



United States Department of the Interior



OFFICE OF SURFACE MINING
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October 11, 2016

John R. Baza, Director
Utah Division of Oil, Gas and Mining
1594 West North Temple
Salt Lake City, UT 84116

Re: TDNs X16-140-545-001 (Dugout Canyon Mine), X16-140-545-002 (Skyline Mine), and X16-140-545-003 (Sufco Mine)

Dear Mr. Baza,

On December 21, 2015, the WildEarth Guardians (WEG) submitted a citizen complaint, which alleged that the Utah Division of Oil, Gas and Mining (DOGM) has failed to appropriately account for inflation in its bond calculations at the Dugout Canyon, Skyline, and Sufco mines, resulting in bond amounts insufficient to cover the cost of reclamation.¹ In response to the citizen complaint, the Office of Surface Mining Reclamation and Enforcement (OSMRE) issued three Ten-Day Notices (TDN) to DOGM on January 6, 2016. TDNs X16-140-545-001, X16-140-545-002, and X16-140-545-003 cite potential violations under the Utah coal regulatory program (the Utah program) at (1) R645-301-830.200 for failure to assure sufficient bonding exists for completion of the approved reclamation plans and (2) R645-301-830.300 for failure to accurately calculate the costs of reclamation using a current inflation factor based upon an acceptable cost index.

After receiving a State regulatory authority's (RA) response to a TDN, OSMRE must determine whether the standards for appropriate action, or good cause for failing to take appropriate action, have been met in accordance with 30 C.F.R. §§ 842.11(b)(1)(ii)(B)(3) and (4). An action or response from DOGM that is not arbitrary, capricious, or an abuse of discretion will be considered "appropriate action" if it causes a violation to be corrected or "good cause" if it shows a valid reason for failure to take such action. 30 C.F.R. § 842.11(b)(2). In pertinent part, OSMRE may determine that the RA has shown good cause for not taking action where the alleged violation does not exist under the approved State program. 30 C.F.R. §

¹ In the same letter dated December 21, 2015, WEG also alleged that DOGM inconsistently reviews bond amounts and does not ensure adequate bonding of all coal mining operations within the State of Utah. WEG therefore requested that OSMRE conduct an evaluation of the Utah program under 30 C.F.R. § 733.12. While WEG's allegations for both its citizen complaint and request for a State program evaluation are interrelated, this determination pertains only to DOGM's January 22, 2016 TDN response letter. OSMRE issued a determination on the WEG Part 733 request on August 16, 2016, and concluded that WEG's allegations do not warrant further evaluation pursuant to 30 C.F.R. § 733.12.

842.11(b)(1)(ii)(B)(4)(i). OSMRE will make a finding of appropriate action or good cause if the RA presents a rational basis for its decision, even if OSMRE might have decided differently. In reaching its determination, OSMRE will not substitute its judgment for that of the RA. *See John L. Stenger*, 175 IBLA 266, 278 (Aug. 6, 2008).

On January 22, 2016, DOGM submitted its response to the three TDNs stating that no violations exist under either the Utah Coal Mining Reclamation Act or the Utah Administrative Code Rules (the Utah rules). For the reasons discussed below, OSMRE determined that DOGM has shown good cause for not taking action.

ALLEGED VIOLATION 1: DOGM has not assured sufficient bonding for completion of the approved reclamation plan, as required under R645-301-830.200 of the Utah rules.

In its TDN response, DOGM states the alleged violations of R645-301-830.200, for potential failure to assure sufficient bonding, are unfounded because all three sites hold bonds sufficient for completion of the approved reclamation plans. DOGM asserts that its bond calculation methodology and practices ensure sufficient bonding for each mine and that its procedures reflect the level of time and professional assessment necessary to ensure that bonding occurs in accordance with the Utah program and applicable technical guidance. From pages 2 through 13 of its TDN response, DOGM provides a detailed description of its procedures for reviewing and calculating reclamation cost estimates and associated bond amounts. DOGM's response also provides additional materials including Technical Directive 007 (Tech 007) as Exhibit A, Administrative Directive 002 (ADM 002) as Exhibit B, bond summary and mid-term review worksheets for the Dugout Canyon, Skyline, and Sufco mines as Exhibits C, D, and E, respectively, and reclamation cost worksheets for these mines as Exhibit F.

DOGM's TDN response explains that its method for calculating reclamation costs and the bond amounts follows its internal Technical Directives, some of which are based on OSMRE's Handbook for Calculation of Reclamation Bond Amounts. DOGM's Technical Directive 007, "Calculation Guidelines for Determining Reclamation Bond Amounts" (Tech 007) establishes specific requirements and procedures for calculating and determining the amount of the reclamation bonds.

Moreover, DOGM explains that it reviews reclamation costs and the bond amount during mid-term permit review, permit revision, and when an increase in the worst-case reclamation scenario occurs. Consistent with the Utah program requirements, DOGM states that it adjusts each bond amount periodically throughout the life of the mine as the cost of future reclamation changes, as required by R645-301-830.410. DOGM additionally explains that it elected to establish a set review schedule to reevaluate and adjust bond amounts in its Administrative Directive 002, "Mid-Term Reviews" (ADM 002). ADM 002 outlines internal procedures and cites to the regulatory basis for conducting its mid-term review process, which includes reviewing the bond amount.

DOGM's TDN response states that each time DOGM recalculates a bond cost estimate, present-day dollars are used for all direct and indirect cost line items. Response at 10. Direct reclamation costs (those associated with demolition, earthwork, and revegetation) are based upon

detailed drawings and individual reclamation line item activities submitted by the permittee, as required by R645-301-830.140. Response at 6. To calculate indirect costs (those associated with mobilization and demobilization of equipment, contingencies, contractor profit and overhead, project management fees, etc.), DOGM employs a mix of flat percentages and R.S. Means Heavy Constructions Cost Data (R.S. Means). Response at 9. An “iterative process” is used as necessary to resolve any discrepancies, to DOGM’s satisfaction, between the numbers provided by the permittee and DOGM’s own calculations. Response at 6-7. An escalation factor (also referred to as an “inflation factor”) is then calculated to estimate the anticipated inflation rate; this is applied to the total direct and indirect costs to project anticipated costs five years into the future, at which point DOGM then recalculates the reclamation cost estimate. Response at 10.

If a significant permit revision changes the future costs of reclamation, DOGM explained in its TDN response that it updates all reclamation cost line items and recalculates the escalation factor to project costs to the next scheduled mid-term review. If a minor permit revision changes the future cost of reclamation, the most recent escalation factor is applied to the new costs, projecting those costs to the next scheduled mid-term review, and those costs are added to the most recent reclamation cost estimate. Response at 11. After all necessary calculations are complete, DOGM assesses whether the bond amount held is adequate to assure completion of the permitted reclamation plan. Response at 11.

OSMRE reviewed the materials provided by DOGM in addition to online permit information available for each of the three identified mines. The online permitting information was consistent with the information provided by DOGM in its TDN response and indicated that review and adjustment procedures were consistently followed as set forth in ADM 002. Our review of prior permitting documentation indicated that in some instances, a permittee opts to retain a higher posted bond amount than required to reduce administrative costs. This occurred when the reclamation cost estimate decreased or was lower than the posted bond amount. When the recalculated reclamation cost estimate exceeded the posted bond amount, OSMRE’s review also found that DOGM routinely required the permittee to adjust the bond amount. This is to make certain posted bond amounts are sufficient to assure completion of the reclamation plan as required by R645-301-830.200.

OSMRE’s review of the permitting documentation for each mine indicates that DOGM reevaluated the reclamation cost estimates and required bond adjustments when necessary during recent mid-term permit reviews, consistent with DOGM’s TDN response. DOGM completed and approved the last mid-term review at Skyline on April 16, 2015, followed by Sufco mine on September 4, 2015, and lastly Dugout Canyon, which was approved on May 3, 2016.

In addition to routine mid-term reviews, DOGM recently reevaluated the bond amounts at the Skyline and Sufco mines as part of its permit revision process. On June 28, 2016, DOGM recalculated the reclamation cost estimate at the Sufco mine as part of a permit revision. Because the new cost estimate exceeded the posted bond amount, DOGM required the permittee to post additional bond. On July 19, 2016, DOGM adjusted the reclamation cost estimate for the Skyline mine to account for changes resulting from a permit revision and to correct historical errors in demolition, earthwork, and revegetation costs. As the posted bond amount at Skyline

was greater than the reclamation cost estimate, the face of the bond was maintained and did not change.

Recent approvals for partial Phase III bond release at Dugout Canyon mine further bolster DOGM's assertion that it holds bonds sufficient to cover the cost of implementing the reclamation plan for each mine. At the Dugout Canyon mine, Phase III bond release occurred as recently as July 26, 2016. This again evidences the situation in which DOGM approved a partial Phase III bond release and the permittee opted to retain its current surety bond amount. Thus, where the actual bond amount held is more than, or equal to, the reclamation cost estimate, the R645-301-830.200 requirement is satisfied.

DOGM's TDN response provides a rational basis for concluding that no violations exist under the Utah program because each site is bonded in an amount sufficient to assure completion of the reclamation plan, as required by R645-301-830.200. In addition to the Utah program requirements, DOGM developed internal technical directives to establish procedures for calculating bonds and procedures for reevaluating and adjusting the bond amounts. The overall process presented in Tech 007 appears to be technically sound for bond calculations, and would likely yield consistent and defensible cost estimate calculations. OSMRE's review of the Dugout Canyon, Skyline, and Sufco permitting documents indicates that DOGM routinely adjusted the bond amounts when necessary to ensure that a sufficient bond amount was held. In some instances, permittees even retained a higher posted bond amount than required. Review of each site's permit documents evidenced DOGM's adherence to the ADM 002 procedures for assessing bond adequacy at mid-term permit review, as well as for permit revisions and where the cost of reclamation changes. Information from recent permitting actions, including the permit revisions at Skyline and Sufco mines and the partial Phase III bond release at Dugout Canyon, alongside each permit's mid-term review are consistent with DOGM's assertion in its TDN response that sufficient bonds are held at each site. Therefore, OSMRE finds that DOGM has shown good cause for not taking action to correct the alleged violations under R645-301-830.200 because no such violations exist at the Dugout Canyon, Skyline, and Sufco mines.

ALLEGED VIOLATION 2: DOGM has inaccurately calculated the cost of reclamation by using an inflation factor from an outdated Cost Index in violation of R645-301-830.300.

In its TDN response, DOGM states that it uses an appropriate escalation factor for its calculations to accurately reflect the future anticipated reclamation costs at each mine site, and the alleged violations under R645-301-830.300 are therefore unfounded. Response at 2. As explained in the section above, DOGM provides a detailed description of the methodologies and procedures used to employ inflation factors in reclamation bond calculations, as well as bond cost calculation worksheets. According to the TDN response, when recalculating reclamation cost estimates, DOGM updates each line item cost estimate using then-present-day dollars as provided in ADM 002. Response at 10. DOGM then calculates and applies an escalation factor to the updated present-day cost estimate, yielding the anticipated total reclamation cost five years into the future. *Id.* Bond adequacy is then assessed through a comparison between the revised total reclamation cost estimate and the total posted bond amount. *Id.*

On page 11 of the TDN response, DOGM indicates that it utilizes R.S. Means Cost Index values to calculate an escalation factor appropriate for use during each year. On page 12, DOGM's TDN response indicates that it averages the previous five years of January R.S. Means Index values to calculate the inflation factor. According to DOGM, that inflation factor is then applied to the updated total reclamation cost estimate to project those costs five years into the future to the date when DOGM will recalculate all costs and the associated inflation factor again, during the next mid-term permit review.

The TDNs cite alleged violations at each site as a result of DOGM's use of an outdated cost index, thereby skewing the inflated reclamation costs calculations. The Utah rules only require that DOGM apply an inflation factor based upon an *acceptable* cost index. R645-301-830.300 (emphasis added). OSMRE agrees with DOGM's rationale that its use of R.S. Means is appropriate as it incorporates costs typically associated with reclamation projects. While no Federal counterpart exists specific to inflation factor use or requirements, a 1983 final rule explained that the Federal regulations for bond adjustments "as written provides the regulatory authority with the discretion to consider the potential impact of inflation, but does not require it. Rather, [30 C.F.R.] § 800.15 may be used to provide for the adjustment of the bond amount as necessary to cover such problems as inflation." 48 Fed. Reg. 32932 (July 19, 1983). DOGM opted to add inflation factor requirements within the Utah rules in addition to the general requirement to adjust the bond amount to reflect the future cost of reclamation.

A review of the permit documentation for each site is consistent with DOGM's TDN response. As described by DOGM and ADM 002, the reclamation cost estimates at all three sites were reevaluated and escalated to account for anticipated inflation during mid-term reviews. OSMRE's review of each permit found that DOGM is calculating and applying an updated inflation factor to reclamation cost estimates for each permit, at minimum, every five years as DOGM explained in its TDN response. The updated inflation factor is used to estimate the effects of inflation five years into the future, when DOGM again updates anticipated costs to present-day dollars and recalculates the inflation factor based on recent R.S. Means Cost Index values. In this way, inflation factors are always calculated based upon actual recent inflation. As addressed in the prior section, DOGM approved and completed mid-term reviews, which included reclamation cost estimate updates, at Skyline mine on April 16, 2015, at Sufco mine on September 4, 2015, and at Dugout Canyon mine on May 3, 2016. The reclamation cost estimates for all three mines were recalculated to employ present-day-dollar line item costs. Each total reclamation cost was escalated five years forward to 2019 dollars for Skyline and Sufco mines and 2020 dollars for Dugout Canyon mine.

Evaluation of the mid-term review documentation demonstrated DOGM's thoroughness in recalculating each reclamation cost estimate as well as its attention to detail with regard to ensuring that the permittee used current R.S. Means cost information. During OSMRE's review of the mid-term review documents exchanged between DOGM and the permittees, DOGM deemed one permittee's mid-term review response as deficient because certain R.S. Means unit costs were incorrect and were not updated to reflect changes in the current year's edition. DOGM requested to meet with the permittee to ensure the reclamation bond cost estimate was updated accurately. DOGM issued its final approval at a later date and required the permittee to post additional bond.

However, unlike averaging the January R.S. Means values from the previous five years as explained on page 12 of the TDN response, Tech 007 states that DOGM uses “the *three-year average* for the escalation factor from the Means Historical Cost Index for Utah.” Tech 007 at page 10, § (D)(1) (emphasis added). The following subsection additionally provides that DOGM “will escalate the reclamation costs for a maximum of five years.” *Id.* at 10, § (D)(2). OSMRE calculated inflation factors based upon R.S. Means values over the three years preceding DOGM’s recalculation events as established in Tech 007 and found that DOGM’s inflation factors were much lower. OSMRE could not recreate DOGM’s inflation factor based on R.S. Means Index values from the three years preceding recalculation events. This discrepancy may be due to the use of different R.S. Means values since DOGM’s TDN response references a five year average of January values, whereas Tech 007 provides for the use of inflation data from the three preceding years as the basis for calculating the escalation factor. However, OSMRE’s permit review notes that DOGM does in fact recalculate and apply escalation factors during each reclamation cost estimate update, which occurs at a minimum of every five years, and all costs are projected five years into the future.

OSMRE finds that DOGM has provided a rational basis for concluding that no violation of R645-301-830.300 exists at the Dugout Canyon, Skyline, and Sufco mines. OSMRE agrees that DOGM’s use of R.S. Means is appropriate for reclamation cost estimates and inflation factor calculations. Consistent with the TDN response, OSMRE’s review of permit mid-term review documents indicated that each mine updated reclamation cost estimates to present-day dollars and applied an updated escalation factor to estimate the effects of inflation over the ensuing five-year period to when all cost estimates will again be updated. Where a permittee submitted a reclamation cost estimate based on outdated or incorrect R.S. Means costs, DOGM deemed the permittee’s mid-term review response deficient and required that the permittee correct the R.S. Means unit costs. Therefore, DOGM has shown good cause for not taking action because under the Utah program, no violation exists at the three identified mines. Regarding the variation between DOGM and OSMRE’s calculations, OSMRE will follow up with DOGM through oversight procedures to further clarify how DOGM employs R.S. Means values when calculating inflation factors.

DETERMINATION ON TDN X16-140-545-001, X16-140-545-002, and X16-140-545-003

For the reasons explained above, OSMRE finds that DOGM has shown good cause for not taking action under 30 C.F.R. § 842.11(b)(1)(ii)(B)(4)(i) because the violations alleged at the Dugout Canyon, Skyline, and Sufco mines do not exist under the Utah program. DOGM’s TDN response provides a rational basis to demonstrate that it uses an acceptable cost index typical for reclamation activities to accurately calculate the cost of future reclamation, and that each site is bonded in an amount sufficient to assure completion of each site’s reclamation plan.

Notwithstanding this determination, OSMRE’s review has identified separate concerns associated with DOGM’s internal technical guidance. Portions of Tech 007, which DOGM uses as a reference for calculating bond amounts, as written and as applied, potentially conflict with certain requirements established in the Utah program, SMCRA, and the Federal regulations. The issues identified do not involve the site-specific violations alleged at the Dugout Canyon,

Skyline, and Sufco mines. Instead, these matters will be appropriately addressed through oversight procedures. Following this determination, OSMRE's Denver Field Branch will initiate discussions with DOGM to assess and resolve the issues identified.

For any questions related to this decision, please contact me at (307) 261-6545 or aboehms@osmre.gov.

Sincerely,



Alan Boehms, Manager
Denver Field Branch

C: Jeremy Nichols, WildEarth Guardians