STATE OF COLORADO

Cazier - DNR, Tim <tim.cazier@state.co.us>

Re: Providence Mining Stormwater Permit - Cripple Creek Colorado

Rosow - CDPHE, Kathleen <kathleen.rosow@state.co.us> Fri, Aug 2, 2013 at 5:10 PM
To: Braun Environmental <braunenv@msn.com>
Cc: "Scott, Erin" <erin.scott@state.co.us>, Tim Cazier - DNR <tim.cazier@state.co.us>

Art,

Thank you for the information regarding the Providence mine, and I apologize for the delay in responding to your email.

I reviewed the information you provided, along with the mining application submitted to DRMS in December 2012, and also talked with Tim Cazier (DRMS) about the mine site today. Based on this information and associated photographs, a stormwater discharge permit certification is required for the Providence mine site.

The referenced photographs indicate that the site has been altered/improved to facilitate the prospecting/mining operations at the site,and as you indicated by phone, material around the portal entrance has been moved, concrete surfaces added to the pad, and equipment moved on-site for site operations.

An application for the CDPS General Permit for Stormwater Discharges Associated With Metal Mining Operations and Mine-Waste Remediation (COR040000) is attached for your use. Note that permit COR040000 expired on September 30, 2011. This permit is administratively continued and remains in effect under Section 104(7) of the Administrative Procedures Act, C.R.S. 1973, 24-4-101, et seq (1982 repl. vol. 10) until a renewal permit/certification is issued and effective.

As we discussed, stormwater that comes into contact with any raw material, ore, or waste products such as tailings at the Providence Mine site, and discharges to surface water cannot be covered under permit COR040000 - a alternate CDPS permit is required for such discharges. If you anticipate such discharges from the mine site, please coordinate with the Water Quality Control Division well in advance as preparing an individual permit is a lengthy process.

Please call with any questions you may have,

Kathy

Kathleen Rosow - Work Group Lead
Permits Section| Water Quality Control Division
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On Thu, Jul 18, 2013 at 11:50 AM, Braun Environmental <braunenv@msn.com> wrote:

> Kathy,
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> It took me a little longer to get my visuals together, so here is finally my email.
>
> As we discussed, this site and the storm water permitting have me a little bit stumped. On one hand the site looks to need a storm water permit and on the other it appears to not need one. I will start with some background.

DRMS got this started when I submitted the 110 permit application on behalf of Providence Mining (Permit No 2012-52). In the permit, it was stated that we hoped someday that sulfide ore would be mined. DRMS interpreted this to mean that the project was going to mine sulfide ore and would need a storm water permit based on a potentially hazardous mineral.

The site is currently an exploration project that DRMS decided last year should have a 110 permit. The project is not actually in mining phase, but is instead in development stage; the work being performed to rehabilitate an old underground mine. The company has not yet rehabilitated enough of the mine to have intercepted any areas capable of producing significant quantities of any type of ores, especially high sulfide ores. At this point, we have no sampling evidence that minable grades of sulfide ores exist on the site and the rehabilitation done so far is a long way from even accessing areas where these materials might even exist. It is possible that no producible quantities of sulfide ore will ever be found. With this in mind, there is no reason at the present time to construct any containment facility for materials that are not known to exist, nor would it be proper to develop handling procedures for materials that have yet to be discovered. If the materials are found in the future, then procedures can be developed and permits obtained as necessary, based on factual information. Any other compounds or chemicals that might be used on the site are to be stored in proper containers and under cover as appropriate per EPA regulations. Therefore, it appears that the No Exposure Certification might be correct for this side of the issue.

Without the presence of potentially hazardous materials, what remains is the sediment component for the runoff. The project occupies a historically disturbed area (see topographic map-Exhibit E-1A) that dates back 100 years or more. Access to the project area is via an old road that has been in existence for more than 100 years, and work is limited to an old waste rock pile that has been in existence nearly as long. The operation is limited to the use of that road and the level area located near the old mine portal. The area can be identified on the attached map by the cultural labeled features shown, i.e, office, porta-john, wall, and water tank. The operation is almost wholly located on that historically disturbed area, with any new disturbance anticipated to be well under the one acre limit that would trigger the requirement for a permit, per § 122.26(b)(15).

The site is located on a west-facing hillside about 400 feet distance from a dry stream bed located east of the town of Cripple Creek. The DRMS instructions were to model the site using stream basin calculations that would compute run-off, and then predict channel and stream flows. Since the site is so tiny, those channel and stream flow calculations are not really appropriate and would be limited to just a few gallons instead of the normal cubic feet per second rates. However, the basic data on precipitation, and resulting runoff estimates are useful for determining the total amount of runoff, or standing water, that can be generated. The storm data shows that the 24-hour 100-year event is about 3.4 inches with a calculated non-filtration and non–evaporation remainder being about 1.7 inches. This number is useful to calculate the total volume of water that might be expected to move off, or be temporarily retained at the site. This volume number is quite small on the historical disturbed areas, and the added volume on any new areas (less than 1 acre) is expected to be even less. The site currently has small catchment basins built adjacent to the roadways and below the base of the work area (old waste rock pile area). These basins are effectively trapping silt from the runoff generated from the historically disturbed areas that are being used. It is not anticipated that the operation will produce any significant additional storm water runoff over that produced historically.

I have attached a topographic map of the site, and an aerial photo showing the labeled relevant features. The photo that looks east across the valley toward the mine and shows the current work being done, along with the areas of historic disturbance. Let me know what you think, and we will move ahead from there. Thanks for your help.

Art Braun

Braun Environmental, Inc.

303-988-7697

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