

**RAILROAD COMMISSION OF TEXAS
HEARINGS DIVISION**

**SURFACE MINING DOCKET NO. C18-0004-SC-38-F
APPLICATION BY TEXAS MUNICIPAL POWER AGENCY
FOR RELEASE OF PHASE I, II, AND III RECLAMATION OBLIGATIONS FOR 0.6
ACRES AND PHASE II AND III RELEASE FOR 970.6 ACRES,
PERMIT NO. 38D, GIBBONS CREEK LIGNITE MINE V, GRIMES COUNTY, TEXAS**

**ORDER APPROVING RELEASE
OF PHASE I, II, and III RECLAMATION OBLIGATIONS FOR 0.6 ACRES
AND OF PHASE II AND III RELEASE FOR 970.6 ACRES**

Statement of the Case

Texas Municipal Power Agency (TMPA), P. O. Box 7000, Bryan, Texas 77805, applied to the Railroad Commission of Texas (Commission), Surface Mining and Reclamation Division (Staff), for Release of Reclamation Obligations on an aggregate 971.2 acres with 0.6 acres for Phase I, II, and III and 970.6 acres for Phase II and III within Permit No. 38D, Gibbons Creek Lignite Mine V, Grimes County, Texas. The Application is made pursuant to the Texas Surface Coal Mining and Reclamation Act, Tex. Nat. Res. Code Ann. Ch. 134 (Vernon Supp. 2019) (Act) and §§12.312-313 of the "Coal Mining Regulations," Tex. R.R. Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2019) (Regulations).

Permit No. 38D currently authorizes surface coal mining operations at TMPA's Gibbons Creek Lignite Mine V within its approximate permit area of 3,899.7 acres. Copies of the Application for release were filed in the required county and Commission offices. After public notice, no comments or requests for hearing were filed. The only parties to the proceeding are TMPA and Staff. There remain no outstanding issues between the parties. Based on the information provided by the Application, Staff's technical analysis and the field Inspection Report of the area, Staff recommends the approval of release of reclamation obligations for an aggregate 971.2 acres with 0.6 acres for Phase I, II, and III and 970.6 acres for Phase II and III. The parties have filed waivers of preparation and circulation of a proposal for decision. The Commission approves the releases as requested and finds that TMPA is eligible to the reduce the amount of bond for the permit in an amount that is attributable to the subject acreage in future bond adjustments.

FINDINGS OF FACT

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

1. By letter dated October 18, 2017, Texas Municipal Power Agency (TMPA) filed its application (Application) with the Railroad Commission of Texas (Commission), Surface Mining and Reclamation Division (SMRD and/or Staff) for Release of Reclamation Obligations on an aggregate 988.42 acres with 71.49 acres for Phase I, II, and III and 916.93 acres for Phase II and III, within Permit No. 38D, Gibbons Creek Lignite Mine V, in Grimes County, Texas. By correspondence dated April 22, 2019, TMPA and Staff indicated that at a meeting held on August 10, 2018, they agreed to reduce the requested acreage for release from 988.42 acres to 971.2 acres by removing three 500-ft x 500-ft (5.75 acres) soil grids (Grids AD18SE, AD19SE, and AE19SW) to provide a regular rectangular boundary around Seep 9A thereby facilitating markings in the field and providing room for equipment to work with around future mitigation structures in the Seep 9A area. Subsequent to the August 2018 meeting, by letter dated September 21, 2018, TMPA submitted Supplement No. 1 to the Application to reduce the total aggregate acreage from 988.42 acres to 971.2 acres, specifically for release of Phase I, II, and III for 0.6 acres and Phase II and III for 970.6 acres. By letter dated October 26, 2018, Staff suspended the Application due to lack of surface water data and assessment. By letter dated December 19, 2018, TMPA submitted Supplement No. 2 to the Application to provide surface water data and assessment.
2. The Application is made pursuant to the Texas Surface Coal Mining and Reclamation Act, Tex. Nat. Res. Code Ann Ch. 134 (Vernon Supp. 2018) (Act), and the "Coal Mining Regulations," Tex. Railroad Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2018) (Regulations). The Application was properly certified in accordance with § 12.312(a)(3). No fee is required for this Application.
3. The Application was filed with the Hearings Division by letter dated October 20, 2017. Staff declared the Application administratively complete by letter dated January 17, 2018 and transferred to the Hearings Division. Staff filed its Technical Analysis (TA) and the

May 8, 2018, Field Inspection Report (Inspection Report) by letter dated January 25, 2019, recommending approval of the bond release application with no outstanding comments. The chronology of Application and action are set out below:

DATE	ACTION
October 18, 2017	TMPA submits Application for release of reclamation obligations for a total acreage of 988.42 acres for Phase I, II, and III.
October 20, 2017	The Application is filed with the Hearings Division.
December 5, 2017	Staff performs a field inspection on the proposed acreage requested for release of reclamation obligations (Inspection Report dated May 8, 2018).
August 10, 2018	Staff and TMPA agree to reduce the acreage from 988.42 acres to 971.2 acres to provide a regular rectangular boundary around Seep 9A; thereby, facilitating marking in the field and providing room for equipment to work with around future mitigation structures.
September 12, 19, 26, and October 3, 2018	Notice of Application published in newspaper of general circulation in the locality of surface coal mine operation. Notice accurately reflects the current total acreage requested for release (971.2 acres).
September 21, 2018	TMPA submits Supplement No. 1 to reduce acreage from 988.4 acres to 971.2 acres.
October 26, 2018	Staff identified that the data and/or evaluation of the data for Permanent Impoundments A2P-1, A2P-2, A3P-1, A3P-2, and A3P-3 were not provided in the Application; administrative review of the Application was suspended by SMRD due to lack of surface water data in the Application.
November 12, 2018	TMPA mailed to landowners and interested parties the copies of the public notice.
December 19, 2018	TMPA submits Supplement No. 2 to provide surface water data and assessment.

January 17, 2019	Staff determines the Application administratively complete and transfers the Application to the Hearings Division.
January 25, 2019	Staff issues TA and Inspection Report recommending release of Phase I, II, and III reclamation obligations for 0.6 acres and Phase II and III release for 970.6 acres.
April 8, 2019	Docket reassigned to ALJ within the Hearings Division.

4. Permit No. 38D is currently bonded by a self-bond in the amount of \$3,300,000 and a collateral bond with letter of credit in the amount of \$9,300,000 to provide for continuation of bonding for the permit in a total amount of \$12,600,00 (Docket No. C19-0012-SC-38-E). By Commission Order dated April 9, 2019, TMPA was ordered to submit a bond application or application for replacement of bond that proposes to increase the amount of bond for Permit No. 38D in a sufficient amount based on Staff's latest cost estimate within 90 days from the date of the Order (*Infra* at Finding of Fact No. 6 and corresponding Ordering Paragraph). As of the date of this Order, Commission action has not been taken on any TMPA bond application submitted pursuant to the Order adopted in Docket No. C19-0012-SC-38-E.
5. Copies of the Application were filed for public review, in compliance with notice requirements, at the main office of the Railroad Commission of Texas at 1701 North Congress, William B. Travis Building, Austin, Texas, and in the office of the Grimes County Clerk in Anderson, Texas.
6. Notice of application was published once a week for four consecutive weeks in the *Navasota Examiner* circulated in Grimes County on September 12, 19, 26, and October 3, 2018. The newspaper is a paper of general circulation in the area of the proposed bond release request area, Grimes County. The notice of application contains all information required by the Act and Regulations for notice of an application requesting bond release. 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. TMPA submitted proof of publication to the Commission by letter dated November 26, 2018.

7. TMPA sent notice of the Application to owners of interests within and adjacent to the areas requested for release. TMPA also sent notice 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. The notice was provided via certified letter in multiple mailings dated November 12, 2018. TMPA mailed notice to the Brazos River Authority, Carlos Lakes LLC, Citi Mortgage Inc., Environmental Protection Agency (District Office in Dallas), Texas General Land Office, Navasota Soil and Water Conservation District, Natural Resources Conservation Service, Pleasant Hill Church Cemetery, State of Texas, Senior Resident Engineer, Texas Commission on Environmental Quality, Texas State Soil and Water Conservation Board, U.S. Army Corps of Engineers, Wickson Creek Special Utility District (SUD), and Grimes County, Grimes County Judge and Commissioners Court (Precincts 1, 2, 3, and 4), and to several landowners and 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. Copies of the notification letters were filed with the Commission on November 27, 2018.
8. Staff provided notification of the Application by certified letter dated September 5, 2018, to the Grimes County Judge. Mailing of notification was provided at least 31 days prior to the date of consideration of the docket by the Commission in accordance with §134.133 of the Act. A copy of the letter was provided in Attachment II of Staff's TA.

9. No adverse comments or written objections were filed regarding the request for release pursuant to the notification. No requests for hearing or informal conference were filed pursuant to §12.313(d).
10. Pursuant to §12.312(b) of the Regulations, Staff notified owners of interests in lands and lessees of the Application for release and the Office of Surface Mining Reclamation and Enforcement (OSMRE), Tulsa Field Office by letters dated October 26, 2017, of the date and time of Staff's field inspection scheduled for November 15, 2017. The notification stated that a release had been requested and, pursuant to §12.312(b)(1), advised them of the opportunity to participate in the on-site inspection. Staff provided copies of the letters dated October 26, 2017, in Appendix II within Attachment III (Inspection Report) of the TA. The letter to OSMRE was returned to sender as not deliverable. Subsequently, by letters dated November 21, 2017, Staff sent notification in accordance with the Regulations to required persons and OSMRE that the initial bond release inspection scheduled for November 15, 2017, was postponed due to TMPA not having the subject area(s) marked in the field. The re-scheduled inspection was scheduled for December 5, 2017. Staff provided copies of the letters dated November 21, 2017, in Appendix II within Attachment III (Inspection Report) of the TA.
11. The re-scheduled inspection occurred on December 5, 2017, as stated in Staff's notification letters dated November 21, 2017. A representative of TMPA, Staff and one landowner were present for the pre-inspection meeting. The one landowner elected to not accompany Staff during the filed inspection. Following a pre-inspection meeting the SMRD Inspection and Enforcement staff, accompanied by a representative from TMPA, conducted its inspection of the area requested for release that included observation of two landowner's tracts. The Inspection Report states that a landowner expressed concern over erosion along a former road that ran northeast and southwest across the property and erosion with reclaimed slopes across the property. In the Inspection Report, Staff notes that sparse vegetation and minor erosion was observed along the former road; repairs to the area were made and documented in the February 2018 monthly inspection report; no other erosion issues were observed throughout the landowners' tract;

vegetation across the tract appeared healthy and in good shape; and, erosion potential throughout the well-vegetated area should continue to be minimal. In the Inspection Report, Staff noted that all structures listed in the Application were observed and appeared stable and intact.

12. The 3,899.7-acre permit area is located approximately 8 miles northwest of Anderson, Texas. The permit area is bordered to the north by State Highway 30 (SH 30). A general location map of the permit area, with the 971.2 acres proposed for release, is found in Appendix IV within Attachment III of Staff's TA.
13. The total 971.2 acres requested for release are comprised of two portions of Areas A2 and A3. A portion of the proposed release areas northeastern boundary is adjacent to Farm-to-Market Road 244 (FM 244), eastern boundary is adjacent to County Road 186 (CR 186), and southern boundary is adjacent to FM 3090.
14. The postmining land uses for the 971.2 acres are pastureland (789.7, 81.3%) and developed water resources (DWR) (181.5 acres, 18.7%). The pastureland acreage requested for release lies within four land management units (LMU) that were placed into the five year extended responsibility period (ERP) on January 27, 2006, (LMU A3-1 for 165.4 acres) and June 4, 2010, (LMUs A3-2 for 483.3 acres; A2-1 for 13.0 acres; and, A2-2 for 128.0 acres).
15. Mining operations were conducted on 956.1 acres, 8.1 acres were disturbed by mining related activities, including roads and diversions, and 7.0 acres were disturbed as ancillary between 1986 to 1996. Final grading of the 970.6 acres was accomplished between 1992 and 2003. Final grading of the 0.6 acres was accomplished between 1987 and 2011. Reclamation activities began in 1986, and have continued, as required, for necessary maintenance of the subject areas.
16. Based upon the Application and Staff's review, Phase I release of reclamation obligations have been met for 0.6 acres in accordance with Phase I requirements for backfilling,

regrading, and drainage control as required by §12.313(a)(1). The requested 0.6 acres for Phase I release have postmining land use of DWR.

- a. The area has been backfilled and regraded to its approximate original contour [§12.385(a)]; eliminated all highwalls [12.385(b)]; placed suitable topsoil substitute material over regraded spoil; constructed no cut-and-fill terraces; and, accomplished drainage control in accordance with the approved reclamation plan. The area was regraded between 1987 and 2011 in a manner such that erosion and water pollution has been minimized.
 - b. The area is comprised of one permanent impoundment, Pond A2P-2, that is listed as an end lake. Pond A2P-2 was approved as a permanent postmine feature by SMRD letter dated August 23, 2001. Ground cover surrounding the pond is sufficient to control erosion. The area has been revegetated and stabilized to reduce runoff and provide effective sediment control.
 - c. Runoff from the 0.6-acre area requested for Phase I release flows into final discharge Ponds SP-13 and SP-20. [§12.343].
 - d. No roads are located within the area requested for Phase I release.
 - e. No stream diversions are located within the area requested for Phase I release. [§12.341].
 - f. No disposal of non-coal waste has occurred within the area requested for Phase I release. [§12.375].
17. The 970.6 acres proposed for Phase II and III release were previously granted Phase I release by the Commission in either Docket No. C10-0009-SC-38-F (Order dated April 21, 2010) or Docket No. C13-0012-SC-38-F (Order dated October 30, 2018).

18. Based upon the Application and Staff's review, Phase II release of reclamation obligations have been met for a total aggregate of 971.2 acres in accordance with Phase II requirements for revegetation and for quality of discharges from the area as provided in §12.313(a)(2). The lands have been reclaimed and managed in accordance with the approved postmining land use. [§§12.147 and 12.399]. The postmining land uses in the area proposed for Phase II release consists of 789.7 acres of pastureland and 181.5 acres of DWR.
- a. TMPA submitted soil fertility data for pastureland in accordance with the approved mine soil testing plan. By letters dated October 14, 2011, April 3, 2012, July 16, 2013, and March 28, 2014, TMPA reported soil fertility data for the 2009 through 2013 growing seasons. Staff determined the data indicated it was in accordance with approved soil-testing plan. Copies of Staff's approval letters for the applicable growing seasons dated November 30, 2011, July 19, 2012, September 4, 2014, and June 3, 2014, were provided in Section 5 of the Application.
 - b. Permanent revegetation has been established on the area regraded in accordance with the approved reclamation plan for pastureland. The area is planted with approved species; photographs contained in the Inspection Report show that vegetation is well established. The area has been revegetated with Hybrid Bermudagrass and mixed bunch grasses with interseeded clover. The bunch grasses include Alamo Switchgrass, Kleingrass, Old World Bluestem, Sideoats Grama, Bahiagrass, and Indiangrass. All species were approved for the respective land uses at time of planting. The groundcover evaluation for the 165.4 acres of pastureland within the LMU A3-1 was submitted by letters dated September 2, 2011, and November 27, 2012, for the 2010 and 2011 growing seasons and approved by SMRD letters dated December 13, 2011, and April 2, 2013, respectively. The groundcover evaluation for the 624.3 acres pastureland within the LMUs A3-2, A2-1, and A2-2 were submitted by letters dated April 9, 2014, and June 18, 2014, for the 2012 and 2013 growing seasons, and approved by letters dated October 2, 2015, and October 6, 2015, respectively.

The groundcover area indicates it is capable of stabilizing the soil surface from erosion. [§§12.390-12.395].

- c. The surface water monitoring has been conducted in accordance with the requirements of the permit. Phase II sediment control requirements are being met for the area as required by §12.313(a)(2) of the Regulations based upon monitoring of Ponds SP-13 and SP-20. The Staff's analysis of the data (TMPA and SMRD) indicates no adverse trends for total suspended solids (TSS) concentrations and finds that TMPA has demonstrated that the areas proposed for Phase II release from reclamation liability obligations are not contributing suspended solids to stream flow or runoff outside of the permit area in excess of effluent limitations set out in the water quality permit or in excess of stream segment standards. [Finding of Facts No. 19(e), *infra*].
 - d. No silt dams are present within the area requested for Phase II release. [§12.344].
 - e. No rills or gullies were present within the area requested for Phase II release that would require repair. The areas have been stabilized to reduce the potential for contributing suspended solids to streamflow.
 - f. No prime farmland, for which additional requirements would be applicable, are located within the areas requested for Phase II release.
19. Based upon the Application and Staff's review, Phase III release of reclamation obligations have been met for the 971.2 subject acres in accordance with Phase III requirements for the completion of the ERP, soil resampling and vegetation standards as provided in §12.313(a)(3). SMRD has approved all structures within the requested area for Phase III release as permanent. Surface water and groundwater within and adjacent to areas have been protected in accordance with §§12.313(a)(3), 12.348, and 12.349. The postmining land uses in the area proposed for Phase III release consists of 789.7 acres of pastureland and 181.5 acres of DWR.

- a. The area contains five impoundments, six erosions control structures, one spillway structure, two inlet structures, four low water crossings and three roads within the area requested for release and have been approved by SMRD as permanent structures. Copies of Staff's approval letters for the structures were provided in Section 5 of the Application. The Pond A2-P1 Spillway Crossing was approved as a concrete low water crossing by letter dated May 12, 2005. At the time Staff's inspection, the Pond A2-P1 Spillway consisted only of a trapezoidal grass-lined channel with no low water crossing. No low water crossings were constructed because there have been no erosion issues at that spillway. No depressions exist within the proposed release area. Photographs taken during Staff's field inspection on December 5, 2017, support Phase III release of the acreage requested and are provided in Staff's TA Appendix IV within Attachment III. [§§12.154, 12.347,12.400,12.401].
- b. The area that has been previously disturbed has met Phase III requirements for successful completion of the ERP of five years for areas that received 26 or more inches of rainfall annually [§12.395(c)]. The pastureland area requested for Phase III release are included in four LMUs (A2-1, A2-2, A3-1, and A3-2) located in two extended responsibility areas (ERA). The LMUs were placed into the five-year ERP on January 27, 2006, (LMU A3-1 for 165.4 acres) and June 4, 2010, (LMUs A3-2 for 483.3 acres, A2-1 for 13.0 acres; and, A2-2 for 128.0 acres).
- c. In accordance with resample requirements in the approved soil-testing plan, TMPA submitted data and analysis of a random 10% of soil grid sampling from the January 27, 2006, and June 4, 2010, ERAs. Staff stated that the data indicated that there are no substantive differences in the analyzed parameters between the 24 grids sampled during initial sampling and the random 10% sampling except values for pH and ABA slightly decreased in all the intervals within the January 27, 2006, ERA, and in the 0-1 ft interval within the June 4, 2010, ERA. Staff concluded that the data do not reflect postmining soil degradation and is acceptable for the applicable ERAs. Copies of Staff's approval letters for the resampling on the subject pastureland acreage were

provided in Staff's TA Attachment V and Section 5 of the Application; however, the ERAs identified in the letters do not correspond with the subject ERAs. Following an inquiry from the ALJ, by correspondence dated May 21, 2019, Staff acknowledged the error contained in the December 20, 2016, approval letter and confirmed that resampling for the subject ERAs was submitted by TMPA and approved by Staff.

- d. Successful revegetation of all acres requested for Phase III has been accomplished in accordance with §12.395 of the Regulations. Pastureland revegetation-success standards must be met in the final year of the ERP to qualify for Phase III release. Revegetation success has been sufficiently addressed by TMPA's Application and Staff's TA [Finding of Fact No. 18 (b), *supra*].
- e. TMPA has conducted surface mining activities to ensure surface water quantity and quality have been protected in accordance with §§12.313(a)(2), 12.313(a)(3) and 12.349. Staff examined TMPA's analysis of surface water information and discharge data from final discharge Ponds SP-13 and SP-20 as well as water quality from stream monitoring stations that receive runoff from the areas requested for release.
 - i. The runoff from the areas proposed for Phase II and III release drained by Gibbons Creek, then to Navasota River (TCEQ Stream Segment No. 1209) and its tributaries, thereafter to the Brazos Rivers (TCEQ Stream Segment No. 1202) and ultimately to the Gulf of Mexico. Discharges from the area are regulated by the TCEQ through the Texas Pollutant Discharge Elimination System (TPDES). The TCEQ issued TPDES Permit No. 02460 to TMPA for wastewater discharges from the Gibbons Creek Lignite Mine V.
 - ii. In support of the requested release, TMPA submitted a surface water hydrology report to address the requirements of §12.349 by letter dated October 4, 2017. TMPA's analyses of the surface water data are based on information compiled from five permanent impoundments (A2P-1, A2P-2, A3P-1, A3P-2, and A3P-3) and five long-term surface-water monitoring (LSTM) stations: SWGC1 (Gibbons Creek -

Undisturbed), SWPC2 (Peach Creek - Undisturbed), SWNR1 (upstream of Navasota River - Undisturbed), SWGC2 (Gibbons Creek - Disturbed), and SWRN2 (downstream of Navasota River - Disturbed), which receive runoff from upstream and downstream of the areas proposed for Phase II and III release. Staff's surface water evaluation focuses on the areas proposed for Phase II and III (971.2 acres) release from reclamation obligations, as described in §§12.313(a)(2), 12.313(a)(3) and 12.349.

iii. TMPA's individual pond long-term monitoring data evaluation is based on information compiled from two ponds, SP-13 and SP-20. Ponds SP-13 and SP-20 were approved by the Commission on February 22, 2013, and February 15, 2012, respectively. Discharge from A2P-1 and A2P-2 flows into permanent sedimentation Pond SP-13 and discharge from A3P-1, A3P-2, and A3P-3 flows into sedimentation Pond SP-20. Both Ponds SP-13 and SP-20 are final discharge points located near the permit boundary.

(A). Data from Pond SP-13 complies with effluent limitations for pH, settleable solids/total settleable matter (SS/TSM), total Iron (Fe), and total Manganese (Mn) under TPDES Permit No. 02460. The average concentration of TSS (35.6 mg/L) slightly exceeds the effluent limitation set by the TPDES permit of 35 mg/L and the pond exhibits a range from 5.0 mg/L to 98.0 mg/L during the period of record (January 1999 to March 2018); however, with the exception of some samplings showing an above average TSS concentration, the samplings indicate a downward trend in TSS concentration beginning in 2013. For Pond SP-13 the average pH [7.8 standard units (s.u.)] and sulfate (SO_4^{-2}) fall within stream segment criteria. There are no TPDES effluent limitations established for total dissolved solids (TDS) and sulfate (SO_4^{-2}) and no stream segment criteria established for SS/TSM, Fe, and Mn.

(B). Pond SP-20 complies with effluent limitations for pH, TSS, SS/TSM, Fe, and Mn under TPDES Permit No. 02460. The highest pH level (9.6 s.u.) occurred

on March 8, 2017; since that time, the pH has been below 9.0 s.u. The highest TSS concentration (207 mg/L) occurred on April 6, 2015, since that time the TSS concentration has been within the TPDES effluent limitation. There was one sampling on April 6, 2015, that indicated a TSS concentration of 207 mg/L above the TPDES effluent limitation; however, Staff indicates that Pond SP-20's average TSS concentration is 17.9 mg/L which falls within the TPDES effluent limitation. The highest Fe level (39 mg/L) occurred on June 6, 2006; since that time, the Fe level has been below 3.0 mg/L. The highest level of Mn occurred on April 18, 2015 (4.12 mg/L), since that time, the Mn level has been below 2.0 mg/L. There was one sampling on April 6, 2015, that indicated a TSS concentration of 207 mg/L above the TPDES effluent limitation; however, Staff indicates that Pond SP-20's average TSS concentration is 17.9 mg/L falls within the TPDES effluent limitation. For Pond SP-20 the average pH (7.6 s.u.), TDS (742.3 mg/L) and SO_4^{-2} fall within stream segment criteria.

- (C). TMPA has demonstrated that disturbance to the hydrologic balance has been minimized in the permit and adjacent areas, and that material damage has been prevented outside the permit area. Staff's technical review of the report indicates discharge data from Ponds SP-13 and SP-20 comply with effluent limitation for pH under TPDES Permit No. 02460.
- iv. TMPA provided long-term surface water monitoring (LTSM) data for LTSM Stations SWGC1, SWPC2, SWNR1, SWGC2, and SWRN2. Staff's surface water evaluation focuses on the surface water monitoring data for LTSM Stations SWGC1 and SWGC2, both of which are located on Gibbons Creek and used to monitor upstream and downstream discharges from the areas proposed for Phase III release. LTSM Station SWGC1 is located upstream and LTSM Station SWGC2 is located downstream. The approved LTSM plan requires that the LTSM stations be sampled for flow (Q), pH, TDS, TSS, total iron (Fe), total manganese (Mn), sulfate (SO_4^{-2}), and chloride (Cl^-).

- (A). A comparison of the water quality data collected from undisturbed SWGC1 and disturbed SWGC2 indicates that: the averages observed for pH and Mn concentrations during the monitoring period are substantially similar; however, the averages observed for TSS and Fe concentrations are slightly higher for the disturbed LTSM Station SWGC2 than the undisturbed LTSM Station SWGC1. The highest average observed for TDS concentration (774.0 mg/L) for undisturbed LTSM Station SWGC1 occurred on March 10, 2013; since that time the average TDS concentration has been 345.6 mg/L. The highest average observed for TDS concentration (1,190.0 mg/L) for disturbed LTSM Station SWGC2 occurred on November 9, 2016; since that time the average TDS concentration has been 490.4 mg/L. The flow-weighted average TDS (367.0 mg/L) at disturbed LTSM station SWGC2 is lower than Stream Segment No. 1209, Navasota River (600.0 mg/L) criteria and lower than Stream Segment No. 1202, Brazos River below Navasota River (750 mg/L) criteria. The highest SO_4^{-2} concentration (422.0 mg/L) for disturbed LTSM station SWGC2 occurred in February 21, 2018. The average SO_4^{-2} (141.4 mg/L) for disturbed LTSM station SWGC2 is higher than the average SO_4^{-2} (93.9 mg/L) for undisturbed LTSM station SWGC1, and lower than the maximum annual average SO_4^{-2} concentration criterion for Stream Segment No. 1202, Brazos River below Navasota River (200.0 mg/L). The average Cl^- (92.9 mg/L) for disturbed LTSM station SWGC2 is higher than the average Cl^- (58.1 mg/L) for undisturbed LTSM station SWGC1, and lower than the maximum annual average Cl^- concentration criterion for Stream Segment No. 1209, Navasota River, (140.0 mg/L).
- (B). No negative impacts to water quality or quantity are anticipated from flows leaving the proposed release area. According to Staff's Cumulative Hydrologic Impact Assessment (CHIA) for the mine, Staff indicates that the largest percentage (potential) increase in TDS concentration downstream of

the confluence of Steele Creek and the Navasota River, is projected at Navasota River Basin Mass-Balance Point No. B (USGS Gauging Station No. 08110500) to be approximately 14.7% (from 155 to 178 mg/L), which is less than the maximum annual average concentration for Stream Segment Nos. 1209 (600 mg/L) and 1202 (750 mg/L). Staff anticipates a reduction in TDS concentration as runoff travels further downstream. The flow-weighted average TDS concentrations (367 mg/L) at disturbed LTSM Station SWGC2 somewhat exceed the TDS concentration predicted in the CHIA at Navasota River Basin Mass-Balance Point No. B (USGS Gauging Station No. 08110500), but is less than the maximum annual average concentration for Stream Segment Nos. 1209 (600 mg/L) and 1202 (750 mg/L). Further, the average TDS concentrations (490.4 mg/L) and flow-weighted average TDS concentrations (367.0 mg/L) at disturbed LTSM station SWGC2 are expected to remain near the levels observed in recent water samples and within or lower than average TDS concentrations observed during the baseline surface water period for the same station. Staff's TA supports a conclusion that water quality in comparison to the approved surface water Probable Hydrologic Consequences (PHC) determination has been protected.

- (C). TMPA's evaluation of flow data for the LTSM stations includes a discussion of impacts to water quantity relating to the PHC determination, stating that: "long-term reliable streamflow records were not available within the project area and vicinity; therefore the stream-flow records available for the USGS Station 08110100, located on Davidson Creek near Lyons, Texas, were used to estimate average annual runoff from the project area." The drainage area monitored by this gauge is 195 sq. mi. (124,800 acres). Mean monthly stream flow records in acre-feet from 1984 through 2014 were used to develop the long-term average flows. The average monthly stream flows in acre-feet for this station were used to characterize the monthly runoff that

may be expected to occur in the project area per acre of drainage area. The average annual runoff was calculated as 0.4 acre-feet per acre, or approximately 5 inches. Staff concluded in the CHIA, with respect to water quantity, that the attenuation of storm runoff and increase in sustained flows in the Navasota River basin will be insignificant when compared to the amount of storm runoff originating within the cumulative impact drainage area (CIDA).

- f. The groundwater hydrologic balance has been protected as required by §§12.313(a)(3) and 12.348, and the re-established postmining groundwater system is adequate for the proposed postmining uses of the 971.2 acres requested for Phase III release. TMPA submitted Supplement No. 1 by letter dated September 21, 2018 to reduce the acreage from 988.4 acres to 971.2 acres; however, the reduction does not change the groundwater assessment. The groundwater review incorporated the initial assessment made by Staff with the updated monitoring data. The initial submittal included groundwater monitoring data through the second quarter of 2017. Staff, for this Supplement No. 1, reviewed the long-term groundwater monitoring (LTGM) results as submitted to the Commission. These generally showed no deviation in water levels or quality from the measurements measured in 2016 and early 2017. In addressing the requirements of §12.348, TMPA submitted Hydrologic Balance: Ground-Water Protection report to address the overburden, spoil, and underburden aquifers within and adjacent to the Gibbons Creek Lignite Mine V.

- i. The 4525 Overburden Sand Unit, also known as the Yuma Member of the Manning Formation is a significant water source, is the only unconfined aquifer in the system, and is monitored by Well MG72A. Below the 4525 is a sedimentary sequence which included clay units, interbedded sands and clay, and the 4500-lignite seam. These units separate the 4525 Sand Unit from the 3525 Sand Unit, also known as the Upper Gibbons Creek Sand, which is a confined aquifer that was dewatered as part of the approved mine plan operations and is monitored by Wells M142A and

MA2B3. Clay and lignite units below the 3525 Sand Unit separated it from the 3325 Sand Unit, which is here considered to be underburden. The 3325 Underburden Sand Unit is a confined aquifer which was depressurized as part of the mining activities and is monitored by Well MA2B4.

- ii. Three spoil monitoring wells were installed of which two spoils monitoring wells are located in the southern area (MA2S1 and MA2S2) and one spoil monitoring well is in the center of the northern area (MA3S6) of the acreage proposed for release. All wells within the proposed release area have been plugged, except for spoil monitoring wells MA2S1, MA2S2 and MA2S4. Hydrograph in the spoil monitoring wells show that a static water level has been established in the spoil, the ground water in the spoil is fed by and is in equilibrium with surface water structures (Ponds A2P-1 and A2P-2 in the south, A3P-2 and A3P-3 in the center and A3P-1 in the north). Well MA3S6 shows higher pH levels early between 2003 and mid-2005, thereafter there is a drop in pH levels due to the sulfate to carbonate-bicarbonate ratio rises. Wells MA2S1 and MA2S2 consistently show pH levels of about 4.0. s.u. The water levels in monitoring wells MA2S1, MA2S2, and MA3S6 have recovered, and the water quality has stabilized.
- iii. The 3525 overburden LTGM wells are MA2B3 and M142A. The overburden LTGM well (MA2B3) is located north of the proposed bond release area in the A2 Mineblock in Permit 38D. The depth to water in the well has remained fairly constant, with an average of 12 feet of water and a minimum and maximum depth of 5 to 18.0 feet respectively. For Well MA2B3, TDS ranged from 2,000 to 3,300 mg/L through 2015, but has since been generally above 3,500 mg/L. Staff indicates that the pH measurements observed at this well has remained consistent for the entire period of record. The overburden LTGM well (M142A) is located south of the proposed release area in A2 Mineblock of Permit 38D. Staff indicates that the water levels observed in the well have increased since the baseline values and may be attributed to the result of higher transmissivity in homogenous spoils allowing for

greater recharge of the deeper units. For Well M142A, the TDS average concentration of 1,393 mg/L, ranging from a low of 166 mg/L to a high of 2,089 mg/L. TDS show an initial decline in levels before appearing to stabilize around 1,400 mg/L. Staff indicates that the pH level have consistently been between 6.0 and 7.0 s.u. since 2000.

- iv. One underburden LTGM well MA2B4 is located north of the proposed bond release area in the A2 mineblock in Permit 38D. The TDS values have reached equilibrium with values staying primarily in the mid-700 to 800 range for 2005 through 2013, then an increase in TDS concentrations through 2013 and there has been an increase to levels that are consistently above 1000 mg/L since 2016, a concentration of 1240 mg/L was reported in May 2017; however, Staff does not indicate the increases observed at this well are an impediment to Phase III release of the subject acreage and notes monitoring at this well, located outside the requested release boundary, will continue in accordance with the approved LTGM monitoring plan. The depth to water in the well has also remained fairly constant, with an average of 8 feet to water and a minimum and maximum depth of 6 and 13 feet respectively.
 - v. The current PHC determination indicates that no impacts will occur to domestic water supply wells. Furthermore, TMPA indicates in the release Application that should impacts occur, the applicant will mitigate the compromised water right. TMPA will continue to monitor all the wells currently in the LTGM program. The data provide by TMPA for 971.2 acres proposed for Phase III release meet the ground-water protection requirements at §12.348.
20. No wells are located within the proposed release areas except for the three spoil wells discussed in Finding of Fact No. 19(f)(ii), *supra* [§12.333].

21. The areas requested for release of reclamation obligations are capable of sustaining the postmining land uses. Monthly inspections and Staff's Inspection Report on May 8, 2018, demonstrate that the land has been reclaimed to and managed in accordance with the approved postmining land uses.

22. Pursuant to §12.313(a)(3), the Commission may release the remaining portion of the bond attributable to the subject 971.2 acres upon a determination that reclamation has been successfully completed in accordance with the terms of the approved permit and the requirements of the Act and the Regulations. As a result of being granted Phase I, II, and III release for 0.6 acres and Phase II and III release for 970.6 acres, TMPA is eligible to reduce the bond amount for Permit No. 38D. In its TA, Staff calculated an eligible bond reduction amount according to the reclamation cost estimate (RCE) approved administratively by letter dated February 7, 2017. The Commission adopted an updated RCE when it accepted the current bonds for the permit by Order dated April 9, 2019 [Docket No. C19-0012-SC-38-E at Finding of Fact No. 5]. Therefore, the bond reduction amount calculated in the TA is inaccurate. However, as stated by Staff in its TA, a specified reduction amount is only an estimate provided for illustration purposes. The actual amount of any reduction would be calculated based on the costs for reclamation at the time a bond reduction is requested by TMPA; therefore, ensuring the proposed bond amount is sufficient to cover the cost of outstanding reclamation work. Given TMPA does not request an adjustment to the approved bond in the Application, the accuracy of the amount of the reduction contained in the TA is inconsequential, as any eligible reduction amount based on the current RCE would be superseded once the costs for reclamation are calculated at a future date when TMPA requests a reduction of the bond. Additionally, since the Commission is not required under the Act or the Regulations to determine an eligible bond reduction amount when approving an application for release, this Order prescribes TMPA is eligible to reduce the amount of bond attributable to the 971.2 acres granted full release, but does not specify the amount of the reduction.

23. All acres requested for release were marked in the field to distinguish them from active mining and reclamation areas.

24. TMPA and Staff, the only parties to the proceeding, filed waivers of the preparation and circulation of a proposal for decision. The proposed order was circulated to the parties with opportunity for comment.
25. Open meeting notice has been posted for Commission consideration of this application in accordance with Tex. Gov't Code Ann. CH. 551 (Vernon Supp. 2019).

CONCLUSIONS OF LAW

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

1. Proper notice of application and notice of consideration by the Commission has been provided for this request for release of reclamation obligations.
2. No public hearing was requested, and none is warranted.
3. TMPA has complied with all applicable provisions of the Act and the Regulations regarding notice for Commission jurisdiction to attach to allow consideration of the matter.
4. TMPA has complied with all applicable provisions of the Act and the Regulations for the acreage requested for release as set out in the Findings of Fact.
5. The Commission may approve a release of Phase I, II, and III reclamation obligations for the 0.6 acres, and a release of Phase II and III reclamation obligations for the 970.6 acres as set out in the above Findings of Fact and Conclusions of Law.
6. Pursuant to the Commission's authority for inspection and evaluation of release applications, the Commission may order that TMPA continue marking the area approved for release so that Staff mapping, and tracking will be efficient.

7. TMPA is eligible to the reduce the amount of bond for Permit No. 38D by an amount that is attributable to the subject 971.2 acres in future bond adjustments.

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 a release of Phase I, II, and III reclamation obligations for 0.6 acres and a release of Phase II and III reclamation obligations for 970.6 acres is hereby approved;

IT IS FURTHER ORDERED that all areas released from reclamation obligations shall remain clearly marked in the field with permanent boundary markers maintained to distinguish these areas at all corners and angle points from active mining and reclamation areas in accordance with this Order;

IT IS FURTHER ORDERED that the current bond remains in effect in accordance with its terms until a replacement bond is approved by the Commission;

IT IS FURTHER ORDERED TMPA is eligible to reduce the amount of bond for the permit by the amount that is attributable to the 971.2 acres granted full release in this Order;

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; and

IT IS FURTHER ORDERED by the Commission that this order shall not be final and effective until 25 days after the Commission's Order is signed, unless the time for filing a motion for rehearing has been extended under Tex. Gov't Code §2001.142, by agreement under Tex. Gov't Code §2001.147, or by written Commission Order issued pursuant to Tex. Gov't Code §2001.146(e). If a timely motion for rehearing is filed by any party at 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. Pursuant to Tex. Gov't Code §2001.146(e), the time allotted for Commission action on a motion for rehearing in this case is 100 days from the date the Commission Order is signed.

SIGNED on June 18, 2019.

RAILROAD COMMISSION OF TEXAS



CHAIRMAN CHRISTI CRADDICK



COMMISSIONER RYAN SITTON



COMMISSIONER WAYNE CHRISTIAN

ATTEST:



Deputy Secretary, Railroad Commission of Texas

