmcoal@utah.gov>

Re: Sufco Sink Hole

Steve Christensen <stevechristensen@utah.gov>

Thu, Oct 13, 2016 at 10:05 AM

To: Daron Haddock <daronhaddock@utah.gov>, Dana Dean <danadean@utah.gov>, Cheryl Parker <cherylparker@utah.gov>, Howard Strand <hstrand@osmre.gov>, Christine Belka <cbelka@osmre.gov>, "Matt, Duane" <dmatt@osmre.gov>, OGMCOAL DNR <ogmcoal@utah.gov>, Jessica Montcalm <jmontcalm@utah.gov>

Good morning,

Quick update on the Sufco sinkhole issue. Vicky Miller (Sufco) has informed me that the mitigation work was completed on October 10th. The site is being surveyed right now. The company is expecting to submit the detailed as-built information along with the other requisite permitting information by November 14th.

Regards,
Steve

On Thu, Sep 29, 2016 at 5:02 PM, Steve Christensen <stevechristensen@utah.gov> wrote:

Good afternoon,

I wanted to keep everyone up to date on some developments with the Sufco sinkhole issue. I've attached the mitigation plan in its current form. Cheryl Parker had an opportunity to do a quick review of it and determined that the mitigation proposal meets the sniff test relative to prudent engineering practices (see e-mail below).

Additionally, I've attached the cultural report produced by Sufco's consultant. Our in-house archaeologist, Jessica Montcalm, has reviewed the report and feels we're on an appropriate path with this mitigation plan. Jessica has also been in direct communication with the SHPO and they concur with the plan. I forwarded the Forest the consultants cultural report so they are in possession of it as well.

The Forest will be sending us a formal hard-copy letter in coming days that essentially outlines the emergency nature of this work and their concurrence with the proposed mitigation plan.

I think that's it for now. Let me know if you have any questions.

Thanks,
Steve

—— Forwarded message ——

From: **Cheryl Parker** <cherylparker@utah.gov>

Date: Thu, Sep 29, 2016 at 4:08 PM

Subject: Re: Sufco Sink Hole

To: Vicky Miller <vmiller@bowieresources.com>, OGMCOAL DNR <ogmcoal@utah.gov>

Cc: Steve Christensen <stevechristensen@utah.gov>, Priscilla Burton <priscillaburton@utah.gov>, Daron Haddock <daronhaddock@utah.gov>

Vicky,

I have completed a quick review of the repair plan for the April 2016 sink hole that you provided in the previous email and would recommend it as a prudent engineered repair.

I appreciate your immediate efforts to secure the site with fencing and prompt responses with an engineering repair plan. I agree with your assessment of the unfortunate alignment of a natural void coinciding with a mid panel subsidence as the most reasonable explanation of the event, and the proposed plan for a long term mitigation is a more desirable option than filling the sink hole due to the size of hole. The volumes required to fill the hole would indeed require significant volumes that would result in a much larger area of disturbance than setting back the current condition to a stable slope matching similar depressions in the vicinity.

The five basic points outlined for the repair of the sink hole follow and meet reasonable good practice of engineering. For example:

1. Following prudent engineering by minimizing the disturbance by the proposed single track access road to the site that is 1000 feet in length that will be roughed and seeded upon completion.
2. The plan to reclaim a minimum eight to 30 inches of topsoil within the anticipated disturbance area and protect the soil in the interim of the repair with silt fence.
3. Stabilize the residual material to an engineered down slope of 2.5:1. The final slope will tie into AOC and blend in with natural sink holes in the vicinity.
4. Redistribute 8-15 inches of topsoil, bringing in additional topsoil if required. Final surface will be roughened to mitigate erosion.
5. Seeded with a site specific native mix by hand broadcasting.

I hope the weather will hold out for you to be able to complete the repair this year but due to the elevation of the site understand if the repair is delayed.

Cheryl Parker, M.S., P.E. | Coal Program Engineer

State of Utah DNR
Division of Oil Gas & Mining
1594 W North Temple, Suite 1210
Salt Lake City, UT 84116
Office: 801-538-5286

—
Steve Christensen
Utah Division of Oil, Gas and Mining
1594 W North Temple, Suite 1210
Salt Lake City, Utah 84116
(801) 538-5350
stevechristensen@utah.gov

—
Steve Christensen
Utah Division of Oil, Gas and Mining
1594 W North Temple, Suite 1210
Salt Lake City, Utah 84116
(801) 538-5350
stevechristensen@utah.gov