

# **RAILROAD COMMISSION OF TEXAS**

## **HEARINGS DIVISION**

**SMRD DOCKET NO. C16-0005-SC-47-F**

**APPLICATION OF TEXAS WESTMORELAND COAL COMPANY FOR PHASE III  
RELEASE ON 165.8 ACRES, PERMIT NO. 47A, JEWETT E/F MINE,  
LEON AND FREESTONE COUNTIES, TEXAS**

**ORDER APPROVING RELEASE OF PHASE III RECLAMATION OBLIGATIONS**

### **Statement of the Case**

Texas Westmoreland Coal Company (TWCC), 4336 FM 39 S., Jewett, Texas, 75846 applied to the Railroad Commission of Texas (Commission), Surface Mining and Reclamation Division, for release of Phase III reclamation obligations on 165.8 acres within the Jewett E/F Mine, Permit No. 47A, located in Leon and Freestone Counties, Texas. The application is made pursuant to the Texas Surface Coal Mining and Reclamation Act, TEX. NAT. RES. CODE ANN. Ch. 134 (Vernon Supp. 2016), and "Coal Mining Regulations" Tex. R.R. Comm'n, 16 TEX. ADMIN. CODE Ch. 12 (Thomson West 2016).

Phase III release encompasses the completion of the five-year Extended Responsibility Period (ERP) for revegetation and for all reclamation activities related to surface water quality and quantity and groundwater protection for this acreage. Permit No. 47A currently authorizes surface coal mining operations at TWCC's Jewett E/F Mine, within its 9,341-acre permit area. Copies of the application were filed in required County and Commission offices and distributed to applicable agencies for review and comment. No requests for hearing were filed following public notice. The only parties to the proceeding are TWCC and the Commission's Surface Mining and Reclamation Division (Staff). There remain no outstanding issues between the parties. Based on the information provided by the application, Staff analyses, and the inspection of the area, Staff recommends Phase III release of reclamation obligations on 165.8 acres. The parties have filed waivers of preparation and circulation of a proposal for decision.

After consideration of the application and the Findings of Fact and Conclusions of Law, the Commission approves the release of reclamation obligations as recommended by Staff. TWCC does not request adjustment to the approved reclamation bond at this time and no new bond has been submitted. The Commission determines an eligible bond reduction amount of \$169,613.40.

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**Findings of Fact**

Based on the evidence in the record the following Findings of Fact are made:

1. By letter dated October 7, 2015, Texas Westmoreland Coal Company (TWCC) filed its application (Application) with the Railroad Commission of Texas' (Commission) Surface Mining and Reclamation Division (SMRD and/or Staff) for a release of reclamation obligations for 165.8 acres within the F Area of the Jewett E/F Mine, Permit No. 47A, located in portions of Leon and Freestone Counties. Permit 47A was most recently renewed on March 9, 2010. The permit area contains approximately 9,341 acres. TWCC conducted mining operations on the acreage requested for release of reclamation liability from 2005 to 2006.
2. The Application is made pursuant to Texas Surface Coal Mining and Reclamation Act, Tex. Admin. Code Ann. Ch. 134 (Vernon Supp. 2016) (Act), and the Coal Mining Regulations, Tex. R.R. Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2016) (Regulations). No filing fee is required. The Application was properly certified in accordance with §12.312(a)(3).
3. The Application was filed with the Hearings Division by letter dated October 12, 2015. The Commission's SMRD Staff declared the Application Administratively Complete by letter dated March 29, 2016. Staff filed its Technical Analysis (TA) and the December 7, 2015 Field Inspection Report by letter dated August 30, 2016, recommending approval of the bond release application with no outstanding comments.
4. TWCC does not request a reduction in the amount of the approved reclamation bond instruments. The existing reclamation bonds for the permit area total \$33,500,000. The accepted reclamation performance bonds for Permit No. 47A are surety bonds issued by Aspen American Insurance Company in the amount of \$15,500,000 and by Liberty Mutual Insurance Company in the amount of \$18,000,000. These surety bonds were accepted by Commission Orders dated August 9, 2016 and June 12, 2012, respectively.
5. The 165.8 acres recommended for Phase III release are bonded at a rate of \$930 per acre [Finding of Fact No. 25, *infra*].
6. TWCC sent notice by letter dated February 2, 2016 to owners of interests in the areas requested for release and adjacent lands and to local governmental bodies, planning agencies, sewage and water treatment authorities and water companies in the locality as required by §12.312(a)(2) of the Regulations. TWCC mailed notice to the County Judges/Commissioners' Courts of Leon and Freestone Counties, the Natural Resources Conservation Service's local offices in Fairfield, and Centerville, the Texas Commission on Environmental Quality, the Texas Department of Transportation, the Environmental Protection Agency, Region 6, the U.S. Army Corps of Engineers, Fort Worth District Office, the Texas General Land Office, Donie Water Works, Concord-Robbins Water

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- System, the Brazos River Authority, the Central Texas Soil and Water Conservation District, and to several lessees. The areas requested for release are not located within the territorial boundaries of any municipality that would be notified pursuant to §12.313(c) of the Regulations. The Hearings Division received copies of the notification letters which were received by Staff on March 22, 2016. SMRD, as required by §134.133 of the Act, notified Leon County Judge Bryon Ryder of the Application and provided a copy of the approved public notice by certified letter dated March 22, 2016 (Attachment II to Staff's TA).
7. Copies of the Application were filed for public review at the main office of the Railroad Commission of Texas at 1701 North Congress Avenue, William B. Travis Building, Austin, Texas and in the offices of the Leon and Freestone County Clerks.
  8. Notice of application was published once a week for four consecutive weeks in the *Jewett Messenger* circulated in Leon County on February 10, 17, 24 and March 2, 2016, and in the *Fairfield Recorder* circulated in Freestone County on February 11, 18, 25 and March 3, 2016. The two newspapers are papers of general circulation in the area of the proposed bond release request area, Leon and Freestone Counties. The notice of application contains all information required by the Act and Regulations for notice of application for bond release applications. The published notice is adequate notification of the request for release. The notice includes the elements required by §134.129 of the Act and §12.312(a)(2) of the Regulations: the name of the permittee, the precise location of the land affected, the number of acres, permit number at the time of application and date approved, the amount of bond approved, the type and appropriate dates reclamation work was performed, and a description of the results achieved as they relate to the approved reclamation plan. The notice contains information on the applicant, location and boundaries of the permit area, the Application's availability for inspection, and the address to which comments should be sent. TWCC submitted proof of publication to the Commission by letter dated March 16, 2016.
  9. No adverse comments or written objections were filed regarding the request for release. No requests for hearing or informal conference were filed pursuant to §12.313(d).
  10. Pursuant to §12.312(b) of the Regulations, the Division's Inspection and Enforcement (I&E) personnel notified owners of interests in lands and lessees of the Application for release, of the date and time of Staff's field inspection. The notification letters, dated October 16, 2015, stated that a release had been requested and, pursuant to 16 TAC §12.312(b)(1), advised addressees of the opportunity to participate in the on-site inspection on October 27, 2015. I&E also sent notice to the Department of Interior, Office of Surface Mining Reclamation and Enforcement (OSM) (Tulsa, Oklahoma office), however, no OSM representative attended.
  11. The inspection occurred on October 27, 2015 as scheduled. Two landowners/owners of other interests, two Commission inspectors and three mine personnel attended the inspection meeting and field inspection.

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12. The areas proposed for release are detailed in Staff's TA and Field Inspection Report (Attachment III to Staff's TA). Figures and photographs of the proposed release areas, included in the Staff Inspection Report and Evaluation, provide depictions of the areas included in the Application and the specific releases proposed. Photographs from the inspection are included in Appendix IV of the Inspection Report and provide support for the Application. The location of the proposed release area is shown on the Location Map in Appendix I.
13. The Application included ownership and tract information for owners of interests in and adjacent to the area proposed for release. There are four tracts within the release area with approximately 52 owners of such tracts. A portion of Tract No. 749 is within the release area; a portion of Tract No. 773 is within the release area; Tract No. 770 is entirely within the release area and; Tract No. 770-1 is entirely within the release area. There are six adjacent tracts with multiple landowners and six leaseholders.
14. The 165.8 acres proposed for Phase III release were granted Phase I and II Release by Order dated May 15, 2012 (Docket No. C12-0003-SC-47-F).
15. The 165.8 acres for Phase III release have a postmine land use of pastureland. Observations made during the inspection of the request area confirmed that the land has been reclaimed to, and managed in accordance with the approved postmine land use.
16. The 165.8-acre pastureland area is included in one land management unit (LMU): FN1-09P within the Extended Responsibility Area (ERA) that was initiated on August 5, 2009. In accordance with the five-year Extended Responsibility Period (ERP), TWCC submitted 2012 and 2013 ground-cover and productivity data for the LMU by letters dated May 9, 2013, and February 27, 2014, respectively. By subsequent letters dated July 29, 2013, and May 15, 2014, respectively, SMRD Staff determined that the vegetation data for the LMU met the performance standards in accordance with 16 TAC § 12.395(c)(2) during the 2012 and 2013 growing seasons.
17. Minesoil Monitoring Reports for the LMU comprising the proposed release area were submitted, in accordance with the approved soil-testing plan, by letters dated March 31, 2009 (2008 Minesoil Monitoring Report), April 30, 2010 (2009 Minesoil Monitoring Report), and March 31, 2011 (2010 Minesoil Monitoring Report). Subsequently, by letters dated October 14, 2009, July 7, 2010, and May 27, 2011, respectively, Staff concluded the parameters reported were in accordance with the approved soil-testing plan, and the data did not indicate the presence of acid-forming or toxic-forming materials in the top four feet of postmine soils in the release area. By letter dated July 31, 2014, TWCC, in accordance with the ERP and the resample requirements of the approved soil-testing plan, submitted data and analysis of a random ten percent of the grids within the ERA. By letter dated November 25, 2014, Staff determined postmine soil degradation had not occurred within the proposed areas for release, in accordance with §12.395.

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18. The Staff inspection noted no issues with erosion in the areas requested for Phase III release. The Staff Inspection Report and photographs contained in Appendix IV to the Inspection Report reflect that the areas requested for Phase III release are stable with no active erosion evident (§12.389).
19. No portions of the areas proposed for Phase III release of reclamation liability were reclaimed as prime farmland (§§12.201 and 12.620-12.625).
20. No permanent structures are contained within the area for Phase III release.
21. There are no permanent roads within the area for Phase III release.
22. The groundwater hydrologic balance has been protected as required by §12.313(a)(3) and §12.348 and the re-established postmine groundwater system is adequate for the proposed postmine use of the 165.8 acres requested for Phase III release.
  - (1) In addressing requirements of §12.348, TWCC has submitted groundwater monitoring data for the overburden, spoil and underburden aquifers within and adjacent to the Jewett E/F Mine.
  - (2) Groundwater monitoring for the area proposed for Phase III release has been performed in accordance with the provisions of the approved permit. Long-term groundwater monitoring (LTGM) records have been reviewed by Staff on a quarterly basis.
  - (3) The premine overburden water-bearing strata (shallow systems within 100-150 feet from the surface) in the reclaimed area have been mined through; however, these strata constituted only minor aquifers. The underburden aquifers in the Jewett Mine area are separated from the overlying mined spoil by underclays having a thickness of five feet or more. Immediately below these underclays are the shallowest water-bearing underburden units, comprised of thin silty sand lenses of limited lateral hydrologic extent interbedded with clay layers and lignite stringers. The shallowest significant aquifer units within the mine area are sedimentary units of the lower Calvert Bluff and Simsboro Formations underlying the lignite-bearing strata near the base of the Calvert Bluff Formation.
  - (4) One spoil long-term groundwater monitoring (LTGM) well (FSPOIL-1) is located in Area F adjacent to the southeastern boundary of the area requested for Phase III release. Data for this relatively recent spoil monitoring well show that the water-table elevation has increased by more than eight feet over the period of record (3rd Quarter 2014 - 1st Quarter 2016) and now appears to be at or above the ground level (artesian conditions), indicating that the sandy soils in the postmine surface have rapidly resaturated, indicative of and similar to premine conditions for much of the area.

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- (5) The nearest nest of LTGM wells is located about 4,500 feet south-southeast of the proposed release area. Overburden LTGM well F0213-4 is completed in native Carrizo Formation sands, well F0213-3 is completed in the Calvert Bluff interburden confined sand, and well F0213-1 is completed in the nearest underburden confined Simsboro sand. Mining in F Area has occurred more recently adjacent to these wells, and the drawdown effects of pumpage and pit inflow seen in these wells are therefore more recent. The approved Probable Hydrologic Consequences (PHC) determination for Permit No. 47A predicts a maximum simulated drawdown in water-level elevation of five feet. The most recent measurements provided in the Application for wells F0213-3 and F0213-4 indicate a decrease in the water-level that exceeds the PHC prediction with decreases of 12.3ft and 7.6ft, respectively, from premine levels. After the ALJ asked for clarification, Staff provided an explanation that because these drawdowns are temporary in the undisturbed overburden aquifers adjacent to mined areas, a demonstration of positive recovery is the overriding factor regarding the protection of water quantity. Data collected from F0213-3 and F0213-4 indicate that drawdown reached a maximum in 2013 and are presently increasing in water-level elevation. Additionally, the drawdown models that provided the basis of the water-level prediction in the PHC determination used parameters that were sufficiently conservative that the actual extents of the drawdown should not exceed the predicted extents. Further, water elevations over the period of record for the underburden monitoring well (F0213-1) demonstrate that the primary underburden aquifer that was actively depressurized now shows recovery considerably higher (+13 feet) than the premine (baseline) elevation.
- (6) The reclaimed spoil-area water quality appears to have followed trends expected from the PHC determination for the Jewett Mine. No problematic issues are apparent with chloride, sulfate, pH, iron and manganese. Data from spoil LTGM wells show a median TDS concentration of 1,210 mg/L, ranging from 837 mg/L to 2,010 mg/L over the short period of record, and is decreasing, having already reached concentrations suitable for agricultural use.
- (7) Analysis of water quality in the overburden and interburden confined aquifers of the reclaimed area indicate no significant impacts have occurred due to mining. Data collected from the F0213 well nest indicates there are no problematic issues with chloride, sulfate, pH, iron and manganese. TDS concentrations have shown very little to no effect from mining, remaining stable in the 330-375 mg/L range. Carrizo Formation water quality is the most variable, with TDS concentrations elevating somewhat from 2007 to 2014 and decreasing in more recent months. The Carrizo Formation waters continue to show the freshest water in the region, currently having a TDS concentration of about 50 mg/L, approaching the premine TDS concentration of about 45 mg/L. TDS concentrations appear to have reached maximums and are now decreasing, or have exhibited stabilization for several years.

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23. TWCC has conducted surface mining activities to ensure surface water quantity and quality have been protected in accordance with §12.313(a)(3) and §12.349.
- (1) The area proposed for release from reclamation liability is located in the F mine area of the Jewett E/F Mine. Runoff from the Phase III release area ultimately drains to Buffalo Creek, which discharges into the Trinity River. All discharges from the Jewett E/F Area Mine flow to the Trinity River (Stream Segment No. 0804) and Navasota River [Stream Segment No. 1252 (Lake Limestone)]. Stream segment criteria have been established by TCEQ.
  - (2) TCEQ issued Texas Pollutant Discharge Elimination System (TPDES) Permit No. 02653 to TWCC for wastewater discharges from the Jewett Mine. Runoff from all disturbed areas at the Jewett Mine is monitored under the TPDES Permit, applicable stream segment criteria and provisions outlined in the approved long-term surface water monitoring program for Permit 47A.
  - (3) During the period of record, runoff from the area proposed for release from reclamation obligations flowed to Pond 033. Long-term data and quarterly pond data are typically provided and analyzed as described in Advisory Notice AD-BO-312 in support of Phase II release from reclamation obligations and a review is contained in the Commission's Order approving Phase II release for this area [Finding of Fact No. 14, *supra*]; therefore, Staff did not consider any long-term data from final discharge ponds and quarterly pond data from permanent impoundments in its review of this application for Phase III release.
  - (4) In support of Phase III release from reclamation obligations, TWCC provided long-term surface water monitoring (LTSM) data from six LTSM stations located throughout the permit area. Staff, in its TA, noted TWCC's evaluation of all six LTSM stations, but limited its evaluation to LTSM stations FSW-7 and FSW-2. These stations are used to monitor discharges upstream and downstream of the 165.8-acre parcel proposed for release which allows for a comparison of the water quality between areas that have either been disturbed, or are undisturbed by mining related activities. LTSM station FSW-7 is located on Wilkerson Spring Branch and monitors undisturbed runoff. LTSM station FSW-2 is located on Buffalo Creek and receives disturbed runoff from the 165.8-acre parcel.
  - (5) The approved LTSM plan requires that LTSM stations FSW-2 (Buffalo Creek - Disturbed) and FSW-7 (Wilkerson Spring Branch - Undisturbed) be sampled for flow-weighted averages (Q), pH, total dissolved solids (TDS), total suspended solids (TSS), total iron (Fe), and total manganese (Mn).
  - (6) Staff, in its TA, determined the parcel proposed for release did not have a negative impact on surface water quality by comparing the water quality of disturbed (FSW-2) and undisturbed (FSW-7) LTSM stations through an evaluation of (1) baseline

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surface water data, (2) applicable stream segment criteria to include Federal and State effluent standards, (3) the probable hydrologic consequences (PHC) determination by the permittee and (4) the Cumulative Hydrologic Impact Assessment (CHIA) estimates by Staff for specific mass-balance points.

- a. The average for pH levels at undisturbed FSW-7 [7.0 standard units (s.u.)] and disturbed FSW-2 (7.3 s.u.) fall within the TCEQ stream segment standard (6.5 – 9.0 s.u.) and the allowable range under the TPDES permit (6.0 – 9.0 s.u.). The lowest pH values collected for both LTSM stations occurred in December 2006 [5.9 (FSW-7) & 6.3 s.u. (FSW-2)], but since that time have remained within the TCEQ criterion. The baseline average for each station is either equal to, or marginally lower than, the respective averages observed during the monitoring period. The baseline range for each station is also similar to the respective ranges established during the monitoring period.
- b. The average TDS concentrations at undisturbed FSW-7 (183.8 mg/L) and disturbed FSW-2 (457.6 mg/L) fall within the applicable TCEQ stream segment criteria (600 mg/L). The range of TDS concentrations at both undisturbed FSW-7 (20.0 mg/L – 689.0 mg/L) and disturbed FSW-2 (202.0 mg/L – 2,000.0 mg/L) are higher than the stream segment criteria (600 mg/L); however, since peak concentrations were recorded in June 2008, and September 2009, respectively, no sample has exceeded the applicable standard. The baseline average and range of TDS concentrations at both stations is lower than that collected during the monitoring period, but is not appreciably dissimilar in the context of Staff's full evaluation. The range and average at undisturbed FSW-7 is lower than that at disturbed FSW-2. This is expected given FSW-2 receives runoff from areas disturbed by mining activities; however, as stated above, the average TDS concentration at FSW-2 meets the criterion for Stream Segment No. 0804 and no single sample exceeded the criterion during the final five years data was collected.
- c. Total Fe concentrations at undisturbed FSW-7 (Avg: 2.0 mg/L; Range: 0.6 mg/L – 4.2 mg/L) appear to be similar to the concentrations at disturbed FSW-2 (Avg: 1.9 mg/L; Range: 0.3 mg/L – 10.3 mg/L). A comparison to the baseline data suggests an increase in Fe concentration occurred during the monitoring period at both undisturbed FSW-7 (Avg: 1.6; Range: 0.5 mg/L – 2.9 mg/L) and disturbed FSW-2 (Avg: 1.7, Range: 0.5 mg/L – 3.5 mg/L). However, Fe measurements taken at FSW-7 were within the range observed during the baseline period after March 2009, save one reading in March 2015 (4.18 mg/L). This one reading can be considered an outlier based on consistent data over the five years preceding this measurement and a final reading of 1.39 mg/L, immediately subsequent, in June 2015, registering well within the baseline range. Similarly, data from disturbed FSW-2 fell within the baseline range throughout the monitoring period, save three measurements, none of which were taken after March 2008. The sustained conformity with the baseline

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standards at both LTSM stations, coupled with a reasoned analysis of the data, suggests that mining activities in the proposed release area have not resulted in discernible impacts to Fe levels in surface water. Also, Fe concentrations have remained within the limitations established by the TPDES permit [3.0/6.0 mg/L (allowable daily average/allowable daily maximum)].

- d. Total Mn concentrations at undisturbed FSW-7 (Avg: 0.2 mg/L; Range: 0.1 mg/L – 1.1 mg/L) are lower than concentrations at disturbed FSW-2 (Avg: 0.6 mg/L; Range: 0.1 mg/L – 3.3 mg/L). However, a comparison to the baseline data for undisturbed FSW-7 (Avg: 0.3 mg/L; Range: 0.02 mg/L – 3.0 mg/L) and disturbed FSW-2 (Avg: 0.7 mg/L; Range: 0.2 mg/L – 2.5 mg/L) suggests mining activities in the proposed release area have not resulted in discernible impacts to Mn levels in surface water. This conclusion is further supported by sustained compliance with the standards for Mn under TPDES Permit No. 02653 [1.0/2.0 mg/L (allowable daily average/allowable daily maximum)], save a single isolated reading (3.25 mg/L) exceeding the allowable daily maximum at disturbed FSW-2 in September 2006.
- e. The average TSS concentrations observed during the monitoring period are consistent with measurements taken during the baseline period. The TSS concentrations recorded at disturbed FSW-2 (Avg: 27.7 mg/L; Range: 4.0 mg/L – 322.0 mg/L) fall within, or very near the maximum of, the range reported during the baseline period (Avg: 20.9 mg/L; Range: 4.0 mg/L – 51.0 mg/L) save one reading in December 2007 (322.0 mg/L). An adjustment of the average to account for this outlier, coupled with sustained conformity with the baseline range since 2007, indicates mining activities in the proposed release area have not resulted in discernible impacts to TSS concentration levels in surface water. Further, after accounting for an outlying data point recorded during the baseline period, TSS concentrations observed during the monitoring period at undisturbed FSW-7 (Avg: 15.2 mg/L; Range: 4.0 mg/L – 32.0 mg/L) also appear to have remained consistent with premine levels observed during the baseline period (Avg: 24.9 mg/L; Range: 5.0 mg/L – 78.0 mg/L). The stated evaluation of the TSS data also indicates compliance with the standards set forth in the TPDES permit [35/70 mg/L (allowable daily average/allowable daily maximum)].
- f. Surface water quality for the proposed area has been protected in accordance with the approved surface water Probable Hydrologic Consequences (PHC) determination for Permit No. 47A. Staff's statistical and trend analysis of surface water quality data from LTSM stations FSW-2 and FSW-7 indicates that observed increases in levels for each criterion reported are consistent with the approved PHC, the CHIA and/or stream criteria.
- g. No negative impacts to water quality are anticipated from flows leaving the proposed release area. The watershed for LTSM station FSW-2 monitors all

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disturbed surface water leaving the permit boundary. Accordingly, an evaluation of the data from FSW-2 provides an optimal assessment of the impact mining activities attributable to Permit No. 47A have had on surface water quality outside the permit area. The CHIA for this mine is contained in Staff's TA for the Turlington Mine (Docket No. C9-0008-SC-00-A, Permit No. 54, TA Addendum No. 4, May 14, 2010) and the Kosse Mine (Docket No. C7-0026-SC-50-C, Permit No. 50A, TA Addendum No. 2, December 16, 2011). These CHIAs contain an assessment of the cumulative effects of all anticipated mining activities in the Navasota River Basin and in the Trinity River Basin, which includes activities associated with the most recent renewals for Permit Nos. 32, 26, 38, 3 and the Jewett E/F Mine, Permit No. 47A. In its CHIA (Turlington Mine CHIA document), issued May 14, 2010, Staff predicted the greatest potential increase in the indicator parameter (TDS concentration) to occur at the mass-balance point located at USGS Station No. 08065000 on the Trinity River. The CHIA identified baseline TDS concentration of 242 mg/L at this USGS station and quantified an anticipated increase by as much as 0.8%, to approximately 244 mg/L over the life of mining activities within the Trinity River Basin. The average flow-weighted TDS concentration during the baseline monitoring period (September 1998 – February 2000) at station FSW-2 was 313.7 mg/L. Monitoring of TDS concentrations and flow at FSW-2 recommenced in March 2006, in accordance with the approved LTSM plan. The average flow-weighted TDS concentration at station FSW-2 during the monitoring period (March 2006 – June 2016) is 331.7 mg/L. This calculation (331.7 mg/L), while greater than the estimated value in the CHIA at the mass-balance point (244 mg/L) and an increase from the baseline period (313.7 mg/L), is not sufficient to conclude TDS concentrations downstream of the permit area will not comply with the CHIA. There is sufficient overlap in the sampling periods of both stations, up until the mass-balance point standard was established by the CHIA in 2010/2011, to conclude TDS concentrations measured at FSW-2 are not indicative of concentrations at the mass-balance point due to dilution naturally occurring as flow progresses downstream. Further, the flow-weighted average during the monitoring period (331.7 mg/L) remains well below the criteria established for Stream Segment No. 0804 (600 mg/L).

- (7) Staff, in its TA, determined the parcel proposed for release did not have a negative impact on surface water quantity downstream of the permit area by comparing flow data representative of pre- and postmine conditions.
  - a. Data provided as a part of the PHC determination in the permit for the Jewett E/F Area Mine indicate that runoff volumes will increase from premine to postmine conditions as a result of decreased vegetation density. This increase

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is mitigated by the increase in surface water impoundments, which will act to retain and detain surface water runoff. By detaining runoff, peak flows from precipitation events will be attenuated and infiltration to aquifers will be increased, as well as evapotranspiration. Therefore, longer sustained flows will be expected because of the controlled discharge through the ponds and increased groundwater contributions to stream baseflow.

- b. A comparison of baseline data to long-term monitoring data from disturbed LTSM Station FSW-2 was used to evaluate the impact to water quantity outside the permit area. The watershed of disturbed FSW-2 consists of 65,408 acres. The entire 256-acre watershed of undisturbed FSW-7 is located within the watershed of disturbed FSW-2 which monitors all disturbed surface water exiting the permit area. Therefore, a useful comparison between the reported flows at these stations cannot be made. Staff determined a comparison between the median flows observed during the baseline and long-term monitoring periods provided the most accurate depiction of mining activities' impact on surface water quantity downstream. This determination was based on several large storm events (flow greater than 20,000 gpm) occurring during the long-term monitoring period that were not experienced during the baseline period (maximum flow was less than 11,000 gpm), effectively precluding a meaningful comparison of the averages. Staff then converted the flow statistics provided in the Application from gallons per minute (gpm) to cubic feet per second (cfs) to facilitate the comparison. The median flow for disturbed FSW-2 during the baseline period is 11.8 cfs and is slightly larger than the median flow of 9.2 cfs observed during the monitoring period. Based on this comparison, Staff concluded that water being discharged from Permit No. 47A has not been sufficiently diminished or increased by activities as to cause material damage to downstream surface water users.
24. Commission inspection records and files of the Commission have not identified any wells within the area proposed for release.
25. The reclamation cost estimate for the currently accepted bond is based on the "worst-case" pit method of calculation that assumes that reclamation is contemporaneous. The SMRD approved the most recent bond-map revision (Revision No. 29) by letter dated January 5, 2015. The approved reclamation cost estimate is \$30,567,176. Areas for Phase III release are eligible for release of bond in the amount of \$930 per acre according to calculations by SMRD. TWCC is eligible to reduce its performance-bond obligations by \$169,613.40 (\$930 per acre on 165.8 acres, plus a 10% administrative fee of \$15,419.40). If the application is approved by the Commission, as proposed, TWCC would be eligible to reduce its performance bond obligations by \$169,613.40, as shown in the following table:

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**Bond Reduction as Proposed**

<b>Phase Requested</b>	<b>Area Acres</b>	<b>Disturbance Category</b>	<b>Bonded Per Acre</b>	<b>Eligible Reduction Per Acre</b>	<b>Eligible Reduction</b>
Phase III	165.8	Mined*	\$930.00	\$930.00	\$154,194.00
<b>Subtotal</b>					<b>\$154,194.00</b>
Admin. Costs (10%)					\$15,419.40
<b>Total</b>					<b>\$169,613.40</b>
* The mined acreage is currently bonded according to the estimated costs of soil preparation, revegetation and maintenance.					

26. The eligible bond reduction amount, based upon the Findings of Fact contained in this Order and Staff calculations, with which TWCC agrees, is \$169,613.40. No reduction of the \$15,500,000 and \$18,000,000 surety bonds, approved by Orders dated August 9, 2016, and June 12, 2012, respectively, is requested in this application.
27. All acres requested for release were marked in the field to distinguish them from active mining and reclamation areas.
28. Open meeting notice has been posted for consideration of this Application.

**Conclusions of Law**

Based on the above Findings of Fact, the following Conclusions of Law are made:

1. Proper notice was provided for this request for release of reclamation obligations.
2. A public hearing on the request is not warranted.
3. TWCC has complied with all applicable provisions of the Act and the Regulations for release of reclamation obligations for the areas requested for release as set out in the Findings of Fact.
4. The Commission may approve a release of reclamation obligations for Phase III reclamation obligations on 165.8 acres, as set out in the Findings of Fact.
5. An eligible bond reduction amount of \$169,613.40 for use in reclamation cost estimates may be determined.

**SMRD Docket No. C16-0005-SC-47-F  
Order Approving Release of Phase III Reclamation Obligations**

**IT IS THEREFORE ORDERED BY THE RAILROAD COMMISSION OF TEXAS** that the above Findings of Fact and Conclusions of Law are adopted;

**IT IS FURTHER ORDERED** that a release of Phase III reclamation obligations on 165.8 acres, as set out in the Findings of Fact, is hereby approved;

**IT IS FURTHER ORDERED** that the current bonds remain in effect according to their terms until replacement bonding is approved by the Commission;

**IT IS FURTHER ORDERED** that, as a result of the Phase III release of 165.8 acres, the Commission approves an eligible bond reduction amount of \$169,613.40;

**IT IS FURTHER ORDERED** that the Commission may vary the total amount of bond required from time to time as affected land acreage is increased or decreased or where the cost of reclamation changes;

**IT IS FURTHER ORDERED** that the areas shall continue to be marked in the field to assist in future field inspections of other areas; and

**IT IS FURTHER ORDERED** by the Commission that this order shall not be final and effective until 25 days after a party is notified of the Commission's order. If a timely motion for rehearing is filed by any party of interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. As authorized by TEX. GOV'T CODE §2001.146(e), the time allotted for Commission action on a motion for rehearing in this case prior to its being overruled by operation of law, is hereby extended until 90 days from the date the parties are notified of the order.

**SIGNED this 24<sup>th</sup> day of January, 2017.**

**RAILROAD COMMISSION OF TEXAS**

*Christi Craddick*

**CHAIRMAN CHRISTI CRADDICK**

*Ryan Sitton*

**COMMISSIONER RYAN SITTON**

*Wayne Christian*  
**COMMISSIONER WAYNE CHRISTIAN**

**ATTEST**  
*Kathy Way*  
**Secretary, Railroad Commission of Texas**

