

**RAILROAD COMMISSION OF TEXAS  
HEARINGS DIVISION**

**SURFACE MINING DOCKET NO. C19-0007-SC-37-F  
APPLICATION BY FARCO MINING INC. FOR  
RELEASE OF PHASE I, II, AND III RECLAMATION OBLIGATIONS FOR 77.6  
ACRES, RELEASE OF PHASE II AND III FOR 1755.5 ACRES, AND  
RELEASE OF PHASE III FOR 742.1 ACRES AND FINAL CLOSURE OF  
PERMIT NO. 37C, PALAFOX MINE, WEBB COUNTY, TEXAS**

**ORDER APPROVING  
RELEASE OF RECLAMATION OBLIGATIONS  
AND FINAL CLOSURE OF PERMIT NO. 37C**

Statement of the Case

On behalf of the applicant, Farco Mining Inc. (Farco), 6001 Bollinger Canyon Road, C-2348, San Ramon, CA 94583, Trihydro Corporation, 1252 Commerce Drive, Laramie, WY 82070, as Farco's consultant applied to the Railroad Commission of Texas (Commission), Surface Mining and Reclamation Division (SMRD and/or Staff), for Release of Phase I, II, and III Reclamation Obligations for 77.6 acres, release of Phase II and III for 1755.5 acres, and release of Phase III for 742.1 acres, for an aggregate 2,575.2 acres, within Permit No. 37C, Palafox Mine, Webb 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 §§12.312-12.313 of the "Coal Mining Regulations," Tex. R.R. Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2019) (Regulations).

The Palafox Mine permit was first issued as Permit No. 8 by Commission Order dated August 31, 1981, and last renewed as Permit No. 37C by Commission Order dated September 12, 2006. Permit No. 37C encompasses approximately 5,613.7 acres within Webb County; however, only 2,575.2 acres of the permitted area were disturbed by mining operations and are covered under the performance bond. The other 3,038.5 acres were never disturbed by mining operations, are not covered under the accepted bond, and as such, do not require release from the Commission. In 2013, the permit transitioned to reclamation-only activities. Farco's Application requests a multi-phase release of an aggregate acreage of 2,575.2 acres and final closure of Permit No. 37C. Copies of the Application for release were filed in the required county

and Commission offices. After public notice, no comments or requests for a hearing were filed. The only parties to the proceeding are Farco 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 Phase I, II, and III reclamation obligations for 77.6 acres, release of Phase II and III for 1755.5 acres, and release of Phase III for 742.1 acres, for an aggregate 2,575.2 acres. The subject area has been previously granted Phase I and II release, as applicable, to the acres requested for Phase II and/or III in the Application. The parties have filed waivers of preparation and circulation of a proposal for decision with regard to this order approving the release of all reclamation obligations requested and final closure of Permit No. 37C.

Based on the evidence in the record, the Commission approves the requested final releases, release of the bond, and final closure of Permit No. 37C.

### **FINDINGS OF FACT**

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

1. By letter dated April 10, 2018, on behalf of the applicant, Farco Mining Inc. (Farco), Trihydro Corporation (Trihydro), as Farco's consultant representative, filed an application (Application) with the Railroad Commission of Texas (Commission), Surface Mining and Reclamation Division (SMRD and/or Staff) for release of Phase I, II, and III reclamation obligations for 77.6 acres, release of Phase II and III for 1755.5 acres, and release of Phase III for 742.1 acres, for an aggregate 2,575.2 acres, within Permit No. 37C, Palafox Mine, Webb County, Texas. By letter dated April 17, 2018, Staff indicated that the Application was incomplete. By letter dated April 27, 2018, Farco submitted Supplement No. 1 to the Application to provide a revised draft public notice, list of interested parties, Table of Contents, Report Sections 1.0 through 10.0, Table of Soil-Testing Grids, Table of Permanent Structures, and replacements of Figures Nos. 1, 2, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, and 7. By letter dated October 31, 2018, Farco submitted Supplement No. 2 to the Application to provide surface water data and assessment, with an updated Figure No. 7 (Surface and Groundwater Monitoring Location Map) and revised long-term groundwater

and surface water evaluation which incorporated changes made to the long-term surface water monitoring (LTSM) plan approved in Revision No. 21 on September 27, 2018. By letter dated November 20, 2018, Farco submitted Supplement No. 3 to the Application in response to the administrative law judge's comments dated November 15, 2018, on the draft public notice and landowner/agency notification letters.

2. 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 the "Coal Mining Regulations," Tex. Railroad Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2019) (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 November 6, 2018. By letter dated January 18, 2019, Staff declared the Application administratively complete and transferred it to the Hearings Division. By letter dated April 2, 2019, Staff filed its Technical Analysis (TA) and the Field Inspection Report (Inspection Report) dated September 5, 2018, recommending approval of the bond release application and termination of the permit with no outstanding comments.
4. By Order dated May 29, 2008, the Commission accepted a surety bond in the amount of \$3,376,676 for the Palafox Mine. Farco seeks full release of the accepted bond and final permit termination in the subject Application.
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 Webb County Clerk, Laredo, Texas.
6. Notice of application was published once a week for four consecutive weeks in *The Laredo Morning Times* circulated in Webb County on December 15, 22, 29, 2018, and January 6, 2019. The newspaper is a paper of general circulation in the area of the proposed bond

release requested area in Webb 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. By letter dated January 18, 2019, SMRD acknowledged it received on January 15, 2019, copies of the original Publisher's Affidavit, original tear sheets of the public notice, and copies of letter to landowners and governmental officials. Copies of the letters to landowners and governmental officials are dated January 2, 2019.

7. Farco sent notice of the Application to owners of interests within and adjacent to the areas requested for release. Farco also sent notice to local governmental bodies, planning agencies in the locality as required by §12.312(a)(2) of the Regulations. The notice provided via certified letter in multiple mailings dated January 2, 2019, was mailed to the Texas General Land Office, Environmental Protection Agency, Texas Commission on Environmental Quality (TCEQ), U.S. Army Corps of Engineers, Webb County Engineering Office, Webb County Soil and Water Conservation District, Webb County Judge, Webb County Courthouse, USDA Natural Resources Conservation Service, 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.
8. Staff provided notification of the Application by certified letter dated December 13, 2018, to the Webb 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, Tulsa Field Office by letters dated April 16, 2018, of the date and time of Staff's field inspection scheduled for May 9, 2018. The notification stated that a release had been requested and, pursuant to §12.312(b)(1) of the Regulations, advised them of the opportunity to participate in the on-site inspection. Staff provided copies of the letters dated April 16, 2018, in Appendix II within Attachment III (Inspection Report) of the TA.
11. The inspection occurred on May 9, 2018, as stated in Staff's notification letters dated April 16, 2018. Farco representatives, a Chevron representative, Fasken Oil and Ranch Ltd representatives, and SMRD Inspection and Enforcement staff were present for the pre-inspection meeting and during the field inspection. Staff provided a copy of the sign-in sheet of the inspection participants in Appendix III within Attachment III (Inspection Report) of the TA. In the Inspection Report, Staff notes the field conditions were dry at the time of the inspection which allowed access to the entire area proposed for release of reclamation obligations. Staff noted that Farco delineated the boundary of the proposed release area with wooden survey lathes with pink flagging at the top. Staff conducted a random check of boundary markers during the inspection using a GPS enabled Trimble June 3B and confirmed the accuracy of the markers. Staff noted that slight amounts of rainfall have caused most vegetation throughout the permit area to exhibit a golden-brown, dormant appearance; lower-lying areas and ponds footprints were exhibiting a slightly greener coloration; and, despite typical dry summer appearance, permanent vegetation throughout the permit area appeared healthy and self-sustaining. Staff notes that minor erosion repairs had been made just south of a permanent structure, DD-12 Diversion, and northeast of the Wildlife Enhancement Area (WEA). Staff provided a photograph, Photo 95, to show erosion repair along the DD-12 Diversion in Appendix IV within Attachment III

(Inspection Report) of the TA. Staff noted that all structures listed in the Application were observed and appeared stable and intact. Staff provided a map depicting all permanent structures and photograph locations in Appendix IV within Attachment III of the TA.

12. The Palafox Mine is located approximately 31 miles northwest of Laredo, Texas. The Palafox Mine permit was first issued as Permit No. 8 by Commission Order on August 31, 1981, and last renewed as Permit No. 37C by Commission Order dated September 12, 2006. Permit No. 37C encompasses approximately 5,613.7 acres; however, only 2,575.2 acres of the permitted area were disturbed by mining operations and are covered under the performance bond. The other 3,038.5 acres were never disturbed by mining operations, are not covered under the accepted bond, and as such, do not require release from the Commission. On January 29, 2013, the mine operations transitioned to a reclamation-only permit. Farco's Application requests a multi-phase release of the aggregate acreage of 2,575.2 acres and final closure of Permit No. 37C. A general location map of the permit area, with the 2,575.2 acres proposed for release, is found in Appendix I within Attachment III of the TA.
13. Mining operations were conducted on 2,575.2 acres between 1980 to 2005. Final grading on 2,575.2 acres was accomplished between 1982 to 2005. The area was seeded between 1988 to 2006, and some areas were over-seeded in 2017, as part of normal husbandry practices.
14. The aggregate 2,575.2 acres requested for release are comprised of Areas A, B1, B2, C, D, and F. The postmining land uses for the 2,575.2 acres are pastureland (2,442.8 acres, 94.9%) and developed water resources (DWR) (132.4 acres, 5.1%).
15. The Commission has previously approved Phase I and/or II release of reclamation obligations, as applicable, for the subject area for which only Phase II and/or III release is sought in the subject application.

- a. Area B1 (154.9 acres) proposed for Phase II and III release were previously approved for Phase I release by Commission Order dated February 6, 1984. No docket number was noted on the final order that was signed on February 6, 1984.
  - b. Area B2 (255.2 acres) proposed for Phase III release were previously approved for Phase I and II release by Commission Order dated February 6, 1984. No docket number was noted on the final order that was signed on February 6, 1984.
  - c. Areas A, C, and F (1,633.6 acres) proposed for Phase II and III release were previously approved for Phase I release by Commission Order dated October 7, 2008 (Docket No. C8-0011-SC-37-F). Farco initially requested 1,634.9 acres for Phase I release; however, only 1633.6 acres were approved for Phase I release and 1.3 acres were denied for release. The 1.3 acres contained a temporary diversion (Diversion DD-11A), therefore the 1.3 acres were ineligible for release. Subsequently, Diversion DD-11A was approved as part of Revision No. 14 as a permanent diversion on October 28, 2016. Farco's request for release in the subject Application includes the 1.3 acres that contains the permanent Diversion DD-11A.
  - d. Area D (458.2 acres) proposed for Phase III release were previously approved for Phase I and II release by Commission Order dated October 22, 2009 (Docket No. C9-0015-SC-37-F). Initially, Farco requested 459.3 acres for Phase I and II release; however, only 458.2 acres were approved for Phase I and II release and 1.1 acres were denied for release. The 1.1 acres contained a soil monitoring grid that indicated that the area had to be remediated for pH values more limiting than those allowed by the approved soil performance standards, therefore 1.1 acres were ineligible for release. [Finding of Fact No.17(d), *infra*].
16. As indicated in Finding of Fact No. 15, *supra*, approximately 2,501.9 acres have been previously approved for Phase I release out of the requested aggregate 2,575.2 acres, which results in a remainder of 73.3 acres with no Phase I release. However, the Application requests Phase I release on 77.6 acres, which is an additional 4.3 acres. In

Section 1.1 of the Application, Farco explains that the 77.6 acres requested for Phase I release is based on the total acreage within the disturbance area and have been adjusted to fit the actual disturbance lines in the field subsequent to filing bond release applications for these areas. Staff states in its TA that it considers that the actual disturbance lines depicted on Figure 1A and 1B, *Reclamation Bond Release Status* included with the Application represents the full extent of the area disturbed by mining-related activities on the subject area.

17. Phase I release of reclamation obligations have been met for 77.6 acres in accordance with Phase I requirements for backfilling, regrading, and drainage control pursuant to §12.313(a)(1) of the Regulations.
  - a. The postmining land uses within the proposed 77.6-acre area for Phase I release consists of 63.8 acres of pastureland and 13.8 acres of DWR.
  - b. The area has been regraded to its approximate original contour, eliminated of highwalls, and placed with suitable topsoil over regraded spoil. [§12.385]. Thirty-nine cut and fill terraces (TA1-TA18 and TB1-TB21 within Area D) were constructed within the area proposed for release to control erosion on the final graded slopes, assure slope stability, and conserve moisture. [§12.385].
  - c. There is one permanent diversion, A-10 Diversion, within the area which was approved as a permanent structure by letter dated May 15, 2014. [§12.341]. There are three permanent impoundments and three permanent roads within the area: SP-15B, SP-15C, Ranch Road 1, Ranch Road 2, and Service Road A-5. These permanent structures were approved by SMRD by letters dated September 20, 2006, and November 17, 2016. [§§ 12.347, 12.400].
  - d. Backfilling and grading activities have resulted in a minimum 4-foot cover of suitable non-toxic and non-combustible material over all exposed coal seams and all acid-forming, toxic-forming, or combustible materials. [§12.386]. The area includes all or



portions of 17 soil-testing grids, which includes 12 partial soil-testing grids and 5 full soil-testing grids. Data from the grids was submitted from 1994 to 2008. [§12.145(b)5(G)]. Staff indicates postmine soils within the proposed release area meet the applicable post-soil performance standards for Phase I release.

- i. By letter dated September 22, 2008, SMRD directed Farco to submit a mitigation plan by October 6, 2008, to address the negative electrical conductivity (EC) bank balance for 11.4 acres of topsoil and elevated pH value in quarter grid 793-1561A at the Palafox Mine.
  - ii. Farco submitted a mitigation plan which was later modified to only require sulfur additions to correct the high pH in quarter grid 793-1561A. Following remediation by Farco, the soil bank at the Palafox Mine was closed and approved by letter dated October 12, 2010. (Copy of SMRD approval letter enclosed in Appendix A of initial Application).
  - e. Surface water runoff from all areas proposed for Phase I release of reclamation obligations flow through Ponds SP-11A, SP-15A, SP-15C, and SP-18. By letter dated May 26, 2010, release from sedimentation control requirements for Pond SP-11A was approved for release, and by letter dated April 5, 2010, Ponds SP-15A, SP-15C, SP-18 were approved for release. Copies of the letters are provided in Staff's TA Appendix V within Attachment III. [§12.344]
  - f. There are no waste disposal areas within the proposed release area. [§12.375].
18. Phase II release of reclamation obligations have been met for the requested multi-phase release for an aggregate 1833.1 acres (77.6 acres and 1,755.5 acres) in accordance with Phase II requirements for vegetation and the requirement that the area not be contributing suspended solids to streamflow or runoff outside the permit area in excess of effluent limitations pursuant to §12.313(a)(2) of the Regulations.
- a. The postmining land uses within the 1833.1-acre area proposed for Phase II release consists of 1,731.2 acres of pastureland and 101.9 acres of DWR. [§§12.147, 12.399].

- b. Revegetation has been established on the subject acreage with an approved postmining land use of pastureland pursuant to the requirements in §§12.390 – 12.395.
  - i. The vegetation within the proposed release area consists of the following species: Alkali sacaton, Arizona cottontop, Bermudagrass, Blue grama, Blue panic, Buffalograss, Bufflegrass, Cane beardgrass, Galleta grass, Green panic, Green sprangletop, Hubam clover, Illinois Bundleflower, Indian ricegrass, Indiangrass, Inland saltgrass, King Ranch bluestem, Kleburg bluestem, Kleingrass, Lehmann lovegrass, Maximillian sunflower, Native sunflower, Old World bluestem, Plains bristlegrass, Plains dropseed, Russian wildrye, Sideoats grama, Swithgrass, Trichloris, Weeping alkaligrass, and Wilman lovegrass. [§12.391].
  - ii. Ground cover assessments were performed for the 2006 and 2008 growing seasons. For the 2006 growing season, ground cover assessments were approved by letters dated October 23, 2007 (Areas A, C and F), November 2, 2007 (Area B1), and November 16, 2007 (Areas B2 and D). A second ground cover assessment for 2008 growing season was approved by letter dated December 11, 2008 (Area D). Copies of approval letters are provided in Staff's TA Appendix V within Attachment III.
    - A. By letter dated August 9, 2007, Farco submitted vegetative ground cover and forage production data collected from July 17-19, 2007, at Areas A, C, and F; and by Commission letter dated October 23, 2007, SMRD determined that the 2007 ground-cover and forage-production data exceeded the approved standards.
    - B. By letter dated September 14, 2007, Farco submitted vegetative ground cover and forage production data collected from April 18-19, 2007, at Area B1; and by

Commission letter dated November 2, 2007, SMRD determined that the 2007 ground-cover and forage-production data exceeded the approved standards.

- C. By letter dated September 25, 2007, Farco submitted vegetative ground cover and forage production data collected from August 27-28, 2007, at Areas B2 and D; by Commission letter dated November 16, 2007, SMRD determined that the 2008 ground-cover and forage-production data exceeded the approved standards.
  - D. By letter dated May 30, 2008, Farco submitted vegetative ground cover and forage production data collected from May 20-21, 2008 at the Area D of the Palafox Mine; by Commission letter dated December 11, 2008, SMRD determined that the 2008 ground cover and forage production data exceeded the approved standards.
- c. No erosion was observed in areas with DWR land use and all associated ground cover is adequate to control erosion as required.
  - d. 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. Farco provided surface water data compiled for the period of record for several ponds and LTSM stations that receive runoff from the proposed release area. Surface water runoff from the areas proposed for Phase II release flows through Ponds SP-4, SP-4A, SP-11A, SP-17, SP-13, SP-14, SP-15A, SP-15B, SP-15C, SP-18, SP-12, and SP-16. These ponds were approved by SMRD for release from sedimentation control requirements by letters dated May 26, 2010, April 5, 2010, May 31, 2007, and July 1, 2009, respectively. Copies of the letters are provided in Staff's TA (Appendix V within Attachment III). [§12.340].
  - e. As discussed in Finding of Fact No. 19(i), *infra*, the areas requested for Phase II release have been stabilized to reduce the potential for contributing suspended solids

to stream flow or runoff outside the permit area in excess of effluent limitations set out in the water quality permit or in excess of stream segment standards pursuant to §12.313(a)(2) of the Regulations.

- f. No silt dams are present within the area requested for Phase II release. [§12.344].
  - g. No rills or gullies were observed during the inspection of the subject acreage. [§12.385].
  - h. There is no prime farmland located within the area proposed for release which other requirements would be applicable. [§§12.620 – 12.625].
19. Phase III release of reclamation obligations have been met for the requested multi-phase release of a total of 2,575.2 acres (77.6 acres; 1,755.5 acres; and, 742.1 acres) in accordance with Phase III requirements for the completion of the extended responsibility period (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 of the Regulations.
- a. The postmining land uses within the area proposed for Phase III release consists of 2,442.8 acres of pastureland and 132.4 acres of DWR. [§12.147, 12.399].
  - b. The 10-year ERP for 2,438.7 acres of pastureland commenced on September 26, 2007, and approved by letter dated July 26, 2010; an additional 3.4 acres of pastureland (*A-10 Diversion*) were approved into the extended responsibility area (ERA) by letter dated March 30, 2017; and, an additional 0.7 acres (*ANFO Storage Bin area*) were approved into the ERA by letter dated on May 4, 2018; as a result, the ERA is comprised of 2,442.8 acres of pastureland. [§12.395(c)(2)]. For assessment purposes, the ERA for the pastureland acreage requested for release lies within three land management units (LMU): LMU North, LMU Middle, and LMU South.

- c. Successful revegetation of all acres requested for Phase III has been accomplished in accordance with §12.395 of the Regulations. As required for Phase III release of pastureland, Farco has demonstrated that ground cover and forage production in the subject area that requires a 10-year ERP equals or exceeds 90% of the applicable success standards during the growing seasons of any two years of the ERP after year six of ERP.
- i. Farco submitted ground cover and productivity reports for the 2015 and 2016 growing seasons covering the ERA acreage of 2,442.8 (including A-10 Diversion). The 2015 report initially submitted by letter July 29, 2016, did not meet the success standard. Farco submitted a revised report by letter dated March 31, 2017, and supplement dated June 3, 2017. With the replacement, Staff concluded on June 22, 2017, that the vegetation parameters within the September 26, 2007 ERA met or exceeded 90% of the approved success standard during the 2015 growing season. Similarly, the 2016 ground cover and productivity report submitted by letter dated March 20, 2017, and replaced by letter dated March 28, 2017, was approved by letter dated May 12, 2017, following successful demonstration of revegetation in accordance with §12.395(a)(2) of the Regulations. Copies of approval letters are provided in Staff's TA Appendix V within Attachment III.
  - A. By letter dated March 31, 2017, Farco submitted vegetative groundcover and forage production data collected in December 2015 within the September 26, 2007 ERA at the Palafox Mine; by Commission letter dated June 22, 2017, SMRD determined that the 2015 ground cover and forage production data exceeded the approved standards.
  - B. By letter dated March 28, 2017, Farco submitted vegetative ground cover and forage production data collected in December 2016 within the September 26, 2007 ERA at the Palafox Mine; by Commission letter dated May 12, 2017, SMRD

determined that the 2016 ground cover and forage production data exceeded the approved standards.

- d. No small depressions exist within the proposed release area. [12.385].
- e. Farco's approved August 15, 2017 (Revision No. 18) soil-testing plan requires that, during the 9th year of the ERP, a random 10% of all grids within the ERP are to be resampled and analyzed. Accordingly, Farco submitted its 10% resampling soil report by letter dated June 22, 2017 (supplemented by letters dated September 7 and October 4, 2017) which was approved by the letter dated October 23, 2017 (the approval letter was not included in the Application). Staff confirmed (October 20, 2017) that 15 grids representing 10% of the aggregate 147 grids (23 acres in size or smaller) covering the 2,442.1-acre for September 26, 2007 ERA were resampled. The 15 resampled grids were initially sampled from 1987 through 2008 and were all resampled on December 16, 2016 and analyzed for the same parameters as previously. Staff found (October 20, 2017) that the data provided did not reflect postmine soil degradation since initial sampling.
- f. In accordance with the approved soil-testing plan in Permit No. 37C, Farco has demonstrated soil integrity with the subject area has been maintained as required for Phase III release.
  - i. Farco submitted soil-fertility data for the 2014 growing season by letter dated February 6, 2015. By letter dated August 19, 2015, SMRD determined that the soil fertility data did not indicate that augmented fertilization occurred during the 2014 growing season.
  - ii. Farco submitted soil-fertility data for the 2015 growing season by letter dated February 1, 2016. By letter dated June 16, 2016, SMRD determined that the soil fertility data did not indicate that augmented fertilization occurred during the 2015 growing season.

- iii. Farco submitted soil-fertility data for the 2016 growing season by letter dated March 27, 2017. By letter dated May 2, 2017, the SMRD determined that the soil fertility data did not indicate that augmented fertilization occurred during the 2016 growing season.
- g. The area contains 15 permanent ponds, consisting of 12 sedimentation ponds, 2 wildlife enhancement ponds (WEP), and 1 reclamation pond. All 12 sediment ponds have been released from sediment control requirements. Additional structures include 7 diversions, 5 culverts, 39 terraces, 13 roads, 3 buildings (office facility, maintenance shop, and electrical building) and other miscellaneous structures (concrete slabs, storage tanks, ANFO storage bins, loading ramp, scale, and associated concrete slab). All structures have been approved by SMRD as permanent structures. Copies of Staff's approval letters for the structures were provided in Section 6 of the Application. Photographs taken during Staff's field inspection on May 9, 2018, support Phase III release of the acreage requested and are provided in Staff's TA Appendix IV within Attachment III. [§12.354]. Farco subsequently submitted Revision No. 22 by letter dated January 18, 2019 (supplemented by letter dated February 27, 2019) including the construction certification and as-build plans for the rock riprap installed, in the area experiencing erosion in Diversion DD-12. Staff indicates that the application as supplemented, was approved by letter dated March 20, 2019.
- h. Farco has conducted surface mining activities to ensure surface water quantity and quality have been protected in accordance with §§12.313(a)(2) and (3) and §12.349 of the Regulations.
- i. The Palafox Mine is located in the Rio Grande River Drainage Basin. The proposed areas for release are in Areas A, B1, B2, C, D, and F. All discharge from the mine flows eastward to Carricitos Creek or westward to the Rio Grande River.
- ii. Staff examined Farco's analysis of surface water information and discharge data from final discharge for several ponds and LTSM stations that receive runoff from

the proposed release area. The locations of ponds and LTSM stations are depicted in Figure 7 of the Farco's Supplement No. 2.

- iii. Two main watersheds drain the mine, the Rio Grande River and Carricitos Creek. All streams within the permit area are considered intermittent or ephemeral. Runoff from the area proposed for release from reclamation obligations was controlled by a series of ponds. Discharges from the ponds flow to Carricitos Creek and/or other unnamed tributaries to the Rio Grande River and to the Rio Grande Below Amistad Reservoir (Stream Segment No. 2304) of the Rio Grande Basin. Water discharge at the Palafox Mine is currently monitored under Texas Pollutant Discharge Elimination System (TPDES) Permit No. 02733, which requires weekly monitoring during any period of flow for pH, settleable solids, total iron and flow.
  - A. Data was collected and reported for 13 permanent Ponds (and the period of record) as follows: RP1 (December 2007 to April 2017); SP-4 (June 2008 to April 2016); SP-4A (March 2007 to October 2014); SP-11A (December 2007 to August 2008); SP-12 (March 2007 to October 2014); SP-13 (June 2008 to October 2014); SP-14 (December 2007 to October 2015); SP-15A (June 2008 to August 2014), SP-15B (December 2007 to February 2015); SP-15C (August 2008), SP-16 (March 2007 to August 2018); SP-17 (August 2008); and, SP-18 (March 2007 to October 2015). Ponds SP-15C and SP-17 only contained sufficient water to be sampled once during the evaluation period.
  - B. Quarterly data were analyzed for pH, conductivity, total dissolved solid (TDS) and total settleable solids (TSS). Farco indicated that gaps in data occurred because there was insufficient water in the impoundments for samplings. Palafox Mine is in arid area with an average annual precipitation of just 19 inches per year.
    1. Data for pH concentrations demonstrate that the ponds fall within or slightly above the effluent limitation of TPDES Permit No. 02733 (6.0 to 9.0 standard



unit (s.u.). No pH concentration data was provided for Ponds SP-15C and SP-17 because they only contained sufficient water to be sampled once during the evaluation period.

2. Data for conductivity range demonstrate that the ponds fall within the effluent limitation of the permit. No conductivity data was provided for Ponds SP-15C and SP-17 because they contained sufficient water to be sampled once during the evaluation period.
3. Data for TSS concentrations in most ponds appear to be elevated with a range of 4 mg/L (Pond SP-13) to 1230 mg/L (Pond SP-4). Farco indicated that elevated TSS concentrations were observed during the latter half of 2011 and the beginning of 2012, an abnormally dry summer with an extended period of evaporation. Staff states in its TA that it concurs with Farco's explanation and believes it is likely that most of the ponds received less runoff and discharged less frequently, leading to higher TSS concentrations.
4. Data for TDS concentrations have a wide range of values, varying from 72 mg/L in Pond SP-14 to 67,800 mg/L in Pond SP-16. Based on the quarterly pond data provided by Farco for Pond SP-16, the TDS concentration has decreased steadily over time from the maximum (67,800 mg/L) recorded on November 17, 2011 to 20,500 mg/L on August 15, 2018. Although TDS values in SP-16 is high, Farco explains that the spikes in TDS concentrations in the impoundment are as a result of the shallow water depth within the impoundments.
5. Farco's 2018 revised LTSM plan shows that the west side of the mine (not included in watersheds of Ponds SP-12 and SP-14) were previously monitored by Ponds SP-5, SP-6, SP-7, SP-8, SP-9, and SP-10 which were released as part of a Phase II release application in 1984 and subsequently released from sediment control on August 17, 1992. Any stormwater flow

through this area ultimately goes through Carricitos Creek and other unnamed tributaries to the Rio Grande River, entering at a point or points located between the Texas Clean Rivers Program (CRP) Station 13209 to the north and CRP Station 15814 to the south. A summary of the data from the two CRP stations is included in the Stream Monitoring Data Evaluation section of Staff's TA for Phase III release application and were used to determine the significance of any impacts to the waters of the Rio Grande River.

- iv. There are five final discharge ponds, SP-11A, SP-12, SP-14, SP-16, and SP-18, due to stormwater events from 2007 to 2018. Farco provide Table 4, Impoundment Discharge Water Quality in Supplement No. 2 to the Application. Ponds SP-11A, SP-12, SP-14, and SP-18 discharged once, while the largest impoundment Pond SP-16 discharged 16 times. The TPDES Permit for the Palafox Mine requires analysis of pH, total iron and settleable solids in the event of an impoundment discharge. The discharge data for these ponds show that, on all the discharge occasions, pH fell within effluent limitations except on September 11, 2007, when a pH of 10 s.u. was measured in Pond SP-12, a value slightly higher than the limit of 6.0-9.0 s.u., TSS measurements did not exceed the limit established by the TPDES permit (0.5 mg/L) during the period of records, while Fe concentrations for these 5 ponds ranged from 0.1 mg/L to 4 mg/L (TPDES limit of 6.0 mg/L). TDS was analyzed on 5 occasions, and the values range from 124-345 mg/L, well within the Rio Grande Stream Segment limit of 1000 mg/L. Generally, all discharges reported for the periods of record indicate compliance with the discharge permit. As indicated above, from 2007-2018, there have been no exceedances in Fe, TSS, TDS or pH limits except one pH value of 10.0 in Pond SP-12, which Farco attributes to evapo-concentration of alkaline parameters. Staff's technical review of the report indicates discharge data from the ponds comply with effluent limitation for pH and under TPDES Permit No. 02733. Staff indicates in the TA that sedimentation-pond data analyzed does not indicate adverse trends related to water quality due to mining.

In accordance with §12.313(a)(2), runoff from the proposed Phase II release areas are not contributing suspended solids to stream flow or runoff outside of the permit area in excess of the performance standards.

- i. Surface water quality evaluation for Phase III involves comparing the water quality of disturbed and undisturbed LTSM stations for the requested release area to baseline surface water data, applicable stream segment criteria, Federal and State effluent standards, the probable hydrologic consequences (PHC) determination, and Cumulative Hydrologic Impact Assessment (CHIA) estimates for specified mass-balance points. All runoff from the mine discharges to Carricitos Creek and other unnamed tributaries of the Rio Grande River and ultimately joins TCEQ's Stream Segment No. 2304.
- i. The three LTSM stations identified to monitor the effects of discharges from the Palafox Mine are: Carricitos In (P-IN) located upstream of the permit where Carricitos Creek enters the permit area; Carricitos Out (P-OUT) located downstream where the creek leaves the permit area; and Rio Grande Pump Station, now abandoned, that was also located further south of the mine. Farco provided a *Surface Groundwater Monitoring Location Map*, to show the location of the LTSM stations, Figure 7, Supplement No. 2 to the Application.
- ii. Farco provided long-term monitoring data from 2007 to 2018 for P-IN and P-OUT because it was the most complete dataset available and is representative of postmining conditions. (Tables 5-7, Supplement No. 2 to the Application).
- iii. The stream samples at P-IN (undisturbed) and P-OUT (disturbed) were analyzed for flow, acidity, alkalinity, bicarbonates, carbonates, specific conductance, total and dissolved Fe, total manganese (Mn), selenium, settleable solids, TDS, TSS, temperature and pH. Farco provided Tables 5, 6, and 7 in Supplement No. 2 to the Application, along with their respective TPDES permit standards which are summarized below.

- A. Data for pH concentrations indicates that the pH values are within TCEQ stream segment standards (6.18 to 8.45 s.u.) at the P-IN and (6.6 to 8.6 s.u.) at the P-OUT monitoring stations with an exception at P-IN on May 31, 2015, and September 4, 2018, when the pH was 6.18 s.u. and 6.20 s.u, respectively.
- B. Data for TSS at P-IN and P-OUT show a relatively stable and declining trend over the monitoring period. However, TSS at the upstream station P-IN increased to 1,620 mg/L on July 1, 2010, and 2,860 mg/L on July 18, 2014. The TSS concentration at the downstream station P-OUT was significantly lower at 116 mg/L and 223 mg/L on the same days, respectively. Farco attributes the higher TSS spikes at P-IN than P-OUT on both occasions to precipitation events. A comparison of TSS concentrations at P-IN (range of 23 to 2,860 mg/L and average of 411 mg/L from May 2008 to September 2018) to baseline data (range of 152 mg/L to 2,960 mg/L and average of 1,372 mg/L from August 12, 1980, to October 9, 1990) shows that the TSS data for the period of record are lower than those recorded during baseline conditions.
- C. Data for TDS at P-IN and P-OUT show a relatively stable and declining trend over the monitoring period. The highest TDS concentrations for both stations (P-IN and P-OUT) was 4321 mg/L at P-OUT on July 18, 2014, since that time, TDS has significantly decreased to below 200 mg/L at both stations. Additionally, the average TDS concentrations for both monitoring stations during the period of record is below the standard for Stream Segment 2304 (1,000 mg/L).
- D. Data for dissolved Fe concentrations appear to be erratic at both P-IN and P-OUT and increasing at P-OUT as indicated on the trend graph in Appendix C-2. Dissolved Fe at P-OUT ranged from 0.09 to 2.46 mg/L, with an average of 0.7 mg/L. Total Fe concentrations were generally stable, with trend opposite to that of dissolved Fe at both stations. Based on the trend graph, total Fe appears to

be higher at P-IN than P-OUT on July 1, 2010 (42.4 mg/L) and July 18, 2014 (62.2 mg/L). The Environmental Protection Act (EPA) drinking water standards for human consumption recommended levels of Fe is lower than 0.3 mg/L; however, total Fe data from both LTSM stations appear to be representative of baseline water quality data (Table .146-A of the original permit No. 8). The Fe baseline data at P-IN from August 12, 1980, to October 9, 1990, ranged from 0.54 to 81.7 mg/L, with an average of 21.3 mg/L, while at P-OUT baseline data from August 30, 1979, ranged from 0.24 to 79 mg/L. Data demonstrates Fe levels in the area are naturally occurring and are not the result of mining operations conducted under the permit.

E. Data for Mn in Appendix C-2 within the Application shows a stable trend. The range and average concentrations at P-IN is slightly higher than at P-OUT. Although there is no Mn standard for Stream Segment 2304, TCEQ's maximum allowable concentration for hazardous metals such as Mn in inland water is 3 mg/L. Based on the LTSM data from both P-IN and P-OUT in Table 6 and 7 of Supplement No. 2 to the Application, Mn concentrations have been below 1.2 mg/L for the period of record (May 2008-September 2018). Comparison of the data to baseline shows a significant improvement (93%) particularly at the downstream point P-OUT based on Farco's statistics provided in Table 2 of Supplement No. 2.

iv. Rio Grande Pump Station was removed by the landowner. Farco provided long-term monitoring data from 1988 to 2001 for the Rio Grande Pump Station that was monitored from 1988 through 2001 and provided the CRP Rio Grande Monitoring Station data in lieu of quarterly Rio Grande Pump Station data from 2001 to present day in Appendix B-2, Table .146-2.3 of the Application. These two stations, CRP 13209 (North) and CRP 15814 (South), correspond to the International Boundary and Water Commission (IBWC) gauges 08-4509.00 and 08-4590.00 referenced in SMRD's CHIA.

- A. As part of Revision No. 21 of Permit No. 37C, Farco provided a historical overview of the Palafox Mine permit and the Rio Grande Pump Station. It is indicated that regulatory correspondence shows the location of the Rio Grande Pump Station was intended to monitor an unnamed tributary to the Rio Grande River whose watershed included the coal-wash plant and a portion of the mine facilities area; however, at some point the station may have also monitored water pumped from the Rio Grande River to supplement the coal-washing operation. Following, the approval of Permit 37C by Order dated September 12, 2006, the coal-washing operation ceased, and the coal-wash plant ponds were reclaimed and replaced with reclamation Pond RP-1. Active pumping from the Rio Grande River ended and the pump was abandoned; and there appears to be no further monitoring of the Rio Grande Pump Station since that time.
- B. Farco, therefore, conducted a statistical Analysis of Variance (ANOVA) of the data at LTSM stations P-IN and P-OUT in lieu of the Rio Grande Pump Station data. The ANOVA was performed at the 95% confidence level using the Statistical Analysis Suite (SAS) software. The result of the ANOVA showed that: (1) there is no statistically significant difference between any parameter upstream and downstream of the mine; (2) the Rio Grande Pump Station watershed is having little to no impact on the quality of stream water in the vicinity of the Palafox mine; and (3) no changes or adverse impacts to stream water quality are anticipated. Farco provided a summary of the statistics in Appendix B-2, Table .146-2.2 within the Application.
- C. Data for pH measured at the referenced CRP stations were within TCEQ's stream segment criterion. The TDS averages improved from upstream to downstream and the TDS downstream of the mine is below the worst-case scenario of 668 mg/L predicted in Staffs CHIA. Based on the data submitted on Table .146-2.3, Appendix B-2, the maximum measured TDS concentration at both CRP stations was 1,500 mg/L. Staff indicates that it was a single isolated measurement that is not indicative of the typical TDS levels.

- D. Farco indicates that the far west side of the mine disturbance only encompasses approximately 9.6% of the total disturbances area. Therefore, the additional CRP data combined with the complete quarterly data that were submitted for LTSM Stations P-IN and P-OUT are adequate to describe the surface water quality and quantity at the Palafox Mine. Staff concurs with Farco that the west side of the mine disturbance area has not had an adverse impact on waters of the U.S. The ponds in this area were released from sediment control in 1992 and are fully vegetated and stable.
- v. Farco addressed the adequacy of the approved PHC determination through the submittal of a long-term surface water evaluation (statistics and trend analysis). Data from P-IN and P-OUT show that permanent changes to surface water quality are not anticipated. Using a statistical ANOVA, Farco confirmed that there was not a significant difference between samples collected from LTSM stations upstream and downstream of the mine for any parameters sampled and that mine activities have had little to no impact on surface water quality.
- A. Based on the impoundments data provided, the ponds with outfalls that flow to Carricitos Creek rarely discharge. The outfall from Pond SP-16 discharges towards the Rio Grande and has discharged more frequently. Farco estimates an average overall daily flow rate of 0.02 million gallons/day (MGD) at Pond SP-16 in comparison to the daily average flow of 35.84 MGD measured at the closest downstream flow gauging station along the Rio Grande River (station 08-4590.00). This gauging station's flow rate is based on data from June 2007 to 2011, when monitoring was terminated by the IBWC. Farco further adds in Section 3.2.3 of the Application that Pond SP-16 contributes 0.07% to downstream flow per year, a value similar to the estimated Rio Grande River downstream impacts of less than 0.03% from impoundment discharge accounted for in the PHC determination. Staff's notes that its evaluation

supports a conclusion that water quality in comparison to the approved surface water PHC determination has been protected.

- B. The annual evaporation and consumptive livestock losses are approximately 393 acre-feet, an increase over premine consumptive losses. However, Farco indicates that this amount is negligible compared to overall annual runoff of over 1.4 million acre-feet per year measured at USGS Station 08459200. Also, the estimated annual consumptive losses of 393 acre-feet accounts for less than 0.03% of the annual measured flow.
- vi. The CHIA is an evaluation of whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside of the permit area. Staff's CHIA for surface coal mining areas (Eagle Pass, Palafox, Rachal, and Trevino Mines) within the Rio Grande Basin, is contained in Staff's TA, Addendum No. 3 for Docket No C5-0003-SC-42-C, the renewal/revision of Eagle Pass Permit No. 42A. The CHIA establishes material damage criteria for the defined cumulative impact area, which includes the Palafox Mine, based on baseline surface water quality information contained in the permit, TCEQ stream-segment criteria, drinking-water standards, and TPDES wastewater discharge permit standards. Data for TDS concentrations indicate that the flow-weighted mean TDS concentrations downstream at Mass-Balance Location No. 1 (IBWC station No. 08-4590.00 at Laredo) is projected to be as high as 668 mg/L with an estimated average of 594 mg/L (CHIA) Table 3, Rio Grande Basin Surface-Water Mass Balance) for a 9-year period of record, from 2002 to 2010. Farco's average TDS concentration at LTSM Stations P-IN and P-OUT (201 mg/L and 226 mg/L, respectively) are lower than the calculated value in the CHIA and well below the maximum annual average TDS concentration of 1,000 mg/L for Stream Segment No. 2304.
- j. Farco addressed the requirements of §12.348 (relating to Hydrologic Balance: Ground-water Protection) by reference to Section .146(b) of approved Permit No. 37C (Appendix B-2) indicating that no ground water was present, and no ground water



monitoring plan addressing the overburden and underburden were required. Staff's TA indicates that Farco was released from baseline groundwater monitoring requirements by letter dated September 25, 1979.

- i. Groundwater monitoring between 1979 to 2005. By letter dated September 25, 1979, Staff stated, in part, that "[SMRD] will waive those sections of the permit application requirement which require information on groundwater hydrology." Staff stated and summarized the geologic and hydrologic conditions of the area and the extent to which information is available on those conditions as follows:
  - A. No aquifers, perched water tables or any other significantly saturated stratigraphic units affected by mining activities.
  - B. The only aquifer in the area capable of yielding usable-quality water is the Carrizo Sand which occurs at an approximate depth of 1100 feet.
  - C. The general stratigraphy of the area was adequately described in the original Farco Application.
  - D. There are no intermittent or perennial streams in the areas; however, if discharged waters shall enter the Rio Grande River, the Applicant should fulfill the applicable requirements of Section 779.16.
  - E. The Palafox mine area is one of low rainfall, high soil permeability and extreme evaporation rates. These factors should substantially reduce the possibility of rainfall runoff contributing deleterious contributions of suspended solid to receiving streams.
  - F. Staff concludes that "[SMRD] will waive those sections of the permit application requirement which require information on groundwater hydrology."

- ii. Farco provided a copy of letter dated September 25, 1979, in Appendix A, within Supplement No. 2 to the Application.
- k. Groundwater monitoring after 2005. The three spoil wells were constructed in 2005 to monitor groundwater quantity and quality. Farco provided water quantity and quality data for the spoil monitoring wells in Figure 7, *Surface and Groundwater Monitoring Location Map*, in Appendix G within the Application.
  - i. Farco monitors three spoil recharge wells at the Palafox Mine to record any physical and chemical changes in the spoil groundwater and any possible influence of spoil waters on Carricitos Creek and the Rio Grande River. The well locations are shown on Figure 7, *Surface and Groundwater Monitoring Location Map*, within the Application.
  - ii. The Inspection Report dated September 5, 2018, states that several spoil monitoring wells are located within the area requested for Phase III release and that Farco states that the wells will be plugged, or a submission will be made to the Commission requesting the wells remain as permanent, upon approval of Phase III release from reclamation obligations. By correspondence dated June 27, 2019, Farco's consultant, Trihydro, states in part that "Farco will collect quarterly water quality samples from the spoil monitoring wells in July before proceeding with plugging and abandonment" and "would complete the work prior to the anticipated August 2019 conference and provide documentation to be included in the draft order." By correspondence dated July 15, 2019, Trihydro stated that it is their intent to complete plugging and abandoning the spoil wells and submit documentation to SMRD. By correspondence dated July 24, 2019, Trihydro submitted documentation to SMRD to show that Farco had plugged and abandoned the spoil wells. By correspondence dated July 24, 2019, SMRD acknowledged and confirmed completion of the plugging operations, as required by §§ 12.331-12.333.

iii. The spoil monitoring wells have been capped, sealed, backfilled, or otherwise properly managed, as required and approved by the Commission, as provided by §§ 12.331-12.333.

I. Three spoil wells (PA, PB, and PC) were constructed in the proposed release areas in 2005. Spoil Wells PB and PC are located in Release Area A, and Spoil Well PA is located in release Area C. Farco provided Figure 4B, *Proposed Bond Release Area Map*, and Figure 2, *Site Map*, in Supplement No. 2 to the Application; and data for water quantity and quality for the spoil wells in Figure 7, *Surface and Groundwater Monitoring Location Map*, in Appendix G within the Application.

i. Spoil Well PA is located in the northernmost portion of the proposed release area as shown in Figure 2, *Site Map*, in Supplement No. 2 to the Application. Staff indicates that the water-level measurements for well PA obtained from September 2007 through June 2017 are stable with minor fluctuations. Current water levels have stabilized to within one foot of the initial measurement. The pH for the period of record is neutral to basic with a median of 6.5 s.u. and little variability over time. Sulfate concentrations showed little change from the initial sampling date until June 2015, then fluctuated until August 2018. Chloride concentrations remained stable over the period of record. TDS concentrations remained stable from the initial sampling date in 2007 until March 2016, then trended downward slightly through 2018.

ii. Spoil Well PB is located in the easternmost portion of the proposed release area. Water-level measurements for well PB obtained over the period of record from September 2017 through June 2017 show current water levels to be within one foot of initial measurement. Water levels remained relatively are stable with minor fluctuations throughout the monitoring period. The pH for the period of record is neutral to basic with a median of 6.5 s.u., and after the initial pH reading of 5.72 s.u., remained relatively stable during the entire period of record. Sulfate concentrations have remained stable during the entire period of record. Chloride

concentrations remained static over the period of record. TDS concentrations remained stable from the initial sampling date in 2007 until March 2016, then fluctuated through 2018.

- iii. Spoil Well PC is located in the easternmost portion of the proposed release area approximately 1,000 feet west of the permit boundary, as shows in Figure 2, Site Map. Water-level measurements for well PC obtained over the period of record from September 2017 through June 2017 show current water levels to be within two feet of initial measurement. Water levels remained relatively stable with minor fluctuations throughout the monitoring period. The pH for the period of record of 6.5 s.u., ranging from 5.66 to 7.0 s.u., and after the initial pH reading remained relatively stable during the entire period of record. Sulfate concentrations have remained stable during the entire period of record. Chloride concentrations have been essentially static during the period of record. TDS concentrations fluctuated from the initial sampling date in September 2007 to June 2011, were stable through September 2016 then fluctuated through 2018. Staff indicates that fluctuation may be the result of increased precipitation or sampling anomalies.
- m. A groundwater seep is located along the northern disturbance boundary of the mine. Seep water flows to the drainage downstream of Diversion DD-12. The seep was first noted in 2005 and Farco indicates that the source of the seep is unknown, but field water-quality measurements suggest it may be related to spoil recharge, with neutral to basic pH between 6 s.u. to 7.8 s.u. and high conductivity. Seep inspection reports are provided in Appendix F of the Application. Staff's TA states that recent reports indicate there are no erosion issues and that vegetation is not being adversely affected by the seep and some hydrophytic vegetation is present.
- n. Staff indicates that the water quantity in the spoil monitoring wells (as represented by water levels) has generally stabilized, fluctuations in TDS that occurred in the spoil monitoring well from 2016 through 2018 may be the result of increased precipitation

or sampling anomalies, and water levels and saturated thickness are shown in Table 8 and Appendix G of Supplement No. 2.

- o. Staff indicates that for water quality, no comparison of groundwater to baseline or regulatory standards is required because no significant or useable groundwater resources exist in the vicinity of Palafox Mine and spoil monitoring wells are not subject to ground water protection standards. As described in Staff's CHIA for the Palafox mine, however, it is possible for spoil groundwater to influence stream-water quality due to groundwater inflow from the spoil. Water quality in Carricitos Creek is subject to the water-quality criteria for Stream Segment No. 2304.
  - i. Data concentrations for TDS, chloride and sulfate levels in Carricitos Creek are well below the stream segment criteria for TCEQ Segment No. 2304, and spoil monitoring wells does not appear to have influenced the Carricitos Creek. Water quality has followed trends expected from the PHC determination and CHIA for the Palafox Mine. With respect to ground-water systems, Farco has complied with the requirements of the Regulations for the subject acreage proposed for Phase III release.
    - ii. The current PHC determination indicates that no impacts will occur to domestic water supply wells. The data provided by Farco for the subject acreage proposed for Phase III release meets the ground-water protection as provided by §12.348 of the Regulations.
  - p. There is no prime farmland located within the area proposed for release which other requirements would be applicable. [§§12.620 – 12.625].
- 20. The areas requested for release of reclamation obligations are capable of sustaining the postmining land uses. Monthly inspections and Staff's Inspection Report dated September 5, 2018, demonstrate that the land has been reclaimed to and managed in accordance with the approved postmining land uses.

21. Pursuant to §12.313(a)(3), the Commission may release the remaining portion of the bond attributable to the subject 2,575.2 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 release of Phase I, II, and III reclamation obligations for 77.6 acres, release of Phase II and III for 1755.5 acres, and a release of Phase III for 742.1 acres, for an aggregate 2,575.2 acres, Farco is eligible to be released of the bond in its entirety. Staff states in its TA that the most recent bond-map update (Revision No. 19) was approved by letter dated May 2, 2018. Revision No. 19 approved reclamation cost estimate amount of \$711,698 as the minimum required bond amount. Farco requested the full release of the \$3,376,676 surety bond approved by Order dated May 29, 2008, and final permit termination in this application. Staff recommends release of reclamation liability for all 2,575.2 acres. The subject 2,575.2 acres represent the entirety of the permit area that were disturbed by mining operations. As such, upon approval of the Application by the Commission, Farco will be eligible to eliminate its performance bond obligations as no amount of bond remains necessary to ensure reclamation of the permit area.
22. All areas requested for release were marked in the field to distinguish them from previously released areas and the requested release areas. Upon entry of this Order, all areas within the current permit area of Permit No. 37C will have been fully released, the permit area reduced to 0.0 acres, and the Permit officially and permanently closed and retired; accordingly, there is no further requirement or need for continued marking in the field of a permit area or any other area, including the area requested for release in the subject Application.
23. Farco and Staff are the only parties to the proceeding. A proposed order was circulated to the parties on July 3, 2019, that approved the requested releases, terminated the permit and contained language allowing Farco 90 days to complete plugging activities related to the spoil wells addressed in Finding of Fact No. 19(k), *supra*. Staff filed exceptions to the initial proposed order stating that release of the acreage and termination of the permit prior

to well plugging completion is contrary to requirements set forth in the Regulations. Following review of Staff's exceptions and receipt of correspondence from Farco that it intended to plug the wells, the Administrative Law Judge informed the parties that a recommendation would not be presented to the Commissioners prior to documentation establishing compliance with §§12.331-12.333 being filed in the docket and that a second proposed order would be circulated to the parties after the required documentation was received. Subsequently, by letter dated July 24, 2019, Farco submitted documentation that it has complied with §§ 12.331-12.333. By letter dated July 24, 2019, SMRD acknowledged and confirmed completion of the plugging operations as required by §§ 12.331-12.333. The second proposed order was circulated to the parties on July 25, 2019. The parties filed waivers of the preparation and circulation of a proposal for decision prior to this matter being noticed in accordance with the Open Meetings Act. No exceptions were filed to this order.

24. Open meeting notice has been posted for Commission consideration of the 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 Farco's Application and proper notice of consideration by the Commission has been provided.
2. No public hearing was requested, and none is warranted.
3. Farco has capped, sealed, backfilled, or otherwise properly managed the spoil monitoring wells within the permit area and Farco submitted documentation establishing compliance in accordance with §§ 12.331-12.333 of the Regulations.

4. Farco has complied with all applicable provisions of the Act and Regulations regarding notice for Commission jurisdiction to allow consideration of the Application and Final Closure of Permit No. 37C.
5. Farco has complied with all applicable provisions of the Act and the Regulations for the acreage requested for release under the Application as set out in the Findings of Fact.
6. The Commission may approve a release of Phase I, II, and III reclamation obligations for 77.6 acres, a release of Phase II and III for 1755.5 acres, and a release of Phase III for 742.1 acres as set out in the above Findings of Fact and Conclusions of Law.
7. With the approved releases, all disturbed areas within the permit boundary will have been released from reclamation obligations, and the permit may be terminated and the surety bond in the amount of \$3,376,676 may be released.

**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 77.6 acres, a release of Phase II and III reclamation obligations for 1755.5 acres, and a release of Phase III for 742.1 acres is hereby approved;

**IT IS FURTHER ORDERED** that as a result of the aforementioned release, the Commission determines that all previously disturbed areas within the current permit area of Permit No. 37C have been fully released and no bond amount is required to ensure further reclamation of the permit area;

**IT IS FURTHER ORDERED** that the surety bond in the amount of \$3,376,676 is hereby released in its entirety;



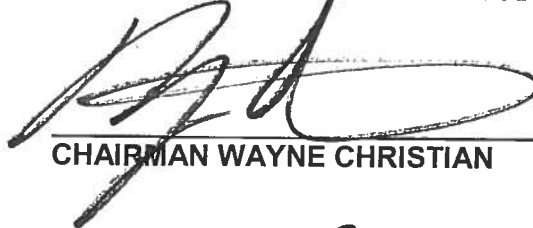
**IT IS FURTHER ORDERED** that all performance obligations under Permit No. 37C are terminated and all areas released from reclamation obligations are no longer required to be marked in the field with permanent boundary markers;

**IT IS FURTHER ORDERED** that Permit No. 37C, Palafox Mine, is officially and permanently closed and the Permit retired, representing the conclusion and completion of all reclamation activities required under Permit No. 37C; 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 August 6, 2019.**

**RAILROAD COMMISSION OF TEXAS**



**CHAIRMAN WAYNE CHRISTIAN**



**COMMISSIONER CHRISTI CRADDICK**



**COMMISSIONER RYAN SITTON**

**ATTEST**



**Deputy Secretary, Railroad Commission of Texas**