RAILROAD COMMISSION OF TEXAS
HEARINGS DIVISION

SURFACE MINING DOCKET NO. C18-0017-SC-11-C
APPLICATION BY SAN MIGUEL ELECTRIC COOPERATIVE, INC. FOR RENEWAL/REVISION, PERMIT NO. 11G, SAN MIGUEL LIGNITE MINE, ATASCOSA AND MCMULLEN COUNTIES, TEXAS

ORDER APPROVING APPLICATION FOR RENEWAL/REVISION OF PERMIT NO. 11G

STATEMENT OF THE CASE

The Applicant, San Miguel Electric Cooperative, Inc. (SMECI), P.O. Box 280, Jourdanton, Texas 78026-0280, has applied to the Railroad Commission of Texas (Commission), Surface Mining and Reclamation Division (SMRD and/or Staff), for a permit application for approval of a five-year renewal/revision of Permit No. 11G for San Miguel Lignite Mine, Atascosa and McMullen Counties. The permit area is located approximately 50 miles south of San Antonio, sixteen miles south of Jourdanton, Texas and six miles southeast of Christine on FM 3387. The application proposes to renew and revise the permit for an additional five-year term. The permit area contains approximately 16,000 acres. The proposed San Miguel Lignite Mine area is comprised of three mine areas: Areas A, B and E. Area B is divided into Area B and Area B-Extension, also known as Area BX. Area B is bounded on the southwest by Area A and La Parita Creek, and on the northeast by Metate Creek. Extraction of lignite has ceased in Areas A and E, but certain permanent roads and final pits in these areas remain open for the placement of coal combustion by-products and haulage of lignite from Permit No. 60 to the power plant. Extraction of lignite is proposed to continue in Area B.

The application and filing fee were submitted pursuant to the Texas Surface Coal Mining and Reclamation Act, Tex. Nat. Res. Code Ann. Ch. 134 (Vernon Supp. 2020) (Act) and the "Coal Mining Regulations," Tex. R.R. Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2020) (Regulations).

The Application was declared administratively complete by the SMRD Director by letter dated March 1, 2016. SMECI filed eight supplements in response to comments made by Staff, and Staff filed a Technical Analysis (TA) and eight (TA) addenda. After public notice of application, the Texas Parks and Wildlife Department commented on the application as supplemented. In addition, a landowner[1] filed a comment; however, no hearing was requested by that landowner. Subsequently, on August 10, 2020, a petition to intervene and be designated an interested party was filed by another landowner[2]; however, the deadline for filing a request for

[1] By letter dated February 4, 2020, Mr. Patrick O. Rayes sought information on SMECI's Application, specifically as it related to "Fly Ash."
[2] On August 10, 2020, A.M. Peeler Ranch, LLC, and Jason Peeler ("Peelers") filed a petition for leave to intervene.

a hearing had expired. The administrative law judge (ALJ) issued an interim ruling denying the request to intervene because the landowner failed to timely request a hearing pursuant §12.211, which precluded the request for a hearing and being designated as a party in this docket. An interim appeal was filed by the landowner and responses were filed by SMECI; however, the Commission did not take action on the interim appeal and the interim ruling was deemed denied by operation of law. During the review period for the application, SMECI had entered into an agreement with a new mine operator. At the request of the ALJ, SMECI filed Supplement No. 8 on October 28, 2020, to update information regarding the change of mine operator pursuant to §12.116.[3] Staff subsequently filed its TA Addendum No. 7, stating that it did not recommend approval of the permit renewal application until SMECI provided information required by §§12.116(b)(3) and (4) of the Regulations. The ALJ issued an interim ruling that determined that SMECI's Supplement No. 8 included information sufficient to meet the requirements of §§12.116(b)(3) and (4) and directed Staff to submit a TA addendum in response to SMECI's Supplement No. 8. The ALJ's interim ruling was not appealed by the parties. Staff filed its TA Addendum No. 8 and reiterated that it did not recommend approval of the renewal application until SMECI provided the information it believes is required pursuant to §§12.116(b)(3) and (4) of the Regulations. The ALJ requested whether Staff's position was adverse to a recommendation by the ALJ for approval of the application. In response, Staff reiterated its position that it did not recommend approval, but indicated that it did not oppose a recommendation by the ALJ approving the application, and waived its right to a proposal for decision ("PFD") and to file exceptions and present briefs to the Commission in accordance with 16 Tex. Admin. Code §1.121(c) of the Commission's Practice and Procedure Rules. Additionally, Staff updated its response to extract its statement that it did not recommend approval of the application.

SMECI's current bond for Permit No. 11G was accepted as part of a blanket bond covering the three permits issued to SMECI. Staff recommends a bond for the proposed activities in an amount of at least $84,633,598. The current blanket bond for Permit Nos. 11G, 52A, and 60 is sufficient in total to cover the surface coal mining and reclamation operations proposed in this docket and the Application may be approved and the permit issued. Staff's recommended bond amount does not consider the increases in reclamation costs associated with activities to be conducted pursuant to the proposed extended reclamation time frame. A permit provision has been recommended to address the potential insufficiency of the amount of the current bond (Appendix I).

Based upon the Application evidence presented, and Staff's TA and addenda, all factual issues have been addressed as required by the Act and Regulations as set out in the Findings of Fact, Conclusions of Law and Permit Provisions (Appendix I) and the Soil Testing Plan (Appendix II), included as Appendices I and II to this Order. The proposed order was circulated to the parties,

[3] Simultaneously with the submittal of Supplement No. 8, Revision No. 19, a non-significant revision application, was pending review in SMRD because Staff and SMECI were disputing whether additional information was required specific to §§12.116(b)(3) and (4).

SMECI and Staff, and both parties have filed waivers of the preparation and circulation of a proposal for decision. No exceptions were filed.

FINDINGS OF FACT

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

1. By letter dated July 27, 2018, San Miguel Electric Cooperative, Inc. ("SMECI"), P. O. Box 280, Jourdanton, Texas 78026-0280, applied to the Railroad Commission of Texas ("Commission") to renew and revise Permit No. 11G for its San Miguel Lignite Mine located in Atascosa and McMullen Counties. The proposed San Miguel Lignite Mine area is comprised of three mine areas: Areas A, B and E. Area B is divided into Area B and Area B-Extension, also known as Area BX. Area B is bounded on the southwest by Area A and La Parita Creek, and on the northeast by Metate Creek. Extraction of lignite has ceased in Areas A and E, but certain permanent roads and final pits in these areas remain open for the placement of coal combustion by-products and haulage of lignite from Permit No. 60 to the power plant. Extraction of lignite is proposed to continue in Area B. The initial application, made up of three volumes, was submitted to the Surface Mining and Reclamation Division, along with the application fee of $3,000.00 by letter dated July 27, 2018. The application is made pursuant to the Texas Surface Coal Mining and Reclamation Act, Tex. Nat. Res. Code Ch. 134 (Vernon Supp. 2020) ("Act") and the Commission's "Coal Mining Regulations," Tex. R.R. Comm'n, 16 Tex. Admin. Code Ch. 12 (Thomson West 2020) ("Regulations").

2. In accordance with §12.106(b) of the Regulations, SMECI's initial application was filed on July 27, 2018, at least 180 days prior to the expiration of the permit. The initial application was properly filed at least eight months prior to the projected commencement of operations as set out in §12.106(b)(1).

   a. The initial application submitted on July 27, 2018, contains three volumes. Each subsequently filed supplement was contained in a single volume, nine supplemental volumes in total, as described in this finding of fact. On July 30, 2018, the SMRD Director declared the application administratively incomplete. Supplement No. 1 ("Supp. 1") was submitted on August 14, 2018. The SMRD Director determined the application to be administratively complete on August 15, 2018, and transferred it to the Hearings Division for processing, as required by §1.24 and §1.41 of the Commission's Rules of Practice and Procedure. Staff provided its Technical Analysis ("TA") containing a description and list of application deficiencies and non-substantive comments resulting from its review of the initial application and Supp. 1 by letter dated October 8, 2018. SMECI provided a response as Supplement No. 2 ("Supp. 2"), by letter dated January 3, 2019. Staff subsequently filed TA Addendum No. 1, ("TAAddm

1") by letter dated February 11, 2019. SMECI provided a further response as Supplement No. 3 ("Supp. 3"), by letter dated May 29, 2019, to which Staff filed TA Addendum No. 2 ("TAAddm 2") on June 24, 2019, noting continuing concerns. SMECI then submitted Supplement No. 4, ("Supp. 4") on July 22, 2019. On August 27, 2019, Staff filed TA Addendum No. 3 ("TAAddm 3"), which addressed the application as revised by Supp. 4; to which SMECI submitted Supplement No. 5 ("Supp. 5") on September 27, 2019. Staff responded with TA Addendum No. 4 ("TAAddm 4"). SMECI filed Supplement No. 6 ("Supp. 6") on November 14, 2019, to which Staff responded with TA Addendum No. 5 ("TAAddm 5"). SMECI subsequently submitted Supplement No. 7 ("Supp. 7") by letter dated April 3, 2020, and additional information to Supplement No. 7 ("Supp. 7A") by letter dated August 4, 2020. Staff filed TA Addendum No. 6 ("TAAddm 6") containing its technical review of the supplemented Application as modified in Supplement Nos. 1 through 7A. SMECI responded to this TA addendum with Supplement No. 8 by letter dated October 28, 2020. By letter dated November 12, 2020, Staff filed TA Addendum No. 7 ("TAAddm 7"), representing Staff's technical review of the Application as modified through Supplement No. 8, and noting one remaining issue with regard to members owners/controllers of SMECI. By letter dated November 18, 2020, SMECI requested that the ALJ determine that the information contained in the application is sufficient and that no additional information is needed. The ALJ exhaustively reviewed the record and issued an interim ruling by letter dated December 18, 2020, that the owner/controller information in the application satisfies the regulatory requirements for electric cooperatives. The interim ruling was not challenged by either SMECI or Staff. Nevertheless, Staff filed its TA Addendum No. 8 ("TAAddm 8") by letter dated January 15, 2021, indicating that the supplemented application meets all regulatory requirements except that it does not include sufficient ownership and control information for the member cooperatives of SMECI. This same position was reiterated in a letter from Staff dated January 20, 2021, in response to an inquiry letter from the ALJ dated January 15, 2021. The Commission determines that this issue was appropriately addressed in the ALJ's December 18, 2020, interim ruling; thus, the Commission determines that there are no further concerns that would preclude approval of the application.

b. Staff identified 59 application deficiencies in the initial TA. In TAAddm 1, Staff noted 25 application deficiencies, seven of which were new. In TAAddm 2, Staff noted eight application deficiencies, four of which were new. In TAAddm 3, Staff noted two continuing application deficiencies and one new application deficiency. Similarly, the initial TA contained 50 non-substantive comments, TAAddm 1 contained 17 non-substantive comments, TAAddm 2 contained six such comments, and TAAddm 3 contained a single non-substantive comment. Staff identified no further deficiencies to the application in TAAddm 4 and TAAddm 5. In TAAddm 5 and TAAddm 6, Staff

sponsored one permit provision as a permit approval requirement. In TAAddm 7 and TAAddm 8, Staff noted a new application deficiency regarding ownership and control information for SMECI, pursuant to §12.116(b)(3) and (4).

c. All information contained in the supplements has been submitted for the purpose of supplementation, clarification, limitation, or correction of data and information addressed in sections of the administratively complete application. The application and all supplements were appropriately placed on file for public inspection. The information contained in the supplemental documents does not constitute a material change to an application for which additional notice must be provided pursuant to §12.212(d) of the Regulations.

d. The required public notice was published after the filing of the initial application. The notice indicated that the application might be further supplemented. The supplements do not result in any material effects on landowners or the environment that are greater than those initially proposed or that create a need for additional notice. The initial submittal plus the nine supplements is collectively considered in this Order as the "Application."

3. The Application meets the requirements of §12.107 of the Regulations, as described in the findings of fact in this Order. Staff indicates that there is a recommended proposed permit provision at this time (TAAddm 8).

a. The Application was filed in the format required by the Commission at the time of filing, contains the applicable information required by §§12.116 through 12.154 of the Regulations, and is in compliance with §12.107(a) of the Regulations.

b. The Application is supported by appropriate references to technical and other written material available to the Commission, with adoption of the permit provisions contained herein, as required by §12.107(b).

c. The technical data submitted in the Application includes the information required by §§12.107(c) and (e) of the Regulations.

d. The technical data in the administratively complete Application includes information on persons who collected and analyzed the data in the Application, with dates of collection and analysis and methodology required by §12.107(c), and proof that collection and analyses were performed by persons qualified or under the direction of qualified persons with required information of persons consulted pursuant to §12.107(d).

e. The maps and plans submitted in the Application meet requirements set out in §12.107(f) of the Regulations.

f. The permit Application was accompanied by a Form SMRD-1C signed by a responsible official listed on the Form SMRD-1C as authorized to act on behalf of SMECI, and indicating that the information contained in the Application is true and correct to the best of his knowledge and belief, in accordance with §12.107(g) of the Regulations.

4. The Application, filed with the Commission by letter dated July 27, 2018, for the renewal/revision of Permit No. 11G, was accompanied by a $3,000 renewal-application filing fee. The appropriate application fee has been received by the Commission for the Application. Documentation of payment of this fee is contained in the Commission's files. [§12.108(a)].

5. SMECI submitted an original affidavit and news clippings showing publication of notice of application in accordance with §12.123 of the Regulations. Proper notice of the Application was published once each week for four consecutive weeks in a newspaper of general circulation in the locality of the surface mining and reclamation operations as follows: on January 29 and February 5, 12, and 19, 2020, in *Pleasanton Express* (Atascosa County) and on January 29, February 6, 13 and 20, 2020 *in The Progress* (McMullen County). Affidavits of publication with clippings were submitted. The notice of Application as published contains all information required by the Act and the Regulations. The notices contained all required information concerning the Applicant, the location and boundaries of the proposed permit area, the availability of the Application for inspection, and the address to which comments, objections, or requests for a public hearing or informal conference on the Application were to be sent. The published notice includes statements that information in some sections of the renewal/revision Application are unchanged from the approved permit and are proposed for renewal by reference; hence, copies of previous applications are on file in the county courthouse to accompany the Application. The supplements to the Application filed after notice was published, Supplement Nos. 7, 7A, and 8, submitted April 3, 2020, August 4, 2020, and October 28, 2020, respectively, were submitted to update reclamation timetables, to revise exhibit sheets and maps to correlate and support information provided in previous supplement submittals, and to provide updated mine operator information.

6. By letter dated December 20, 2017, the Commission mailed via first-class mail or intra-agency mail a complete notice of application to the Texas and Federal agencies listed in §12.207(c) of the Regulations and to local government agencies, including the required divisions of the following: Texas Commission on Environmental Quality (TCEQ); Texas Historical Commission (THC); University of Texas, Bureau of Economic Geology; Texas

State Soil and Water Conservation Board; Texas Parks and Wildlife Department (TPWD); General Land Office; Natural Resources Conservation Service (NRCS); U.S. Department of Fish and Wildlife Service (USFWS); U.S. Office of Surface Mining Reclamation and Enforcement; and U.S. Department of the Army Corps of Engineers (USACE); as required by §12.207(c)(4) of the Regulations; and the Atascosa and McMullen County Judges and Clerk's offices. TPWD filed comments with the Commission with regard to the proposed Application. The substance of TPWD's comments is addressed in Finding of Fact No. 35(e), and related findings, *infra*.

7. By letter dated January 30, 2020, the Commission mailed notice of the application by first-class mail to the list of owners of interests in lands within the permit area and adjacent lands as identified in the application at the addresses indicated on that list. By letter dated February 4, 2020, Mr. Patrick O. Rayes sought information on SMECI's Application, specifically as it related to "Fly Ash" layered in the open pits, Fly Ash" layered in the open pits, the consequences of the saltiness of ash leaching to the surface, long-term effects of the leaching on the surface, and requesting a report on how leaching is addressed. By letter dated February 14, 2020, the ALJ responded by providing contact information for SMRD's project manager for this Application to address his concerns. By separate letter dated February 14, 2020, the ALJ requested that Staff and SMECI contact Mr. Rayes regarding his concerns noted in his letter dated February 4, 2020, and to provide a copy of any relevant correspondence. By letter dated October 1, 2020, the ALJ requested clarification on whether Staff and SMECI contacted Mr. Rayes regarding his concerns, and if so, to provide a copy of any relevant correspondence. By letter dated October 13, 2020, Staff responded to the ALJ's request, providing a copy of a letter it sent to Mr. Rayes dated October 13, 2020, containing its response to his February 4th letter. In this letter, Staff informed Mr. Rayes of the regulatory requirement prohibiting placement of toxic materials on or near the surface, and providing the location in the approved permit of the reclamation plan providing for placement of suitable cover material at least ten feet in thickness over the ash materials. Staff further indicates to Mr. Rayes that no changes to the approved plan are proposed in the Application. By letter dated October 14, 2020, SMECI indicated Mr. Rayes had not contacted SMECI to date and that it was SMECI's understanding that Mr. Rayes would contact Staff if he had additional questions. The record reflects that no request for a hearing was received from Mr. Rayes.

8. On August 10, 2020, A.M. Peeler Ranch, LLC, and Jason Peeler ("Peelers") filed a Petition for Leave to Intervene ("Petition") pursuant to 16 Tex. Admin. Code §1.37 of the Commission's Rules of Practice and Procedure. On August 14, 2020, the Applicant, SMECI, filed a response in opposition to the Peelers' Petition and asserted that the Petition be denied and that it was untimely. Subsequently, on August 17, 2020, the Peelers filed a reply in support of the Petition and on August 26, 2020, SMECI filed a sur-

reply to the Petition and reply, reasserting its request that the Petition be denied. Staff did not file a response to the Petition or Reply.

a. The Peelers contended, in part, that they have a justiciable interest as landowners whose property is directly affected by the San Miguel Lignite Mine and its operations. SMECI opposed the Petition to intervene and contended that the Petition was untimely. SMECI contended, in part, it published notice of the application, the notice provided information for requesting a hearing, notice was mailed to the Peelers with information for requesting a hearing by a set deadline, and the Peelers did not request a hearing by the set deadline pursuant §12.211. SMECI indicated that the Peelers are protestants and are excluded from seeking intervention under §1.37, and that there is no hearing scheduled in which to request to intervene. SMECI re-urged its opposition to the Peelers' Petition and that it be denied.

b. On September 11, 2020, the ALJ issued an interim ruling denying the Petition to intervene because the Peelers' failed to timely request a hearing pursuant to §12.211 which precluded them from requesting a hearing and being designated as a party pursuant to §1.37. The ALJ considered the Peelers' request for additional time to file written objections, as discussed in Finding of Fact No. 8(d), *infra*.

c. On September 21, 2020, the Peelers filed an interim appeal to the ALJ's interim ruling and requested a motion to stay.[4] The interim appeal and the ALJ's interim ruling were provided to the Commissioners the following business day, September 22, 2020. On October 1, 2020, SMECI filed a response to the interim appeal. The Commission did not take action by October 27, 2020, and the interim appeal was deemed denied, pursuant to §1.38(d)(1).

d. On September 25, 2020, the Peelers filed "Written Objections, Motion to Take Official Notice, and Request for Informal Consideration or Disposition, Subject to Peeler's Appeal of Interim Ruling and Motion to Stay," including Exhibits A through K. By letter dated October 2, 2020, SMECI filed its response to the Peelers' submittal. A copy of the Peelers' submittal dated September 25, 2020, and SMECI's response dated October 2, 2020, were transmitted to offices of the Atascosa and McMullen County Clerks to be placed on file with SMECI's application for public review. Integrated in the Peelers' written objections to the application were requests subject to the interim appeal and motion to stay. By letter dated October 8, 2020, the ALJ informed the parties that the Peelers' requests would be held in abeyance pending Commission action on the interim appeal.

[4] The Peelers requested that the Hearings Director and/or the ALJ issue a stay pending any final action taken by the Commissioners. The Hearings Director and the ALJ declined to issue a stay.

e. By letter dated October 29, 2020, the ALJ informed the parties that the Commission did not take action on the interim appeal, therefore the interim appeal was deemed denied by operation of law. The Peelers are not a party to this docket. Any requests that were held in abeyance were lifted and those requests were denied.

9. The Application includes the information required under §12.116 of the Regulations to show business organization, ownership-or-control information, a listing of current officers and directors and their addresses, and updated regulatory compliance information, and a listing of other mining permits held by the Applicant.

a. In the initial application SMECI provided a certification statement indicating that the Application includes updated ownership-or-control information. SMECI acknowledges the requirement of §12.116(a)(1)(C) that ownership-or-control information be updated, as needed, after approval but prior to issuance of the permit. The information provided in the Application has been compared with the information contained in the Applicant/ Violator System (AVS) database. The AVS database has been updated, as needed, in accordance with the changes indicated in the Application. The AVS database is operated by Office of Surface Mining Reclamation and Enforcement (OSM) to identify violators across the country. The AVS database has been queried to determine whether SMECI or any of its controllers, identified in the Application or found in the database, currently has any outstanding violations at owned or operated coal mines in the United States. No outstanding or unabated violations were identified. No record of nonpayment of Abandoned Mine Land (AML) fees.

i. Staff's TA Addendum No. 6, *Appendix VI - Applicant/Violator System [AVS] Report,* states: The last AVS report was made for TAAddm 4 on October 4, 2019. Staff provided an updated AVS report and noted that the report reflected changes made to in AVS system as part of Permit 11G Revision 19, revising portions of §12.116 received June 22, 2020. This revision was determined to be administrative and Staff anticipated it will be approved or disapproved within 90 days in accordance with §12.226(c). Staff instructed the applicant to notify the ALJ of the changes to the relevant sections once they were approved.

ii. By letter dated October 7, 2020, the ALJ requested that the parties confirm SMECI's current mining operator, given that SMECI's Audited Financial Statements and Additional Information, December 31, 2019 and 2018 disclosed SMECI's existing agreement with Kiewit Mining Group expired on June 20, 2020, and that SMECI had entered into an agreement with NACG US, Inc. (NACG), a

subsidiary of North American Construction Holdings Inc. effective June 21, 2020."[5]

b. On October 28, 2020, SMECI submitted Supplement No. 8 in response to the ALJ request to update and correct information in the application as to the new mine operator for approval of the application and issuance of the permit as required by §§12.116, 12.215 and 12.216 of the Regulations. On November 12, 2020, Staff submitted TAAddm 7 recommending that SMECI's renewal/revision application not be approved until SMECI provides the information required by §§12.116(b)(3) and (4) of the Regulations.

c. Subsequently, the ALJ requested that SMECI indicate whether it intended to respond to Staff's TA Addendum No. 7, and if so, provide an expected date for that submittal, and/or it intended to request a hearing to address information required by §12.116. In response, SMECI requested that the ALJ determine that the renewal/revision application is complete, and that the application be processed accordingly. In the alternative, SMECI requested that a hearing be held for the sole purpose of addressing the information required by §12.116. Based on the parties' positions and the information provided in the record, there was sufficient information for the ALJ to make an interim ruling.

i. Staff's position was that SMECI is an electric cooperative corporation and that as a member-owned cooperative owned by less than ten (10) members, at least one of the members must own more than ten (10) percent in SMECI; therefore, SMECI fails to provide the information required by §§12.116(b)(3) and (4) of the Regulations. Therefore, Staff did not recommend approval of the current permit renewal until SMECI provides the required information under §§12.116(b)(3) and (4).

ii. SMECI's position was that it had provided all information required by §12.116. Additionally, SMECI contends that the regulations did not require information on any of SMECI's members to be included in the renewal/revision application for the following reasons: (1) those entities "in the applicant's and operator's organizational structure" are required to be included in Section 12.116(b)(3)(D). SMECI's members are not in SMECI's organizational structure; (2) SMECI's members do not own SMECI in the manner contemplated by the regulations, and none of SMECI's members own of record ten (10) percent or more of SMECI;

[5] By letter dated March 31, 2020, SMECI provided its "Audited Financial Statements and Additional Information, December 31, 2019 and 2018" (AFS) for the fiscal year ending December 31, 2019, with regarding to Permit No. 52A, Statement No. 15 on page 26 references that SMECI entered into an agreement for a new mine operator.

and (3) none of SMECI's members exercise control over SMECI or the permitted operations, SMECI's Board of Directors alone exercise such control and those Board Members are bound to discharge their fiduciary obligations to SMECI and not act as a controlling mechanism for the member cooperatives.

d. On December 18, 2020, the ALJ issued an interim ruling that determined that SMECI's most recent supplement, Supplement No. 8, submitted on October 28, 2020, met the requirements of §§12.116(b)(3) and (4) and directed Staff to submit an addendum in response to SMECI's Supplement No. 8 and provide an AVS report with the addendum on or before January 15, 2020. The ALJ's determination was based on the factual background and legal analysis, as follows:

i. Given the statutory framework necessary to form an electric cooperative and conduct business in Texas, and by SMECI's own admission, SMECI is a rural electric cooperative that is owned by its member cooperatives.[6]

ii. SMECI has demonstrated that its cooperative members do not own, of record, ten (10) precent or more of the entity.[7]

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[6] The Texas Legislature enacted the Electric Cooperative Corporation Act (ECCA) in 1937 to promote rural electrification through the creation of electric cooperatives, and that statute was codified in 1997. The ECCA has remained as the purpose for which an electric cooperative could be organized in Texas. As referenced by the parties, the ECCA provides general provisions to the formation of an electric cooperative and defines an electric cooperative and member, as follows: an electric cooperative is a corporation that is organized under the ECCA; and a member is an incorporator of an electric cooperative or a person admitted to membership in the electric cooperative. SMECI is a rural electric cooperative that is owned by its member cooperatives, it is a rural electric cooperative formed under the auspices of the Federal Rural Utilities Service (RUS), governed by a Board of Directors, and the directors' and other officer's names and addresses have been provided in Table .116-1 in the Application. SMECI is a wholesale power supplier providing power to Brazos Electric Cooperative, Inc. of Waco, Texas, and South Texas Electric Cooperative, Inc. of Victoria, Texas. SMECI has no shareholders and has not operated a surface coal mining operation in the United States under any other name. SMECI operates the San Miguel Lignite Mine under three Commission-issued permits: Permit Nos. 11G, 52A, and 60.

[7] The term of "owning of record" contemplates voting stock, of which SMECI as a cooperative does not possess because SMECI does not have shareholders. Rather, SMECI has members and as represented by SMECI, the only voting rights that are held by a person from a member cooperative are those who are elected to the Board of Directors. The member cooperatives own the cooperative, but that ownership is fundamental to the existence of the cooperative, without which its purpose to provide electric services to rural areas would not be accomplished. Membership is derived because the members are the consumers and users of the services provided by the cooperative. In this case, membership does not equate to a percentage of ownership of record, rather membership provides an exclusivity to cooperative members to use the services of the cooperative that otherwise would not be available. Additionally, the ECCA provides the general provisions to the formation of an electric cooperative and it does not contemplate that a member of cooperative has a percentage of ownership upon becoming a member of a cooperative, if that were so, the ECCA would provide for such provision. Staff's reasoning that because SMECI is owned by its members and there are less than ten (10) members that it is mathematically reasonable that at least one member would own more than ten (10) percent (10%) is not support by the applicable case law or statute. The ALJ determined that in conclusion, based on the facts and applicable law, SMECI's member cooperatives do not "own, of record," ten (10) percent or more of the electric cooperative, the entity that is SMECI.

iii. SMECI does not need to provide information for each cooperative member, given that SMECI member cooperatives do not own, of record, ten (10) percent or more of the entity, SMECI.

e. The ALJ's interim ruling issued December 18, 2020 was not appealed by the parties.

f. By letter dated January 12, 2021, Staff indicated that the AVS report included in TAAddm 6 remains unchanged since originally generated on August 5, 2020, and attached an updated AVS report to its letter. In that letter, Staff indicated that it did not find a TA addendum to be necessary, and despite disagreement with the interim ruling, it did not wish to appeal the interim ruling and deferred to the ALJ's ruling on this issue.

g. By letter dated January 14, 2021, the ALJ informed the parties that Staff's letter dated January 12, 2021, does not satisfactorily comply with the ALJ's directive stated in the interim ruling, and an addendum is requested to be submitted. Additionally, the ALJ proposed to schedule an informal conference to clarify an inquiry as to the nature of the addendum requested. SMECI responded that it was available to appear at the informal conference; however, Staff responded that it had a scheduling conflict.

h. On January 15, 2021, Staff filed its TAAddm 8 and although it referenced the ALJ's interim ruling, it also referenced TAAddm 7 in which it did not recommend approval of the supplemented application. In that letter, the ALJ explained that the reason for requesting Staff's recommendation on the sufficiency of the application is to determine whether Staff is adverse to a recommendation by the ALJ to approve the application. In response, by letter dated January 20, 2021, Staff reiterated its position that it did not recommend approval, but indicated that it did not oppose a recommendation by the ALJ approving the application, and waived its right to a proposal for decision ("PFD") and to file exceptions and present briefs to the Commission in accordance with 16 Tex. Admin. Code §1.121(c) of the Commission's Rules of Practice and Procedure. Additionally, by letter dated January 25, 2021, Staff updated its response to retract its statement that it did not recommend approval of the application, and reiterated that it did not oppose a recommendation by the ALJ approving the application, and waived its right to a PFD and to file exceptions and present briefs to the Commission in accordance §1.121(c).

i. SMECI provided the name and address of the owners of lands to be mined (Table .116-2, Supp. 3) and of the owners of properties contiguous to the proposed permit area (Table .116-4, Supp. 1). These table in the Application were updated from those in the approved permit.

j. The information contained in SMECI's Application is satisfactory to address the requirements of §12.116.

10. The Application includes the information to comply with the requirements of §12.117 of the Regulations with the adoption of a permit provision for documentation of claimed right-of entry and operation information. The Application indicates that there are no proposed changes to information contained in the approved permit. SMECI specifically provides reference to Section .117 in Permit No. 11E Renewal/Revision, Supplement No. 1 (October 2003) and Permit No. 11D Renewal/Revision (September 1997).

a. The existing permit area encompasses numerous land tracts of diverse acreages ranging from less than an acre to several hundred acres in size. Landowner A. M. Peeler, Jr. is the largest landowner, owning approximately 465 tracts totaling about 11,394 acres. SMECI is the owner of 155 tracts totaling about 1,726 acres. Remaining acreages is owned by various other landowners of record. All land tracts are depicted in the Application on revised Exhibit .116-1 (sheets 1 and 2), *Permit 11G Renewal Land Tracts*, which shows tract numbers and the proposed permit boundary, and which is contained in the initial Application submittal for this docket. SMECI also provided Table .116-2, *Permit Area Legal and Equitable Owners of Record*, in which the tract numbers, names, and addresses for each owner of surface property within the proposed permit area is listed, along with lease recordation right-of-entry information.

b. From the information in the record, it is unclear whether SMECI identifies any ancillary leasehold interests on properties that it proposes to mine. Although it does not appear to have been included in the Application, permittees must demonstrate right of entry to mine through areas controlled by leasehold interests through identification of an accommodation agreement or other right-of-entry documentation. No information has been provided for such demonstration. However, because it does not appear from the Application that any active wells or unplugged boreholes exist at present within the proposed permit term disturbance area, the right-of-entry information contained in section .117 of the Application is sufficient for the proposed permit term. If a new well is installed ahead of mining in any future mine blocks, SMECI will need to revise the approved premine (and possibly postmine) land use and provide the required right-of-entry demonstration prior to any mining or mining-related disturbance of the established well pad and access road.

c. The information provided in SMECI's Application is satisfactory to address the requirements of §12.117.

11. The Application has met the requirements of §12.118(a), (b), and (c) of the Regulations. The permit area is not within an area designated as unsuitable for surface mining activities under §§12.78 - 12.85 of the Regulations, and not within any area under study for designation in an administrative proceeding. SMECI does not claim an exemption under §12.118(b). SMECI will not conduct surface mining activities within 300 ft of an occupied dwelling.

12. The Application includes information in compliance with §12.119 of the Regulations for the life of mine and §12.125(1) for the size, sequence, and timing of sub-areas of the mine. Areas proposed for mining during the proposed five-year permit term and for the life-of-mine area have been included in the Application. SMECI indicates that the proposed term for this permit renewal is five years from the date of Commission approval. The proposed permit area includes approximately 538 acres (five-year permit term and future permit terms), with total mine lignite production from 2018 through the life-of-mine period of 5,985,000 tons (five-year permit term - 2018 through 2023 of 4,517,000 tons, and 1,468,000 tons for the future permit term).

13. The Application provides information that complies with §12.120 of the Regulations for personal injury and property damage insurance. By memorandum dated July 6, 2020, the Commission's Office of General Counsel (OGC) reviewed and determined that SMECI's submission of insurance coverage for Permit Nos. 11G, 52A, and 60 indicate that it has obtained liability insurance for bodily injury and property damage in accordance with the requirement of §12.311. For each permit, SMECI provided a certificate of insurance (Form SMRD-41C) signed by a person authorized to sign on behalf of SMECI. Certificates of insurance (Form SMRD-41C) for each permit were provided and, respectively, indicate that ACE American Insurance Company, Group Liability Policy No. G249154020011, and Umbrella Policy No. G28131732005, provides coverage for San Miguel Lignite Mine, Permit No. 11G, San Miguel Lignite Mine, Area C Mine, Permit No. 52A, and San Miguel Lignite Mine, F, G, and H Area Mine, Permit No. 60, from July 14, 2020, through July 14, 2021. The liability insurance provides for coverage of bodily injury and property damage in an amount adequate to compensate all persons injured or whose property is damaged as a result of surface coal mining and reclamation operations associated with each SMECI permit, including damages resulting from the use of explosives and damage to water wells, and that said coverage is not less than the following minimum required amounts for each permit: Bodily injury, $500,000 (each occurrence), $1,500,000 aggregate and property damage, $500,000 (each occurrence), $1,000,000 aggregate. By letter dated September 25, 2020, confirmed that SMECI had submitted an updated insurance certificate for the San Miguel Lignite Mine and provide a copy of the insurance certificate.

14. The Application meets the requirements of §12.121. SMECI has included identification of other licenses and permits required in accordance with §12.121 to address all areas

proposed for inclusion in the proposed permit area and provided Table .121-1, *Identification of Other Licenses and Permits*, in Supp. 2, as summarized in the following table:

Agency	Type of Permit, License, Approval or Notice
US Army Corps of Engineers ("USACE")	State Program General Permits (Permit Nos. 11A and 31)
	Nationwide 21 Permit, and approved Permit Revisions (Permit Nos. 11D, 11E, 11F, 31, and 52)
	Individual Permit (Permit No. 60)
	Section 404 Application for USACE Project No. SWF-2018-00097, submitted August 10, 2018
Mine Safety and Health Administration ("MSHA")	Legal Identity Report
	MSHA Pond Approvals
Railroad Commission of Texas ("RRC")	Surface Mining and Reclamation Permit Nos. 11G, 52A, and 60
Texas Commission on Environmental Quality ("TCEQ")	TPDES Permit for Permit Nos. 11G, 52A and 60
	TPDES Stormwater General Permit
	Fly Ash, Bottom Ash and Scrubber Sludge Disposal Solid Waste Registration
	TCEQ Wastewater Discharge Permit
	Public Water Supply Registration
	Dam Safety National ID
	Water Use Permits
	Industrial Reclaimed Water Use Permit
	Industrial Waste Disposal (Class V) Permits
Texas Dept. of Transportation ("TxDOT")	Utility Permits
Atascosa County	Dike #11 Permit
	North Haulroad Bridge and Levee 9B Permit
	Metate Creek Levee Permit
	Metate Levee 20B Permit
	La Parita Creek Levee Permit
	Floodplain Development Permit
Texas Parks and Wildlife Department ("TPWD")	Scientific Collecting Permits (SCP)-provisioned for handling specific State-listed threatened species SPR-0790-169, Glenn Norton SPR-0510-080, Jeremiah McKinney

15. SMECI has provided the location of the public offices where the Application was filed in accordance with §12.122 of the Regulations, listing itself as the Applicant, and including the location and boundaries of the proposed permit area, the location where copies of the Application are available for inspection, and the address to which comments were to be sent. A copy of the Application was filed for public review in the offices of the Atascosa

and McMullen County Clerks; copies were also filed with the Railroad Commission of Texas in Austin, Texas. The Application meets the requirements of §12.123 of the Regulations as shown by SMECI's submittal of an original affidavit and news clippings showing publication of notice of application . *See* Finding of Fact No. 5, *supra*.

16. The information contained in the Application meets the requirements of §12.124 of the Regulations by providing a description of the existing premining environmental resources within the proposed permit area and adjacent areas that may be affected or impacted by the proposed surface mining activities by reference to the information contained in sections .125 through .138 of the Application.

17. The information in the Application meets the requirements of §12.125 and §12.151, with the adoption of a permit provision.

a. To address requirements of §12.125(1), SMECI indicated that mining will occur in the proposed permit area until Year 2026, with a total of 538.6 acres disturbed. Approximately 538.6 acres will be disturbed between Year 2018 and Year 2026. Staff indicated in its initial TA that the "previously mined" blocks for Area B shown on Exhibit 119-1, *Life of Mine Map*, were not in agreement with the "previously mined" blocks for Area B shown on Plate 139-1, sheet 5 of 5, *Operations Map*. In Supp. 2, SMECI provided a revised Exhibit 119-1 to correct the discrepancy. Staff indicated in TA Addendum No. 1 that the information provided in response to the requirements of §12.125(1) was satisfactory.

b. SMECI proposes no changes to the cultural, historic, and archeological resources information contained in section .125 of the approved permit. SMECI indicated on page 125-1 of the Application that cultural resources have been studied and documented in previous permit applications. SMECI also indicated that the proposed expansion of mining and mining-related activities within the proposed permit-term mine blocks will have no additional impacts to cultural resources. References are made to Table 125-1 in Permit No. 11F, Supplement No. 1 (approved May 2009), and Exhibit 125-2 found in Permit No. 11F, Supplement No. 2 (approved May 2010). The minor permit boundary changes, which are primarily in Areas A and E, will not affect previously documented cultural resource sites. The Texas Historical Commission ("THC") has previously determined that all cultural resource sites in Area B (including former Area B-Extension) are not eligible for listing on the National Register of Historic Places ("NRHP") or, in lieu of listing, have been satisfactorily mitigated. Staff indicated that cultural resources information provided in this section of the application, as referenced, included the baseline and current data required under §12.125(2) and treatment and protection plan elements required under §12.151. SMECI has satisfied the requirements of §12.125(2)(B),

indicating that it has worked closely with the State Historic Preservation Officer ("SHPO") to identify and evaluate historic and archaeological resources and will continue to do so in the future, including implementation of appropriate assessment, protection, and data recovery measures for NRHP-eligible archaeological sites and historic resources.

18. The Application contains a satisfactory description of the general hydrology and geology of the proposed permit area and adjacent areas as required by §§12.126 - 12.127 of the Regulations. The information contained in this section of the Application is satisfactory to meet the requirements of §12.126 and §12.127.

a. SMECI has satisfied the requirements at §12.126, §12.127(a)(1), and §12.127(a)(2) to describe the general geology and geologic structure of the proposed permit and adjacent areas via citations by SMECI to the relevant portions of approved Permit No. 11F, and further refers the reader to additional information in other application sections (.127, .128 and .129). The Application contains a signed cover page for this section which was signed and sealed by Mr. Eric C. Matzner, P.G., on June 18, 2018.

b. Staff indicated in its initial TA that the referenced information is comprehensive and detailed, and remains unchanged from the approved permit. SMECI is not proposing to extend the current permit area. Staff concurs with SMECI meets the requirements at 12.127(a)(3) to identify and describe the occurrence, availability, movement, quantity, and quality of potentially impacted surface and ground waters by reference to information contained in Application sections .128, .129, and .146.

c. Staff performed an overburden continuous core density analysis for the proposed mining sequence as depicted on Exhibit 119-1, determining that the overburden sampling densities are greater than the required minimum of one per 250 acres, in accordance with the Commission guidance in Technical Release No. G-1. For the six continuous cores drilled to characterize the overburden in the proposed permit-term mine blocks, the areas of influence range from 13.7 acres to 155.0 acres.

d. Staff asserts that SMECI has satisfied the requirements at §12.126 and §12.127 in its references to the approved description of the geology of the proposed permit and adjacent areas.

19. The groundwater and associated information contained in the Application is sufficient to meet the requirements of §12.128. SMECI lists the relevant approved baseline sections and states that no changes are made to baseline information.

Item(s)	Description	Location
Page 128-1	Location references to baseline information	Initial Ren/Rev
Page 128-2	Cover page signed, dated, and sealed by registered geoscientist	Initial Ren/Rev & Supp. 2
Page 128-3	Lists of Tables Figures and Exhibits	Supp. 2
Table 128-7	Water Well Inventory	Initial Ren/Rev
Table 128-8	Oil and Gas Well Inventory	Supp. 2
Exhibit .128-2	Water Well Inventory Location Map	Supp. 2
Exhibit .128-3	Oil and Gas Well Inventory Location Map	Supp. 2

There are two references listed, 'Groundwater Information' portions of Permit No. 11F and Permit No. 11G prepared, respectively, in 2008 and 2016. The Application also includes an update to the private water well inventory consisting of Table .128-7 (initial submittal) and Exhibit .128-2 (Supp. 2), and an updated oil and gas well inventory consisting of Table .128-8 and Exhibit .128-2 (both in Supp. 2). An updated cover page is provided for the section (page 128-2), signed and sealed by Mr. Eric C. Matzner, P.G., dated June 18, 2018. Staff indicates in TAAddm 1 that SMECI has satisfactorily addressed the groundwater information requirements of §12.128.

20. The Application meets the surface-water information requirements of §12.129 of the Regulations. SMECI indicated in Supp. 2 of the Application that the surface-water baseline information contained in the approved permit is sufficient to meet the requirements of this section, and provided references to the location in the approved permit for this information: specifically, in the application section entitled *Response to Section .129 - Surface-Water Information, Permit 11F Renewal/Revision, San Miguel Lignite Mine, Atascosa County, Texas*, prepared by Marston Environmental, Inc. (initial application, March 2008), and in Supplement Nos. 1 (May 2009) and 2 (June 2010), also prepared by Marston Environmental, Inc. Staff concurred with the adequacy of the referenced information.

21. SMECI addressed the alternative water supply information requirements of §12.130 of the Regulations in the initial Application, indicating that the alternative water-supply information is contained in Application section .146. Staff indicated in its TA that the information contained in the Application in section .146 meets the alternative water-supply information requirements of §12.130 of the Regulations.

22. The Application meets the requirements of §12.131 of the Regulations. SMECI indicates that climatologic information has been studied and reported since the initiation of mining and proposes no changes to previously submitted and approved information. SMECI references the initial permit documents for Areas, A, E, B and B-Extension. Staff indicates that although the references do not follow the standard format, not listing the years that these permit documents were submitted or approved, the referenced documents

nevertheless fulfill the purpose of referring the reader to the correct sources. The applicant has satisfactorily addressed the requirements of §12.131 of the Regulations.

23. Section .132 of the Application contains baseline vegetative information for the proposed permit area that meets the requirements of §12.132 of the Regulations.

a. SMECI provided a vegetation baseline report for Area BX. SMECI indicated that because vegetative impacts have concluded in the Area A, E, and B blocks, those vegetative baselines were not provided. Surveys for the vegetative information in Area BX occurred in 1995. Blackland Environmental, LLC ("Blackland") reassessed the vegetative information in the BX block in early 2018.

b. Application Table 132-1 is a listing of the areal extents of the vegetative communities identified by SMECI as present in the permit renewal/revision area.

PLANT COMMUNITY	AREA (acres)	EXTENT (%)
Mesquite shrubland	5,092	88.4
Blackbrush shrubland	143	2.5
Whitebrush shrubland	93	1.6
Grassland	168	2.9
Riparian	205	3.6
Aquatic (Ponds)	56	1.0
Total	**5,757**	**100.0**

c. The Application contains a map, Exhibit 132-1, on which it has delineated the existing vegetation types, as listed in Table 132-1. SMECI provided information to adequately describe the premine plant communities within the permit area to predict the potential for re-establishing vegetation on reclaimed land, including those that are important habitat for fish and wildlife within the permit area. SMECI has provided sufficient vegetative information for the permit renewal/revision area and has met the requirements of §12.132 of the Regulations.

24. The Application meets the requirements of §12.133 of the Regulations. In section .133 of the Application, SMECI provided a fish and wildlife resources report for the portions of Area BX proposed for mining. SMECI indicates that because mining in the Area A, E, and B blocks has concluded, with the majority of those areas being fully or partially reclaimed, the fish and wildlife baseline data for these areas was not provided. Surveys for the fish and wildlife information in Area BX were conducted in 1995. SMECI supplemented the fish and wildlife baseline data for Area BX by referencing studies conducted in 2004-2005 for the San Miguel Lignite Mine, Area C Mine (Permit No. 52A), and studies conducted in 2012-2013 and 2015-2016 for the San Miguel Lignite Mine, F, G, & H Area Mine (Permit No. 60).

a. SMECI adopts the information in section .133 of the approved permit for areas previously disturbed. In the Application, SMECI has provided baseline fish and wildlife information for the area proposed for disturbance in Area BX during the proposed permit term. The new information includes species information from various survey types contained in 17 tables for Area BX, associated reports, and documents in two appendices, analysis of these data depicted on four figures, and study reference information on three exhibits. SMECI also provided four tables listing species of potential occurrence within the permit area.

b. Table 133-1 in the Application (Supp. 2) contains a list of the areal extent of the vegetative communities/habitat types within Area BX and mirrors Table 132-1 (Finding of Fact No. 23, *supra*).

c. Based on the information in Table 133-21 in the Application (Supp. 2), and the USFWS and TPWD lists of threatened and endangered species for Atascosa and McMullen Counties, Staff summarized the information regarding threatened and endangered species with potential to occur in or near the proposed 16,000-acre permit area. Twenty species of potential occurrence are identified, eight of which have been observed in the permit or immediately adjacent area. The observed species include four bird species (Wood Stork, White-Faced Ibis, White-Tailed Hawk, and Botteri's Sparrow), three reptiles (Texas horned lizard, Texas indigo snake, and Texas tortoise), and one State and Federally endangered plant (Black-lace cactus), which SMECI strives to protect from off-road vehicular traffic and other potential disturbances.

d. SMECI indicated in this section (page 133-10) that most avian species that occur in Texas are protected under the federal Migratory Bird Treaty Act (MBTA), and that Atascosa and McMullen Counties are located within the Central Migratory Flyway, through which millions of birds pass during the spring and fall migrations. SMECI provided a list of potentially occurring and documented migratory birds in Table 133-17 for the proposed permit area. SMECI indicates that Bald Eagles, protected under the Bald and Golden Eagle Protection Act, are known to occur in Atascosa and McMullen Counties.

e. Staff summarized that SMECI identified the following game species that have the potential to occur within the renewal/revision area: white-tailed deer, bobwhite quail, scaled quail, mourning dove, white-winged dove, white-tipped dove, wild turkey, and numerous fur-bearing species and waterfowl.

f. In Supp. 2, SMECI provided revised pages to its section .133 narrative, a revised Table 133-1, and excerpts from the pending USACE Project No. SWF-2018-00097, including a map on which it delineated waters of the United States (WOTUS), a table of WOTUS to be impacted, and a map of the planned impacts to WOTUS.

g. In its initial TA TAAddm 1, Staff identified 22 species of greatest conservation need (SGCN) with potential to occur within the permit area, six of which are unlikely, and only one of which has been observed (Audubon's oriole).

h. In TAAddm 1, Staff indicates that the information provided in the Application is adequate to meet the fish and wildlife information requirements of §12.133.

25. The Application addresses the requirements of §12.134 of the Regulations. SMECI indicates on page 134-i of the initial submittal that no changes are proposed to information in this section in approved Permit No. 11G. SMECI lists references for section .134 in Supp. 2 as follows:

Item(s)	Description	Location
Exhibit 134-1	A map delineating different soils	*
Pages 134-1 to 134-6	Soil identification	*, Supps. 1 & 3
Appendix 134-F	Soil identification	*
Appendices 134-A & B	Soil description	*
Table 134-4	Present and potential productivity of existing soils	*
Table 134-6	Present and potential productivity of existing soils	*
Appendix 134-G	Present and potential productivity of existing soils	Supp. 1

* located in Permit No. 11G, Revision No. 6, Supplement No. 1 (February 6, 2016)

Only Appendix 134-G in Supp. 1 of the Application represents new information. All other information is provided by reference. This appendix, titled *USDA National Agricultural Statistics Service, May 2018 Atascosa County, Texas Production Values*, contains data used to develop standards for postmine productivity that were not available prior to submittal of the Application. SMECI indicates on page 134-i that use of selected overburden materials as a supplement or substitute for topsoil is not proposed, therefore, no references are provided. In TAAddm 2, Staff indicates that the information provided in the Application is sufficient to meet the soil information requirements of §12.134.

26. The referenced information in the Application is satisfactory to meet the premine land-use information requirements of §12.135 of the Regulations. SMECI indicates (Supp. 2) that the approved premine land-use information is depicted on the exhibit contained in Revision No. 8 to Permit No. 11G. In Supp. 2 of the Application, SMECI also indicates that the baseline information provided in section .135 of the approved permit and

referenced sections remains unchanged and is intended to support this permit renewal application, the information therein summarized as follows:

Item(s)	Description	Location
Mine Area A	Response to section .135	Permit No. 11
Mine Area A	Response to section .135	Permit No. 11A
Mine Area E	Response to section .135	Permit No. 31
Updated land-use information	Response to section .135	Permit No. 11D
Mine Area B	Response to section .135	Permit No. 11E
Oil and gas wells, pipeline location and pipeline variances	Response to section .135	Permit No. 11G, Revision No. 15 (January 2018) Revision No. 16 (March 2018)

Staff indicated in TAAddm 1 that SMECI has provided adequate references to the approved premine land-use information in compliance with §12.135.

27. SMECI updated its listing in the initial Application, as revised in Supps. 1 and 2, to correctly reference the location of figures and exhibits meeting the requirements of §12.136 of the Regulations. The Application contains maps or references the location of maps in the approved permit showing: (1) all boundaries of lands and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the permit area; (2) the boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin surface mining activities; (3) the boundaries of all areas proposed to be affected over the estimated total life of the proposed surface mining activities, with a description of size, sequence, and timing of the mining of sub-areas for which it is anticipated that additional permits will be sought; (4) the location of all buildings on and within 1,000 ft of the proposed permit area, with identification of the current use of the buildings; (5) the location of surface and subsurface man-made features within, passing through, or passing over the proposed permit area, including, but not limited to major electric transmission lines, pipelines, and agricultural drainage tile fields; (6) the location and boundaries of any proposed reference areas for determining the success of revegetation; (7) the locations of water supply intakes for current users of surface water flowing into, out of, and within a hydrologic area defined by the Commission, and those surface waters which will receive discharges from affected areas in the proposed mine plan area; (8) each public road located in or within 100 ft of the proposed permit area; (9) the boundaries of any public park and locations of any cultural or historical resources listed or eligible for listing on the National Register of Historic Places, and known archeological sites within the mine plan or adjacent areas; (10) each public or private cemetery or Indian burial ground located in or within 100 ft of the proposed permit area; (11) any land within the proposed mine plan area and adjacent area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act; and (12) other

relevant information required by the Commission. Staff concurred in TAAddm 1 that the information contained in the Application meets the general map requirements of §12.136 of the Regulations.

28. The Application contains a list to identify the location of cross-sections, maps, and plans in revised Table .137-1 [Supps. 2, 3, and 7A]. As described by Staff in TAAddm 6, SMECI has met all requirements for identification of general maps, cross-sections, maps, and plans as required by §12.137 of the Regulations. SMECI provided references to the locations of maps, plans and cross-sections meeting the requirements of this section in the Application, as supplemented.

a. The Application meets the requirements of §12.137(a)(1)-(11) by providing the following information in Table 137-1:

Section	Description	Item(s)	Location
(a)(1)	*La Parita Area B and B-Extension Structure and Core Hole Sample Locations*	Exhibit 127-4	Permit No. 11F Ren/Rev Application, March 2008
(a)(1)	*Cross Sections*	Exhibit 127-3, Appendix 127-3	Permit No. 11G, Revision No. 9, October 2016
(a)(2)	*La Parita and La Jarita Creek Drainage Basins; Fish and Wildlife*	Exhibit 129-1	Permit No. 11E Ren/Rev Application, Supp. 2, Vol. 1, June 2010
(a)(2)	*Fish and Wildlife Sampling Locations*	Exhibit 133-1	initial submittal
(a)(2)	*Surface Water Features and Monitoring Locations*	Exhibit 146B-1	initial submittal
(a)(2)	*Long-Term Groundwater Monitoring Network*	Exhibit 146A-1	Supp. 2
(a)(3)	*Generalized Stratigraphic Section*	Figure .127-1	Permit No. 11F, Ren/Rev Application, March 2008
(a)(4)	*Dip and Cross Sections*	Exhibit 127-3	Permit No. 11F Ren/Rev Application, March 2008
(a)(4)	*Dip and Cross Sections*	Figure .127-4	Permit No. 11F Ren/Rev, Supp. 1, May 2009
(a)(4)	*Cross Sections (including Exhibits .127-1-1 through .127-1-9)*	Appendices 127-1 and 127-4	Permit No. 11F Ren/Rev Application, March 2008
(a)(5)	*Underground Mines*	None	
(a)(6)	*Area B Metate Creek Alluvium Groundwater Elevation Map*	Figure .128-6	Permit No. 11F, Ren/Rev, March 2008

Section	Description	Item(s)	Location
(a)(6)	*Underburden Unit 22 Potentiometric Surface Map, September 2014*	Exhibit 146A-2	initial submittal
(a)(6)	*Underburden Unit 22 Potentiometric Surface Map, November 2017*	Exhibit 146A-3	initial submittal
(a)(7)	*Surface Water Features and Monitoring Locations*	Exhibit 146B-1	initial submittal
(a)(8)	*Life of Mine*	Exhibit 119-1	Supp. 2
(a)(9)	*Operations Plan*	Exhibit 139-1 (sheets 1, 2, 3 & 5)	initial submittal
(a)(9)	*Operations Plan*	Exhibit 139-1 (sheet 4)	Supp. 2
(a)(9)	*Variance Temporary Cessation of Operations, and Ash Disposal*	Exhibit 139-2 (sheet 1)	Supp. 4
(a)(9)	*Variance Temporary Cessation of Operations, and Ash Disposal*	Exhibit 139-2 (sheets 2, 4 & 5)	Permit No. 11F Ren/Rev, Supp. 1, May 2009
(a)(9)	*Variance Temporary Cessation of Operations, and Ash Disposal*	Exhibit 139-2 (sheet 3)	Supp. 7A
(a)(9)	*Water Control Plan*	Exhibit 148-1	Supp. 2
(a)(10)	*Water Well Inventory Location Map*	Exhibit 128-2	Supp. 2
(a)(10)	*Oil and Gas Well Inventory Location Map*	Exhibit 128-3	Supp. 2
(a)(11)	*Premine and Postmine Slopes*	Table 145-4	Supp. 2
(a)(11)	*Premine Slopes*	Exhibit 145-3	Supp. 2
(a)(11)	*Postmine Slopes*	Exhibit 145-4	Supp. 2

b. SMECI indicates that all maps, plans, and cross-sections included in the Application have been prepared under the direction of and certified by a Registered Professional Engineer or Professional Geologist in accordance with §12.137(b).

c. Staff indicates in TAAddm 6 that the information provided in the Application is adequate to address the map, plan, and cross-section requirements of §12.137.

29. In Supp. 2, SMECI indicated on page 138-1, and Staff concurred in TAAddm 1, that there are no historical croplands within the permit boundary of approved Permit No. 11G, and that a landowner affidavit and negative determination were provided in approved Permit

No. 11E. A negative determination is made by the Commission, and is therefore not something contained in the application. Nevertheless, the Application meets the requirements of §12.138. SMECI identified that the renewal/revision of Permit No. 11D, subsequently issued as Permit No. 11E, as the permitting action in which a negative determination was made. This negative determination for the area proposed for mining in the proposed permit term is contained in Finding of Fact No. 27 in the Order of Approval for the renewal/revision of Permit No. 11D, Docket No. C8-0016-SC-11-C, which has been officially noticed in this docket, signed by the Commission on November 17, 1998, Finding of Fact No. 27 in that docket reads as follows:

> 27. *San Miguel has identified all prime farmland soil series for the proposed permit area (Application and Supplement No. 1). San Miguel requests a negative prime farmland determination based upon affidavits from landowners included in the application, as supplemented by Supplement No. 3 to provide an accurate list of tracts and owners. The information shows that one of the criteria enabling an applicant to obtain a negative determination for prime farmland, no cropping history for five of the last ten years prior to acquisition for mining, has been met for the tracts identified as containing prime farmland soil units (Table .138-4 and p. 138-4, Supplement No. 1). A negative determination of prime farmland is found for the areas requested as set out in the application, as supplemented. [Docket No. C8-0016-SC-11-C.]*

Official notice was taken of Commission Orders to clarify negative farmland determinations.[8] SMECI has satisfactorily addressed the prime-farmland requirements of §12.138 of the Regulations.

30. The Application meets the requirements of §12.139 of the Regulations by providing a description of the mining operations to be conducted during the remaining expected life of the mine within the proposed permit area.

a. Staff summarized the operation plan proposed by SMECI as follows:

i. SMECI will use standard mining procedures and methods to develop and mine the lignite resources at the San Miguel Lignite Mine, Permit No. 11G. Mine operations have been designed to maximize lignite recovery and operate in an

[8] By letter dated September 30, 2020, the ALJ requested official notice for clarity of the record and included as an attachment for reference, as follows: Attachment 3 Commission Order dated November 17, 1998, Docket No. C8-0016-SC-11-C (negative farmland determination); Attachment 4 Commission Order dated, March 3, 1999, Docket No. C9-0009-SC-11-B (negative farmland determination); and Attachment 5 Commission Order dated, October 22, 2013, Docket No. C8-0024-SC-11-C (negative farmland determination).

economical and efficient manner. All mining will be accomplished within the applicable guidelines and regulations to produce the most environmentally acceptable results, and SMECI proposes its best conceptual plan to date. An impoundment schedule is provided in Tables 148-1 and 2, and a diversion schedule in Table 148-3, both containing the approximate in-service dates and updated status for the 25 existing sedimentation ponds, 16 reclamation ponds, and 30 diversions needed for sedimentation control within the proposed permit renewal/revision area.

ii. SMECI describes its topsoil handling operations on pages .139-4 through 7. Topsoil removal operations will commence following completion of clearing and grubbing activities. SMECI will remove all native topsoil material (A and E soil horizons) for redistribution onto the reconstructed subsoil material. Topsoil will be removed to depths in accordance with approved soil survey maps at the direction of an agronomist or soil scientist with knowledge of local soils. Operators performing the topsoil removal will be trained to identify the topsoil from subsoil, and a staff agronomist will regularly check that the proper topsoil thickness is being removed, so as to minimize contamination and topsoil loss; however, the operational minimum topsoil removal and replacement thickness is 6 inches. If an area has less than 6 inches of topsoil, the topsoil and unconsolidated material to a depth of 6 inches will be removed and handled as topsoil. A buffer zone of approximately 200 feet is maintained around the mine area to ensure that topsoil is not lost or contaminated. SMECI indicates that the topsoil will generally be removed using mobile equipment (scrapers, dozers, continuous surface miners, front-end loaders, and end dump trucks). SMECI estimated the topsoil volumes to be removed (based on average one ft removal depth) each year during the proposed San Miguel Lignite Mine permit term in Table .139-3, and topsoil stockpile capacity volumes in Table .139-4.

iii. Temporary topsoil and haulback stockpiles may be constructed in two or more lifts. All stockpiles will be established, marked, and maintained utilizing slopes of 3h:1v or flatter. All topsoil stockpiles will be temporary structures approximately 30 feet tall and will be seeded for temporary vegetative cover within 60 days following completion of construction, weather and planting conditions permitting, to minimize erosion. Temporary topsoil stockpiles placed in the vicinity of boxcut placement areas near the crop line will remain in place until final reclamation of the adjacent mine area.

iv. The haulback removal plan is described on pages .139-8 and .139-9 of the Application. Haulback material is proposed to be removed to a depth of up to four feet below the original ground surface using mobile equipment. Survey

locations and elevations will be obtained to ensure proper depth of removal. Haulback material will be either stored in temporary stockpiles or distributed directly on regraded spoil areas. The estimated haulback material removal (based on 3-ft removal depth below topsoil) volumes during the proposed permit term have been provided in Table .139-5, and haulback material stockpile capacities have been provided in Table .139-6. Temporary topsoil and haulback material stockpiles have been depicted in Exhibit .139-1.

v. SMECI also described a select material-handling plan using mobile equipment on pages .139-9 and .139-10 for use in areas where suitable overburden material is present and four-foot haulback is not needed. SMECI has proposed to use mobile equipment to place select material directly on regraded spoils. Topsoil is proposed to be distributed to provide a minimum of four feet of soil that is free of AFM or TFM as compared to the native soil baseline. SMECI indicates on page .139-9 that the areas previously approved by the Commission for select material placement are delineated on Exhibit 145-2.

b. Staff's evaluation noted the following:

i. Lignite removal and reclamation activities have been completed in Areas A and E, with the exception of temporary roads and open pits where coal combustion products are being placed. All active mining operations proposed in the Application in the five-year permit renewal term (2018 to 2023) will occur in Area B.

A. The location of the proposed mine-plan area is represented on Exhibits 119-1 (in section .119), and 139-1, sheets 1 through 5 (in section .139). Anticipated pit progressions and the areas to be mined in the proposed five-year permit-term area are shown on these exhibits. Draglines are proposed as the primary equipment to be used for overburden removal during the permit term.

B. There are four recoverable seams within Area B. Mining methods are detailed in the narrative, on range diagrams on Figures .139-1a through 6a for dragline operations, and on Figures .139-7a though 9a for combined dragline/dozer operations.

ii. SMECI has requested a continuation of activities currently approved to conduct mining-related activities within the 100-ft buffer zones for La Parita and Metate Creeks. The operations within the buffer zones include: the B-North Haul Road; B-East Haul Road; La Parita Creek Bridge; Dragline Walkway; Levee 9B;

Sedimentation Pond 9B; La Parita Creek Levee; Metate Creek Levee; Pond 21B; and Pond 23B. These operations may include reclamation, regrade, erosion control, maintenance, mowing and haying activities, grazing and vegetation clearing, and active lignite removal. No new stream buffer zone variances are proposed in this application. Staff recommends continuation of the approved variance to conduct mining-related activities within the 100-foot buffer zones for La Parita and Metate Creeks.

iii. SMECI has requested a variance to allow spoil peaks to remain up to 24 months after coal removal, and rough backfilling and grading to achieve approximate original contour (AOC) be completed up to 40 months after coal removal. Figures .139-10 and .139-11, along with Table 145-1, illustrate the proposed backfilling and grading plan. SMECI's proposed reclamation timetable is described in Finding of Fact No. 36, *infra*.

iv. Ash-disposal operations will continue to occur in Areas A and E as authorized by TCEQ Solid Waste Registration (SWR) No. 31434.

v. SMECI anticipates that approximately 900,000 tons of lignite will be mined annually during the permit term, with total production during the proposed five-year permit term of approximately 4.5 million tons. With this production estimate, SMECI's three approved permits are expected to achieve the anticipate annual delivery to the San Miguel Power Plant of 3,257,000 tons of lignite.

vi. Table 148-1, *Impoundment Schedule*, contains the approximate in-service dates for all existing sedimentation ponds, and Table 148-2 contains a list of all existing and proposed reclamation ponds within the permit area. Diversions that are a part of SMECI's surface-water control plan are listed in Table 148-3 and are depicted on exhibits in section .148 of the Application.

vii. Temporary overburden, haulback and topsoil storage areas are depicted on Exhibit .139-1, sheets 1 through 5, *Operation Map*. Overburden, haulback and topsoil material will be employed in final reclamation, which will be blended into the natural terrain and tied into existing topography. All temporary structures that are no longer required will be reclaimed, unless otherwise approved as a permanent feature of the postmine reclaimed surface. Revegetation activities will be conducted in accordance with the reclamation plan described in section .145 of the Application.

viii. Lignite will be hauled to the storage stockpiles near the truck dump hopper at the San Miguel Power Plant. All mine facilities and the truck dump hopper are

depicted on Exhibit .139-1, sheet 2 of 5. No coal cleaning facilities are proposed. Water and air-pollution control facilities, and sediment control structures are addressed in SMECI's surface-water control plan in Application section .148. No other facilities are proposed. Potential sources of dust will be sprayed with water, as necessary, in accordance with §12.143. Other air-pollution control practices are described on pages .139-42 and 43 of the Application.

31. The Application meets the requirements of §12.140 and §12.217 of the Regulations regarding existing structures. SMECI states that it does not plan to use, modify, or reconstruct any structures or facilities for which construction began prior to approval of the State program as defined at §12.9 of the Regulations.

32. The Application meets the requirements of §12.141 of the Regulations. SMECI indicates that it does not propose to conduct blasting within the permit area.

33. The Application meets the requirements of §12.142 of the Regulations. The Application contains a list in which SMECI identifies operation-plan maps and plans as required by this section, including the location of proposed and existing diversions, permanent impoundments, and sedimentation ponds that may be used to protect and enhance fish and wildlife and related environmental values.

34. The Application meets the requirements of §12.143 of the Regulations. Staff indicates that an air-pollution control plan is not required because the proposed permit area is located east of the 100th meridian and, therefore, §12.143(a) of the Regulations does not apply. The Application contains a plan for control of fugitive dust as required at §12.143(b) of the Regulations. The Commission does not request that an air-quality monitoring plan be provided.

35. The Application meets the requirements of §12.144 of the Regulations. SMECI provides a fish and wildlife protection and enhancement plan for the proposed permit area.

    a. In the text of this replacement section, SMECI describes potential impacts and ways to minimize impacts to fish and wildlife, proposing the following protection and enhancement measures: incremental mining, construction and design considerations, undisturbed blocks, temporary stabilization practices, pre-disturbance surveys, avoidance and relocation measures, proper chemical handling, fire suppression and control, lowered speed limits, directional fencing, employee education, excavation covering, pond and diversion construction, topsoil handling and revegetation, planting arrangements, management techniques, buffer zones, supplemental cover, perch structures, nesting boxes, wetland mitigation, and supporting research.

b. A revised Table 144-1, *Rare, Threatened and Endangered Species of Concern*, is provided in Supp. 2 to identify species of concerns that have been identified onsite or are likely to occur within the permit area.

c. A threatened and endangered species protection plan is contained in Appendix 144-1. SMECI proposes the following protection measures: employee education, notification and reporting, relocation protocols, fencing and erosion control matting protocols, research and outreach, a species monitoring plan, and Black-lace cactus protection measures.

d. SMECI has also committed to complying with all 404 mitigation requirements for protected jurisdictional wetlands.

e. By letter dated November 28, 2018, TPWD provided comments to the Commission on Supp. 1. TPWD has not provided comments on Supps. 2, 3 and 4.

i. TPWD recommended that SMECI include a discussion regarding Elmendorf's onion to reflect a documented occurrence in or near the permit boundary. As Elmendorf's onion has been documented in or near the permit boundary, Staff concurs with TPWD that discussion of this species should be included in the section .133 text. Staff noted a non-substantive comment in section .133 in TAAddm 2 to include this species. SMECI provided a discussion on Elmendorf's onion on page 133-10 in Supp. 4.

ii. TPWD commented that, given a growing trend in natural resource conservation in South Texas is to provide environmental education to employees in both English and Spanish, it recommended producing the Employee Education Hand-out (Attachment 144-1a) in English and Spanish to ensure all mine employees were adequately informed regarding the proper identification, protected status and avoidance of listed species that may occur in the permit area. As Attachment 144-1a includes photographs of the protected species that may occur within the permit area, Staff did not agree that an additional handout in Spanish was required. However, Staff again recommended in TA Addendum No. 2 that SMECI ensure all employees are aware of the protected species that may occur within the permit area, and was not opposed to inclusion in updated Attachment 144-1a in Supp. 4 of a Spanish version in response to TPWD's recommendation.

iii. TPWD indicated that it greatly appreciated that SMECI will be providing occurrence information to the Texas Natural Diversity Database (TXNDD)

operated by TPWD. Staff concurs that providing occurrence information to TXNDD is beneficial to species.

iv. TPWD recommended that SMECI report observations of species of greatest conservation need (SGCN) in addition to those listed as threatened or endangered. SGCN are tracked in the TXNDD; additional data would improve the understanding of SGCN distribution and occurrence in the landscape. Staff concurred that SGCN occurrence information should be provided to TXNDD. As no specific protection plan is required for these species, however, Staff does not recommend that SGCN occurrences be required to be reported to the Commission, except in baseline studies. To its credit, SMECI updated the text in Appendix 144-1 of Supp. 4 to include a commitment to notify the Commission of any SGCN species observed.

v. In that SMECI committed to support a project for species conservation, TPWD recommended that the specific project to be supported be identified, and that SMECI provide specific research objectives of the project, and areas of research that may be pursued in the future. In Supp. 3, SMECI identified the specific project that it would be supporting—a research project that is aimed at the conservation of Texas horned lizards. Information on this planned project is provided in Appendix 144-1.

vi. TPWD recommended that SMECI update the permit application to clarify discrepancies in the planting lists and footnotes. SMECI provided a revised table reference and footnotes. SMECI indicated in the footnote of Table 145-6 that potential volunteer grass species will include all non-noxious species listed in Table 132-1, and that invader species for grazingland and fish and wildlife habitat will be non-noxious and native.

vii. TPWD recommended that SMECI update the Application to clarify discrepancies regarding buffelgrass. SMECI referenced in Supp. 3 that buffelgrass was disallowed for planting per Provision No. 10 of approved Permit No. 11G, stating that buffelgrass was therefore listed in Table 145-5 with a footnote acknowledging its current approval status. However, Staff noted that buffelgrass was not listed in Table 145-5, but rather, it was listed in Table 145-6. In addition, the footnote did not provide a reference to the approval status of buffelgrass, and also referenced what was purported to be list of non-noxious species in Table 132-1 but which did not contain a species list. SMECI addressed the described discrepancy in Supp. 3, by revising the text on page 145-12 to correctly note that buffelgrass is listed in Table 145-6 as a potential invader species. In Supp. 4, a third footnote was added to this table to clarify that buffelgrass was previously

approved for planting but has now been moved to the invader species list. The first footnote in Table 145-6 contained an erroneous reference to non-noxious species in Table 132-1 instead of to Appendix 132-1, which is the entire list of baseline vegetation species. As noted in its TA and TAAdda 1-3, Staff concurred with TPWD's recommendation. In Application Supp. 3, SMECI addressed the discrepancy between the text of this section and Table 145-5 regarding buffelgrass by revising the text to correctly note that buffelgrass is listed in Table 145-6 as a potential invader species. In Supp. 4, a replacement third footnote was included to clarify that buffelgrass was previously approved for planting but has now been moved to the invader species list.

f. The fish and wildlife treatment and protection plan provided by SMECI meets the requirements of §12.144 of the Regulations.

36. The Application contains a reclamation plan for the lands within the proposed permit area and that its plan meets the requirements of §134.092 of the Act and §12.145 of the Regulations. SMECI indicated that its reclamation plan for the proposed permit area includes all information required by §§12.146 through 12.154, and that the plan describes how SMECI will comply with the Regulations as required by §12.145(a). Staff has summarized the proposed plan as set forth in the following table, as adjusted by the ALJ:

Item(s)	**Description**	**Location**
Pages 145-1 & 37	Narrative addressing §12.145	Supp. 3
Pages 145-2, 11-18, & 38-41	Narrative addressing §12.145	Supp. 4
Pages 145-3, 5-8, 10, 19-24, & 26-36	Narrative addressing §12.145	*
Pages 145-4, 9, & 25	Narrative addressing §12.145	Supp. 2
Table 145-1	*Pastureland Post Topsoil Reclamation Timetable*	Supp. 4
Table 145-2	*Final Ash Pit Backfill Timetable*	Supp. 7
Table 145-3	*Industrial Commercial Post Topsoil Reclamation Timetable*	*
Table 145-4	*Pre and Postmine Slope Classes*	Supp. 2
Table 145-5	*Grasses for Revegetation of Disturbed Areas*	Supp. 4
Table 145-6	*Potential Volunteer Species in Revegetated Areas*	Supp. 4
Table 145-7	*Temporary Vegetation/ Cover Crops and Rates for Disturbed Areas*	*
Table 145-8	*Woody and Aquatic Related Species in Revegetated Areas*	Supp. 4
Exhibit 145-1 (Sheets 1, 2, 3, & 4)	*Post Mine Topography*	*
Exhibit 145-1 (Sheets 5)	*Post Mine Topography*	Supp. 2

Item(s)	Description	Location
Exhibit 145-2	*Grid Map*	*
Exhibit 145-3	*Premine Slope Map*	Supp. 2
Exhibit 145-4	*Postmine Slope Map*	Supp. 2
Exhibit 145-1a-1 (Sheets 1 & 2)	*Area A & E Permit 11G Renewal Bond Map*	*
Exhibit 145-1a-1 (Sheet 3)	*Area A & E Permit 11G Renewal Bond Map*	Supp. 2
Exhibit 145-1b-1 (Sheet 1)	*Area B & BX Permit 11G Renewal Bond Map*	*
Exhibit 145-1b-1 (Sheet 2)	*Area B & BX Permit 11G Renewal Bond Map*	Supp. 2
Exhibit 145-1b-2 (Sheet 3)	*Permit 11G Renewal Worst Case Pit Reclamation Cross Sections*	Supp. 3
Exhibit 145-5	*Select Material Placement*	Supp. 2
Figure .145-2	*Typical Hole Abandonment Procedure -Exploration or Core Holes*	Supp. 3
Figure .145-3	*Typical Hole Abandonment Procedure Piezometers, Monitoring or Pumping Wells*	Supp. 3
Appendix 145-1a (pages 145-1a-1 to 22, and 24 to 26)	*Permit 11G Renewal – Areas A & E Reclamation Cost Determination*	Supp. 4
Appendix 145-1a (pages 145-1a-23 & 27)	*Permit 11G Renewal – Areas A & E Reclamation Cost Determination,* revised Table 145-1a-17 (Seep Remediation Unit Cost) and Table .145-1a-20 (Summary of Reclamation Cost)	Supp. 5
Appendix 145-1b (pages 145-1b-1 to 4, 6 to 28, & 3 to 37)	*Permit 11G Renewal – Areas B & BX Reclamation Cost Determination*	Supp. 4
Appendix 145-1b (pages 145-1b-5 & 145-1b-29)	*Permit 11G Renewal – Areas B & BX Reclamation Cost Determination,* revised Table 145-1b-1 (Reclamation Costs) and Table .145-1b-29 (Soil Preparation, Revegetation and Maintenance)	Supp. 5

* Initial Application submittal on July 27, 2018.

a. SMECI provided detailed timetables for the completion of reclamation elements in the initial submittal and in Supps. 4 and 7 that include all information required by §12.145(b)(1). Staff indicates that the timetables are of sufficient detail to meet the requirements of §12.145(b)(1).

b. Commission Order signed on December 8, 2020, Docket No. C20-0021-SC-00-E, accepted two Blanket Self Bonds with Third Party Guarantees to cover reclamation obligations in sum for Permits 11G, 52A and 60. The accepted Self Bond instruments covering the three permits are in the amounts of $131,000,000 and $9,000,000, for

a total $140,000,000. The final pit areas are currently bonded utilizing the Area Bond methodology, which equates to $11,438.00/acre for the mined rate. This cost includes the following work categories: overburden spoil leveling, topsoil distribution, soil preparation, revegetation, and vegetation maintenance for a five-year period. SMECI provided a detailed estimate of the cost of reclamation required to be covered by the performance bond is contained in the Application, in accordance with §12.145(b)(2). SMECI provided a revised detailed reclamation cost estimate in section .145, in Appendices 145-1 and 1a, *Reclamation Cost Determination*, in the initial submittal, and in Supps. 2 through 5. Staff's reclamation cost estimate is $41,903,538 for Areas A and E of the mine, and $42,730,060 for Areas B and BX of the mine, for a total estimate of $84,633,598 recommended by Staff as the necessary performance bond amount for the proposed activities in this Application. The currently accepted reclamation performance bond is in the amount of §70,000,000. SMECI's and Staff's reclamation cost estimates include a detailed cost estimate for remediation of identified saline and acidic seeps, as was requested by Staff. A review of the reclamation plan also reveals that components of the reclamation will not be accomplished until approximately 42 years following coal removal (Supp. 7, Table .145-2)—specifically in those portions of the mine that remain to be reclaimed following completion of the placement of ash materials in the end pits. Thus, it is likely that such actions will require a significantly different cost quotient than is presently considered in SMECI's and Staff's reclamation coast estimate. The Commission must consider an appropriate bond amount based on the proposed reclamation plan. Therefore, it is prudent that the time-value cost of completion of certain components of the reclamation be considered in determining an appropriate performance bond amount. Pursuant to this consideration, the Commission adopts Permit Provision No. 1 as follows, contained in Appendix I to this Order, to ensure that sufficient funds are available should the Commission be required to complete reclamation should SMECI not be able to do so:

> Within 60 days following permit issuance, SMECI shall submit revised reclamation cost estimates for this permit consistent with the approved reclamation plan and considering the time value of money, specifically considering anticipated changes in equipment and manpower costs for necessary reclamation activities proposed to be performed as great as 42 years following final coal removal, which occurred in 1990. Also within 60 days following this permit issuance, to ensure that the blanket bond held by the Commission for three mines, consisting of this permit and Permit Nos. 52A and 60, is sufficient, SMECI shall also submit updated reclamation cost estimates for Permit Nos. 52A and 60. After receipt of SMECI's reclamation cost estimates, Staff shall conduct independent

reclamation cost estimates for the three permits, and, for issued Permit No. 11H, shall consider the anticipated time value of the costs of equipment and manpower to complete the reclamation requirements consistent with the approved reclamation plan. Staff shall provide these estimates to SMECI no later than 60 days following receipt of SMECI's estimates. If necessary, SMECI shall, within 60 days following receipt of Staff's three reclamation cost estimates, file an appropriate replacement bond.

c. SMECI's reclamation plan in the Application meets the requirements of §12.145(b)(3) by providing a plan in the initial submittal, Supp. 2 and Supp. 4 for backfilling, soil stabilization, compacting, grading, and repair of rills and gullies. A variety of techniques are proposed to be employed to prepare and stabilize areas being reclaimed and to minimize erosion, in accordance with §§12.384-12.389 of the Regulations. Strategies to control wind and water erosion start with seedbed preparation techniques. Fertilizing, seeding, or sprigging will be conducted along the contour where possible and will immediately follow seedbed preparation. SMECI provided contour maps and cross sections that show the anticipated final surface configuration of the proposed permit area. Staff concurs that the postmine topographic configuration meets the approximate original contour, as demonstrated in the comparison of the premine and postmine slopes in the following table:

Slope Category	Approved Premine Slopes		Proposed Premine Slopes		Change	
	Area (ac)	%	Area (ac)	%	%	Area (ac)
0 - 2%	10,737	67.1	11,122	69.5	+2.4	+385
2 - 5%	4,969	31.1	4,679	29.2	-1.9	-290
5 - 10%	292	1.8	193	1.2	-0.6	-99
10 - 15%	2	0.01	4	0.0	0	+2
15 - 100%	0	0.0	4	0.0	0	+4
Total	**16,000**	**100.0**	**16,002**	**100.0**		

SMECI provided updated Exhibit .145-1, *Post Mine Topography* (five sheets), Exhibit .145-3, *Premine Slope Map*, and Exhibit .145-4, *Postmine Slope Map*, in Supp. 2, to depict components of its proposed backfilling and grading plan. The change in slopes is a result of the regrading of prior boxcut spoils. The change in slopes of the postmine topography will not have a detrimental effect on the postmine land use. In addition, Staff had noted a contradictory topsoil placement completion date in the Area E ash placement area between the text and Table 145-2. In response to this

concern, SMECI revised the plan in Supp. 4 to correct the Area E ash placement area dates so that they were in agreement.

d. SMECI has described a detailed handling plan for topsoil and subsoil removal, replacement, respreading, and scarification in its topsoil/subsoil handling plan in section .139, and meets the requirements of §12.145(b)(4). The topsoil/subsoil haulback handling plan is not contained in this section but is referenced to section .139(2)(B). SMECI indicates that topsoil substitutes are not proposed for use in the renewal/revision permit area. Staff concurred that no changes to this plan are needed.

e. SMECI proposes to reclaim disturbed areas to postmine land-use types of pasture, industrial/commercial (I/C) and developed water resources (DWR), based on landowner preferences and premine land uses, meeting the requirements of §12.145(b)(5)(A)-(F). Ancillary bonded areas will be revegetated as appropriate to the premine land use. SMECI's proposed plans have been summarized by Staff as follows:

i. Schedule of revegetation [§12.145(b)(5)(A)]: SMECI provides a pastureland land-use reclamation schedule in Table 145-1 and an I/C land-use reclamation schedule in Table 145-3. Revegetation will be initiated as soon as feasible following completion of regrading and replacement of topsoil. In the event that the optimum planting date does not coincide with completion of topsoil redistribution, alternative methods such as surface roughening, seeding of temporary vegetation (as listed in Table 145-7), deep disking, ditching, or mulching will be used to minimize erosion of topsoil. SMECI indicates (page 145-19) that planting of perennial grasses will occur from January-May and September-October; however, if stand failure during the fall planting period is anticipated (due to weather, soil moisture and nature of planting areas), a cool season cover crop (listed in Table 145-7) will instead be temporarily established.

ii. Species and amounts per land-use area [§12.145(b)(5)(B)]: SMECI provides a list (page 145-11) of species to be used in revegetation based on species characteristics. Optimal species are those that will establish quickly, prevent erosion, provide livestock forage, and, secondarily, benefit wildlife. SMECI indicates revegetation in Areas A and E has been predominantly established using introduced species such as Coastal bermudagrass and Kleingrass. In Areas B and BX, SMECI continues to propose the use of a seeding mixture of natives and introduced grasses, consistent with landowner preferences. Species for herbaceous vegetation will be selected from permit-approved species (as listed in Tables 145-5 through 8). Woody plants selected from Table 145-8 and

Appendix 144-3 will be utilized for revegetation of permanent ponds, drainages, and wildlife enhancement/mitigation areas. SMECI anticipates planting 30-40 trees per acre of selected species in mitigation areas.

A. Staff noted that although Table 145-5 contains a list of native and introduced species and planting rates for revegetation of disturbed areas that generally meets revegetation standards in §§12.390 and 12.391, introduced species such as Kleingrass, bermudagrass, and Old world bluestem that were listed in Table 145-5 tended to be invasive and could displace desirable vegetation if not properly managed. Staff further indicated that these species reduced the growth and vigor of other grasses that are more nutritious and could negatively affect plant biodiversity, insects, wildlife, and the surrounding ecosystem. Staff further indicated that Silver bluestem (*Bothriochloa saccharoides*), also listed in Table 145-5, was not present or common in Texas, and was a warm-season short-lived perennial bunch grass that is native to Puerto Rico, not to Texas or the United States. *Bothriochloa laguroides*, also commonly known as Silver bluestem, is a native species that is better adapted to the area. Staff further noted that, similarly, Cane bluestem (*Bothriochloa barbinodis*) or Big bluestem (*Andropogon gerardii*) are native to Atascosa County, important for wildlife, provide palatable forage for livestock and are good for erosion control and could be planted instead of *B. saccharoides*, and that inclusion of these species in Table 145-5 would be satisfactory for pastureland use. Staff requested that Table 145-5 be revised to include a footnote to exclude planting of these species in grazingland and wildlife enhancement areas, except in areas of steep slopes to control erosion. SMECI revised Table 145-5 in Supp. 4 appropriately.

B. In addition, Staff noted that Table 145-6 contained a comprehensive list of plant species that may voluntarily grow in and diversify the reclaimed areas. Although Staff has no concerns with native species such as Partridge pea on the list because SMECI did not intend planting this species, it recommended that the table footnote be revised to indicate that all native species listed in Table 132-1 be included on this list and that non-noxious, non-native species were applicable only to pastureland postmine land use areas. SMECI revised Table 145-6 accordingly in Supp. 4.

C. Staff noted that SMECI proposed to plant woody plants selected from Table 145-8 and Appendix 144-3 along drainages and around ponds, and that all species listed were acceptable for postmine reclamation except Silver bluestem (*B. saccharoides*), Narrow-leafed Yucca (*Yucca angustissima*)

and Spike sedge (*Carex scirpoidea*). Staff indicated that these three species in Table 145-8 or Appendix 144-3 were not common to the county or State and needed to be removed or replaced with other native species. The roots of Narrow-leafed Yucca were known to contain saponins which are toxic to people and grazing livestock. In addition, Staff noted that the USDA warns that although Partridge pea (*Chamaecrista fasciculata*) foliage is nutritious, it can be poisonous and should be considered potentially dangerous to cattle. In Supp. 4, SMECI removed both Silver bluestem and Narrow-leafed Yucca from Appendix 144-3, and Spike sedge was also removed from Table 145-8, satisfying Staff's concerns.

D. Staff noted that SMECI had indicated that ancillary bonded areas would be revegetated as necessary to premine land use; however, in the text it indicated that premine land use of grazingland was referenced for ancillary areas. Staff requested that SMECI revise the text to reflect grazingland land use to be consistent. Further, Staff noted that because grazingland land-use is anticipated for ancillary areas, SMECI needed to indicate that it will employ the same quantitative revegetation-success standards for proposed pastureland and grazingland land-use areas. SMECI made these appropriate changes to its plan in Supp. 3.

iii. Planting and seeding methods [§12.145(b)(5)(C)]: SMECI proposes to use seedbed preparation methods such as contour disking followed by plowing prior to planting permanent vegetation to relieve compaction, promote root penetration and reduce erosion potential. Additional erosion control methods to be employed include leaving graded spoil in a roughened condition prior to topsoil redistribution. Coastal bermudagrass will be planted with a sprig planter, grass seed with seed drill or a grain drill, followed, if necessary, by use of a cultipacker or roller. Planting of temporary vegetation will be by the broadcasting method.

iv. Mulching techniques [§12.145(b)(5)(D)]: SMECI has provided a description of its proposed mulching plan on page 145-17, indicating that the Commission granted a mulching variance to SMECI for the San Miguel Mine on January 9, 1985 (Permit No. 11), and that based upon practical experience, SMECI does not anticipate the use of mulch except in situations where erodibility is a factor due to slope or soil texture. It also indicates that if mulch is used, it will ensure that the mulch is free of noxious weeds. SMECI requests a mulching variance for the proposed permit term. SMECI's mulching plan with the proposed variance is appropriate and is approved.

v. Irrigation Practices, Pest, and Disease Control Measures [§12.145(b)(5)(E)]: SMECI indicates that irrigation will be used when lack of rainfall threatens the establishment or maintenance of revegetated stands. Additionally, SMECI commits to not using irrigation as a normal husbandry practice during the extended responsibility period for reclaimed pasturelands. SMECI indicates that, as a general rule, pesticides and herbicides will not be used; although insecticides and herbicides will be used in specific instances (e.g., localized control of ants, broadleaf noxious weeds, etc.).

vi. Determination of reclamation success [§12.145(b)(5)(F)]: SMECI proposes to meet or exceed a technical ground-cover standard of 95 percent for sod-forming grasses and 90 percent for bunch grasses, consistent with regulatory standards. SMECI will use the Commission's guidance document, *Procedures and Standards for Determining Revegetation Success on Surface-Mined Lands in Texas*, and will submit required revegetation-success reports prior to applying for Phase II release. SMECI proposes to use forage production standards that the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) developed for determining vegetation productivity at the San Miguel Lignite Mine, which are provided in Appendix 145-3. SMECI proposes to gather forage-production data by means of clip plots, haying, or grazing.

vii. SMECI described in this Application existing Provision No. 10, which was adopted in Permit No. 11F but was not retained in currently approved Permit No. 11G because a subsequent revision to the revegetation plan satisfied the requirements of Provision No. 10. Permit Provision No. 10 restrained SMECI from planting Buffelgrass and Bromegrass and the non-native *Phalaris arundinacea*; allowed the planting of native *Phalaris caroliniana* as a habitat feature vegetation in enhancement areas; and required SMECI to provide performance standards for the reclamation of either 7.6 percent of permit-area disturbed acreage to postmine grazingland or fish and wildlife habitat land uses. For performance standards for the reclamation of specified and mapped acreage on Tract Nos. A-470, A-476, and A-765, SMECI proposed the use a revegetation seed mix that included several native grass species that SMECI identified prior to planting. Permit Provision No. 10 also required SMECI to revise, as necessary, its list of revegetation plants in this instance. Nevertheless, the requirements described in former Permit Provision No. 10 are not needed for this renewal/revision application.

f. SMECI has provided a postmine-soil testing plan meeting the requirements of §12.145(b)(5)(G). The soil testing plan ("STP") is contained on pages .145-25 through 36 and Exhibit 145-2, *Permit 11G Renewal Grid Map*, in the initial

Application submittal, and, as indicated by Staff, remains unchanged from the approved STP. The STP as proposed is contained in Appendix II to this Order and is applicable to all mine areas [Area A, Area B (including Area BX), and Area E].

g. SMECI indicated in the Application that surface mining will be conducted to maximize the use and conservation of the coal resource, using the best technology currently available to maintain environmental integrity and minimizing future re-disturbance. SMECI further indicated that the lignite deposit in the proposed permit area is composed of four recoverable seams throughout most of the mining area, and that it will maximize recovery of all economically mineable seams (typically, a minimum lignite seam thickness of 0.5 ft). Staff notes that mining activities and methods of delineation were also described, while noting the protection of environmentally sensitive areas like the floodplain of La Parita Creek.

h. SMECI indicates that all non-coal waste and debris will be collected and disposed of off-site. On-site extinguishers and chemical combustion equipment will ensure safety consideration during construction, mining, and reclamation periods. A haulback-material handling plan and a select-material handling plan using mobile equipment has been proposed. Neither AFM nor TFM will be stored in proximity to a drainage course. If unsuitable material is identified, steps will be taken to either correct the problem with addition of soil supplements, cover the material with four feet of suitable plant growth material, or remove the material, bury it in the pit, and replace it with suitable plant growth material, as per the proposed contingency plan.

i. SMECI has provided a satisfactory drillhole and wellbore plugging and sealing plan meeting the requirements of §12.145(b)(8) of the Regulations.

   i. Upon completion, all exploration holes will be sealed by first filling the hole with bentonite from the bottom of the hole to within 13 feet of the surface. This will be followed by the installation of an industry-accepted hole plugging device set at a depth of 13 feet. A cement plug will be set between the depths of 13 and three feet, with the remaining three feet to surface filled with drill cuttings or native soil, as illustrated in Figure .145-2 in the Application. If artesian conditions are encountered, a cement plug will be used to prevent water flowing from the hole. Geophysical logs of exploration holes within the permit area that penetrate below the lowest lignite to be mined will be reviewed to determine the lithology. If it is found that plugging the hole with abandonment mud is not adequate, holes will be plugged with bentonite or cement to isolate any potential aquifers.

   ii. Water wells or piezometers used for monitoring or pumping purposes, when no longer in use, will be sealed following currently accepted practices and consistent

with §12.331 and §12.333 of the Regulations, and with procedures or options described in 16 Texas Admin. Code §76.104 and §33.014 of the Texas Water Code, as follows:

A. If a well is abandoned or deteriorating, all removable casing will be removed from the well and the entire well pressure-filled via a tremie pipe with cement from bottom up to the land surface;

B. In lieu of the procedure above, the well will be pressure-filled via a tremie tube with clean bentonite grout of a minimum 9.1 pounds per gallon weight followed by a cement plug extending from land surface to a depth of not less than two (2) feet, or if the well to be plugged has one hundred (100) feet or less of standing water the entire well may be filled with a solid column of 3/8-inch or larger granular sodium bentonite hydrated at frequent intervals while strictly adhering to the manufacturers' recommended rate and method of application. If a bentonite grout is used, the entire well from not less than two (2) feet below land surface, may be filled with the bentonite grout. The top two (2) feet above any bentonite grout or granular sodium bentonite will be filled with cement as an atmospheric barrier;

C. Undesirable water or constituents, or the fresh-water zone(s), will be isolated with cement plugs and the remainder of the wellbore filled with clean bentonite grout of a minimum weight of 9.1 pounds per gallon, followed by a cement plug extending from the land surface to a depth of not less than two (2) feet;

D. Large diameter, hand-dug or bored wells to one hundred (100) feet in depth may be plugged by backfilling with compacted clay or caliche to surface. The plugged hole will be left mounded in allowance for settling;

E. SMECI may petition SMRD, in writing, for a variance from the methods stated in subsection (a) of this section. The variance will indicate, in detail, the proposed alternative method proposed and all conditions applicable to the well that would make the alternative method preferable to those methods stated set forth above; and

F. A non-deteriorated well having casing in good condition and that is beneficial to the landowner may be capped with a covering that is capable of preventing surface pollutants from entering the well and that will sustain a weight of at least four hundred (400) pounds. The covering will be constructed in such a way that it cannot be easily removed by hand.

iii. SMECI will employ alternative well/piezometer abandonment procedures in accordance with 16 Texas Admin. Code §76.109 if casing removal is not feasible or practicable. The cased well or piezometer will be cemented or filled with bentonite slurry from the bottom up to within 2 feet of the land surface with the casing left intact. By not removing the well casing, impervious plugs (10-foot concrete surface plug and strategically placed bentonitic seals) set during well/piezometer installation remain intact and unbroken. Introduction of cement/bentonite slurry into the cased well or piezometer will permeate through slotted casing sections and infiltrate and plug the annulus area of the cased hole in addition to the aquifer in the immediate vicinity of the well/piezometer. The combination of surface plugs, bentonitic seals and cementing will isolate aquifers and prevent surface contamination. In the event an abandoned well is mined through, the aforementioned well abandonment procedure will prohibit movement of spoil fluids into the aquifer underlying the lignite seam. After the cement has dried, the surface casing and cement will be removed to three feet below the ground surface and backfilled with topsoil.

j. The information provided in the Application (initial submittal) is sufficient to meet the requirements of §12.145(b)(9) of the Regulations. SMECI has described the programs and methods it currently uses to comply with the requirements of the Clean Air Act, Clean Water Act, and other applicable air- and water-quality requirements, including permits from the Commission, TCEQ, MSHA, EPA, and USACE and has proposed to continue. SMECI proposed to accomplish compliance via water-effluent monitoring and testing, fugitive-dust control, monthly inspections and annual safety certifications of water-control structures, reclamation and safety training, regular environmental audit inspections, groundwater monitoring, fuel spill prevention and control plans, and cultural-resource protection and discovery plans. Staff indicates that the information provided has been reviewed and has been determined to adequately address all requirements of §12.145(b)(9).

37. SMECI's Application includes all information necessary to meet the requirements at §12.146 for protection of the groundwater hydrologic balance, groundwater monitoring, and a satisfactory determination of the probable hydrologic consequences ("PHC") to groundwater. SMECI included revisions to its groundwater control plan for the permit area. A revised depressurization and groundwater control plan has been included in the application as well as a proposed long-term groundwater monitoring plan. Staff provided a summary of SMECI's plans as follows:

a. In TAAddm 5, Staff provided an updated list of the items contained in the Application, with their location therein, that were provided to address SMECI's groundwater protection plan and PHC determination.

Item(s)	Description	Location
Cover page	Cover page - signed and sealed 2/28/19 for Supp. 3	*, and Supps. 2 & 3
Pages 146A-ii	*Table of Contents*	Supp. 3
Pages 146A- iii	*Table of Contents*	*
Page 146A- iv	*Table of Contents*	Supp. 2
Page 146A-1	*Introduction*	Supp. 3
Page 146A- 2	*Introduction*	*
Pages 146A-3 through 4	*Groundwater Evaluation During Mining*	*
Page 146A-5	*Groundwater Evaluation During Mining*	Supp. 2
Page 146A-6, 35-36	*Post-Mine Groundwater Conditions*	Supp. 3
Page 146A-34	*Post-Mine Groundwater Conditions*	Supp. 2
Page 146A-37	*Post-Mine Groundwater Conditions*	Supp. 4
Page 146A-38	*Monitoring Program Revisions*	Supp. 4
Page 146A-39	*References*	Supp. 4
Table 146A-1	*Post-Mine Monitoring Well Construction Summary*	Supp. 2
Table 146A-2	*Post-Mine Reclaimed Spoil and Overburden/Alluvium Unit Groundwater Elevations*	Supp. 2
Table 146A-3	*Underburden Unit 22 Monitoring Well Construction Summary*	*
Table 146A-4	*Underburden Unit 22 Groundwater Elevations*	*
Table 146A-5	*Post-Mine Reclaimed Overburden Groundwater Analytical Summary- Major Ions*	Supp. 2
Table 146A-6	*Post-Mine Reclaimed Overburden Groundwater Analytical Summary- Metals*	Supp. 2
Table 146A-7	*Overburden, Alluvium, and Pond 8 Area Groundwater Analytical Summary- Major Ions*	Supp. 2
Table 146A-8	*Overburden, Alluvium, and Pond 8 Area Groundwater Analytical Summary- Metals*	Supp. 2
Table 146A-9	*Underburden Unit 22 Groundwater Analytical Summary- Major Ions*	Supp. 2
Table 146A-10	*Underburden Unit 22 Groundwater Analytical Summary- Metals*	Supp. 2
Table 146A-11	*Area A Reclaimed Overburden Monitoring Wells Slug Tests Results*	*
Table 146A-12	*Comparison of Pre-Mining to Post-Mining Overburden (Non-Alluvium Wells) Groundwater Analytical Results*	Supp. 2
Table 146A-13	*Comparison of Pre-Mining to Post-Mining Alluvium Groundwater Analytical Results*	Supp. 2

Item(s)	Description	Location
Table 146A-14	*Long-Term Groundwater Monitoring Network*	Supp. 2
Table 146A-15	*Long-Term Groundwater Monitoring Parameters*	*
Figure 146A-1	*Area A Post-Mine Groundwater Elevation Map, December 2017*	*
Figure 146A-2	*Area A Post-Mine Monitoring Well Hydrographs*	*
Figure 146A-3	*Area B Post-Mine Groundwater Elevation Map, December 2017*	*
Figure 146A-4	*Area B Post-Mine Monitoring Well Hydrographs*	*
Figure 146A-5	*Area E Post-Mine Groundwater Elevation Map, December 2017*	*
Figure 146A-6	*Area E Post-Mine Monitoring Well Hydrographs*	*
Figure 146A-7	*Area A Unit 22 Monitoring Well Hydrographs*	*
Figure 146A-8	*Area B Unit 22 Monitoring Well Hydrographs*	*
Figure 146A-9	*Area E Unit 22 Monitoring Well Hydrographs*	*
Figure 146A-10	*Area A Post-Mine TDS Concentrations Map, May 2017*	*
Figure 146A-11	*Post-Mine Spoil TDS Concentrations (Areas A, B, & E)*	*
Figure 146A-12	*Area A Overburden/Alluvium Unit TDS Concentrations*	*
Figure 146A-13	*Area A Underburden Unit 22 TDS Concentrations*	*
Figure 146A-14	*Area B Underburden Unit 22 TDS Concentrations*	*
Figure 146A-15	*Area E Underburden Unit 22 TDS Concentrations*	*
Exhibit 146A-1	*Long-Term Groundwater Monitoring Network*	Supp. 2
Exhibit 146A-2	*Underburden Unit 22 Potentiometric Surface Map – September 2014*	*
Exhibit 146A-3	*Underburden Unit 22 Potentiometric Surface Map – November 2017*	*
Exhibit 146A-4	*Long-Term Groundwater Monitoring Network* [removed in Supp. 2]	*
Appendix 146A-1	*Evaluation of Area B Underburden Depressurization Requirements*	Supp. 2
Appendix 146A-2	*Post-Mine Monitoring Well Boring Logs*	*
Appendix 146A-3	*Area A Seep Investigation Report, Revised March 21, 2008*	*
Appendix 146A-4	*Area A Slug Test Data Summaries and Plots*	*
Appendix 146A-5	*Top of Lignite Structure Map- Beacon 1984*	*

* Initial Application submittal (July 27, 2018)

SMECI indicates that active mining is limited to Area B; therefore, the during-mining portions of this section are limited to this mine area. SMECI defines water quality by TDS concentration, as follows:

Water Quality Designation	TDS Concentration (mg/L)
Fresh	0 to 1,000
Brackish	1,000 to 10,000
Lightly saline	10,000 to 35,000
Saline	35,000 to 100,000

b. SMECI, in response to §12.146(a)(1), (2) and (3), indicated that there are no recognized aquifers in the zone of operation; therefore, there are no groundwater resources to protect. While Unit 22 yields significant amounts of water, SMECI indicated that there are no known current users of this water because it is high in total dissolved solids (TDS) concentration. Furthermore, on page 146A-32, SMECI explained that the potable water in the area is obtained from the Carrizo sand at a depth of about 3,000 feet, which is separated from mining activities by several aquifers below the Unit 22 Sand.

c. SMECI addressed the requirement to restore the recharge capacity at §12.146(a)(8) in Appendix 146A-4 and Table 146A-11, in which it provides the results of slug tests from 11 spoil monitoring wells. The average hydraulic conductivity calculated from these well tests was 2×10^{-2} cm/sec, which represents a higher conductivity than was estimated for premining conditions. Although the eleven wells for which the slug tests were performed were within Area A, these results can also be assumed to represent Areas B, BX, and E.

d. When SMECI performs final reclamation of Area A, backfilling the end pit, the recharge associated with the end pit will cease, and recharge rates would decrease. Pond 10 and Pond 7 are two existing surface-water features are currently used to control or mitigate adverse effects from existing groundwater seeps. Pond 7 has experienced a sharp increase in TDS concentrations as a result of seepage from ground water increasing from 552 mg/L to 14,436 mg/L over a three-year period. Seepages into these surface-water bodies can occur if ground water in the spoil mass has a higher potentiometric surface than the bottom of an adjacent pond. This seems to be the case for Ponds 2, 3, 4, and 5, and there may only be about six feet of elevation protecting Pond 1 from a similar occurrence. There are fewer surface water bodies in Areas B and E in comparison to Area A. Therefore, it is expected that the recharge contribution from surface water to the spoil mass will be less in Areas B and E relative to Area A.

e. There have been two locations where groundwater seeps from within the permit area have the potential to affect surface-water features outside of the permit area—an area north of monitoring well MW-10(S), near the Box-Cut Spoil, and within the surface drainage area of Ponds 10 and 11 if significant discharge were to occur.

f. A revised ground-water monitoring plan is proposed in the Application.

i. Monitoring wells proposed in the long-term groundwater monitoring (LTGM) plan are listed in Table 146A-14 and depicted on Exhibit 146A-1 (both in Supp. 2). There are eight wells (five overburden LTGM wells and three alluvial LTGM wells) in Area A, and four underburden LTGM wells in Area B, for which only quarterly water levels are proposed. Quarterly sampling is proposed for all other wells, and include: 30 wells in Area A, 9 wells in Area B, and 6 wells in Area E. Of these wells, 15 are underburden LTGM wells, three are alluvial LTGM wells, 23 are spoil LTGM wells, and four are overburden LTGM wells. A chain-of-custody form will accompany samples from the collection site, to the courier, and finally to the analytical laboratory.

ii. For each approved LTGM well quarterly samples will be obtained and analyzed as indicated for the following parameters:

Laboratory Analytical Parameters (Quarterly)

Total dissolved solids (TDS)	Boron (B)
Total alkalinity	Calcium (Ca)
Carbonate (CO_3)	Magnesium (Mg)
Bicarbonate (HCO_3)	Potassium (K)
Chloride (Cl)	Sodium (Na)
Sulfate (SO_4)	Iron (Fe) (total and dissolved)
Fluoride (F)	Manganese (total and dissolved)
Nitrate (NO_3)	

Field Analytical Parameters

Electric Conductivity (EC)	Temperature
pH	Depth to Water (ft BTOC*)

Laboratory Analytical Parameters (Annually)

Aluminum (Al)	Mercury (Hg)
Arsenic (As)	Molybdenum (Mo)
Cadmium (Cd)	Nickel (Ni)
Bicarbonate (HCO_3)	Selenium (Se)
Chromium (Cr)	Silver (Ag)
Copper (Cu)	Zinc (Zn)
Lead (Pb)	

* BTOC = below top of casing

iii. SMECI provided well completion information for all LTGM wells in Tables 146A-1 and 146A-3, and in Appendix 146A-2. Period-of-record water-level data are provided in Table 146A-2.

g. SMECI has provided an adequate probable hydrologic consequences (PHC) determination for groundwater in the Application, as required by §12.146(d) of the Regulations. SMECI acknowledges that there are very limited water resources in the permit area.

i. The proposed mining sequence may encroach within the Metate Creek alluvium and, if so, would be expected to deplete the unit because the alluvium is thin and of limited extent, hence the amounts of water are small. Nevertheless, this water source is not considered a usable water source because the water quality is poor.

ii. Underburden water in Unit 22 is proposed to continue to be depressurized in Area B to facilitate mining in adjacent Area BX subarea. SMECI's computer model for depressurization was revised to simulate these activities for the proposed permit term, with pumpage rates of 20-25 gallons/minute. Brackish to slightly saline water from Unit 22 will continue to be injected into deeper wells in the Lower Yegua Sand as authorized in TCEQ Class V Injection Permit (Authorization No. 5W2000016). Two possible private wells have been identified for the Unit 22 ground water; however, completion for these wells is uncertain. SMECI acknowledges its responsibility to mitigate any temporary water quantity effects to these users. No adverse hydrologic consequences are anticipated from depressurization activities within or near Area B. SMECI will report the volume pumped or pumping rates and period of pump operation, for depressurizing purposes for each calendar year within 60 days of the end of the calendar year. Each annual report will include a comparison of the modeled and measured effects of the depressurization program.

iii. SMECI's groundwater PHC determination includes a description of the anticipated postmine conditions for Area A in the overburden, which are relatively stable. Recharge occurs from rainfall infiltration and from surface-water seepage from the end pits (associated with high TDS concentrations, water from which may also be comingled with the La Parita Creek alluvium) and sedimentation ponds. This recharge may also be the source of relatively low TDS concentrations observed in a few LTGM wells. Most of the figures provided in this section illustrate the water quality and quantity trends at the mine.

A. The overburden LTGM wells are designed to detect changes in groundwater quality and quantity (water level) and evaluate the potential for surface-water

seeps to develop in the reclaimed area. The LTGM wells will also be used to detect seasonal variations in groundwater flow conditions and groundwater quality in the overburden and underburden water-bearing zones. Water quality and quantity data obtained from the LTGM wells will be used to support Phase III release from mining and reclamation obligations.

B. Some Area A spoil monitoring wells exhibit high sulfate concentrations that are typical of the oxidation of pyrite. One well [MW-10(S)] is known to have been completed in oxidized lignite, initially exhibiting a very high ratio of sulfate concentrations to TDS concentrations, and a low median pH of 4.27 s.u. This well also exhibited the highest average aluminum concentration (32.5 mg/L). The measured pH is similar to that of some overburden wells within the permit area. The alluvium in Area A (La Parita Creek) exhibits a wide range of TDS concentrations, but with a generally brackish to slightly saline character, and exhibits a pH ranging from acidic to neutral (4.07 to 7.3 s.u.). As with the spoil wells, the highest concentration of aluminum is associated with the well with the lowest pH [well A-MW-20(UM) exhibits aluminum concentrations of 52.6 mg/L]. Boron concentrations are also high in this well (6.9 mg/L).

C. For Areas B and BX, with the exception of alluvial LTGM wells adjacent to Metate Creek, wells in the overburden and spoil are dry. There may be some saturation occurring near Pond 9B; only LTGM wells B-MW-1/B-MW-1R have exhibited any measurable water. As the pH in these wells was not particularly low, water samples did not show particularly high concentrations of metals, although boron concentrations were elevated (17.29 mg/L). Alluvial LTGM wells in Metate Creek are more acidic (measured pH of ~5.0 s.u.) and have increased TDS concentrations (over 33,000 mg/L) relative to both the spoil in Area B and the La Parita Creek alluvial wells.

D. In Area E, spoil LTGM wells have shown slight increases in ground-water levels. This increase is somewhat more pronounced LTGM well E-MW-2 and its replacement well E-MW-2R. Area E spoil LTGM wells exhibit elevated TDS concentrations, but are more stable, ranging from about 9,700 to 14,900 mg/L.

E. Possible water-quality degradation of groundwater due to mining is one of the key objectives of the PHC determination. The premining overburden ground water was either brackish to slightly saline from overburden non-alluvial units, or slightly saline from alluvium associated with La Parita Creek

(Areas A and B) or Metate (Area B) Creek. In Table 146A-12, SMECI has compared premine and postmine water quality in the overburden non-alluvial ground waters by mine area. These data show that there has been roughly a doubling in sulfate concentration, a slight increase in electric conductivity, and a slight reduction in pH. Nevertheless, the overburden ground water has never been considered a usable resource and would therefore be difficult to degrade, as the water remains unusable. Also, in Table 146A-13, SMECI has compared water quality of the alluvium associated with La Parita Creek in the premine and postmine phases, as well as showing Metate Creek alluvium premine water-quality results. The water quality has not shown significant changes as a result of mining.

F. As Staff has summarized, SMECI prepared two reports in 2006 and 2007 to investigate the seep areas. The latest of these two is included in the Application as Appendix 146A-3 "*Area A Seep Investigation Report revised March 21, 2008.*" The conclusions from this report indicate that, in the area north of monitoring well MW-10(S), also known as Area A Box-Cut area, shallow ground water flows from southwest to northeast, with Pond 7 likely the source of this ground water. Water from Pond 7 flows through a lignite seam, producing significant degradation of the water quality, and the water may subsequently be co-mingling with La Parita Creek alluvial water, but not water from the Area A Box Cut area (due to the lower elevations in the Box Cut; i.e., Pond 11). The seep has damaged nearby vegetation. An interceptor trench was installed in September 2008 to eliminate these seeps associated with Pond 7; however, since then, groundwater flow may have changed, as it is no longer intercepted by the trench. At present, SMECI is attempting to lower the surface-water head in Pond 7 by discharging this water under its TPDES permit. Due to the large volumes of water, which must be mixed with fresher water, this phase is expected to occur over a period of 12-18 months, during which time SMECI will maintain a log of all discharges. SMECI will then remediate the soils around the seeps associated with Pond 7. The second report (Appendix 146-A-3) addressed Pond 11, determining that ground-water flow in the La Parita Creek alluvium is influenced by pumping activities in Pond 10 and the associated surface-water elevation of Pond 11. Pond 11 is not likely to develop seeps. The damaged vegetation in this area was due to higher water elevations maintained in Pond 11 prior to 2006. Staff notes that these reports have been updated by subsequent investigations and monitoring since they were first issued.

h. The groundwater hydrologic reclamation plan, long-term monitoring plan, and updated PHC determination in the Application are adequate to meet the requirements of §12.146 of the Regulations for groundwater.

38. The Application contains all information necessary to meet the requirements at §12.146 of the Regulations for protection of the surface-water hydrologic balance, and surface-water monitoring, and also contains a satisfactory surface-water PHC determination. The Application, with the approved surface-water monitoring stations, will meet the requirements for a surface-water monitoring plan as required by §12.146(c) of the Regulations. The plan is based upon the PHC determination and analysis included in the approved permit and as revised in the Application. SMECI has provided an adequate plan for monitoring water-quality parameters and streamflow at appropriate locations and frequencies. Staff provided a summary of SMECI's plans as follows:

a. In TAAddm 5, Staff provided a list of the items contained in the Application, with their location therein, to address SMECI's proposed surface-water protection plan and PHC determination.

Item(s)	**Description**	**Location**
Cover page	Cover page [Supp. 6 signed and sealed 11/13/2019]	*, and Supps. 2-6
Pages .146B-i, ii and iv	Table of Contents, tables, figures, exhibits, and list of Appendices	*
Pages .146B-iii	Table of Contents, tables, figures, exhibits, and list of Appendices	Supp. 5
Page .146B-1	*Reclamation Plan: Protection of Hydrologic Balance*	*
Page .146B-2	*Introduction*	*
Page .146B-3	*Probable Hydrologic Consequences on Surface Water*	Supp. 3
Pages .146B-4 through 18	*Probable Hydrologic Consequences on Surface Water*	*
Pages .146B-19, 21 through 34	*Surface Water Evaluation*	*
Page .146B-20	*Surface Water Evaluation*	Supp. 2
Pages .146B-35, & 36	*Surface Water Evaluation*	Supp. 6
Pages .146B-36a & 36b	*Surface Water Evaluation*	Supp. 5
Pages .146B-37 and 37a	*Surface Water Monitoring Plan*	Supp. 2
Page .146-39	*References*	Supp. 3
Table .146B-1	*Water Rights*	*
Table .146B-2	*Summary of Hydrologic and Sedimentologic Evaluation 10-Year, 24-Hour Storm Event*	*

Item(s)	Description	Location
Table .146B-3	*Area B Watershed Characteristics*	*
Table .146B-4	*Sedimentology Characteristics*	*
Table .146B-5	*Estimates of Monthly Lake Evaporation*	*
Table .146B-6	*Permanent Pond Consumptive Losses*	*
Table .146B-7	*TPDES Permit 02043 Discharge Parameters*	*
Table .146B-8	*TCEQ River Segment Water Quality Criteria*	*
Table .146B-9	*Area C Impact Matrix*	*
Table .146B-10	*Surface Water Monitoring Parameters*	*
Figure .146B-1	*Surface Water System Flow Schematic*	*
Figure .146B-2	*Water Rights*	*
Figure .146B-3	*Hydrologic and Sedimentologic Analysis, Mine Area B, Worst Case Conditions*	*
Figure .146B-4	*Hydrologic Activity Profile – La Jarita Creek*	*
Figure .146B-5	*Hydrologic Activity Profile – La Parita Creek*	*
Figure .146B-6	*Hydrologic Activity Profile – Metate Creek*	*
Figure .146B-7	*Hydrologic Activity Profile – Atascosa River*	*
Figure .146B-8	*Hydrologic Activity Profile – Frio River*	*
Figure .146B-9	*Hydrologic Activity Profile – Nueces River*	*
Figure .146B-10	*TDS versus Flow Rate in the Atascosa River near Whitsett, TX (1964-1968)*	*
Figure .146B-11	*TDS versus Flow Rate in the San Miguel Creek near Tilden, TX (1978-1983)*	*
Figure .146B-12	*LTSM Station 1E Cross Section and Rating Curve*	*
Figure .146B-13	*LTSM Station A2 Cross Section and Rating Curve*	*
Figure .146B-14	*LTSM Station MK001 Cross Section and Rating Curve*	*
Figure .146B-15	*LTSM Station MK001A Cross Section and Rating Curve*	*
Figure .146B-16	*LTSM Station MK002 Cross Section and Rating Curve*	*
Figure .146B-17	*LTSM Station SM005 Cross Section and Rating Curve*	*
Figure .146B-18	*LTSM Station MK003 Cross Section and Rating Curve*	*
Figure .146B-19	*LTSM Station MK004 Cross Section and Rating Curve*	*
Figure .146B-20	*Area A Seep Area*	Supp. 5
Exhibit 146B-1	*Surface Water Features and Monitoring Locations*	*
Appendix 146B-1	*TPDES Permit 02043*	*
Appendix 146B-2	*SEDCAD4 Computer Models*	*
Appendix 146B-3	*Runoff Curve Number Calculations*	*
Appendix 146B-4	*Streamflow Data for USGS Stations 08208000 and 082067000*	*

Item(s)	Description	Location
Appendix 146B-5	*Surface Water Analytical Results*	*
Appendix 146B-6	*Pond Discharge Analytical Results* [Summary – 2008 through 2017]	*
Appendix 146B-7	*SMLM Permit 11F, Revisions 31 (September 19, 2011) and 32 (September 29, 2011)*	*

* Initial Application submittal (July 27, 2018)

b. SMECI provided a surface-water hydrologic reclamation plan to meet the requirements of §12.146(a) of the Regulations. SMECI includes the following plan elements:

i. Acid-forming materials (AFM) and toxic-forming materials (TFM) will be covered by a minimum of four feet of suitable (AFM and TFM-free) material;

ii. An obligation to protect or to replace water assigned through water rights or acquired through riparian rights to holders within and downstream of the permit. Existing water rights are listed in Table 146B-1, *Water Rights*, and depicted on Figure .146B-2. Water rights will be protected; the nearest water right owned by a person other than SMECI is owned by the City of Corpus Christi; the water right is located approximately 14 miles downstream of the permit area at Choke Canyon Lake. SMECI has identified methods to protect or mitigate other users that could be impacted (Finding of Fact No. 21, *supra*);

iii. An obligation to monitor final discharges to ponds in accordance with applicable State and federal water quality permits;

iv. A description of how SMECI plans to prevent acid and toxic drainage from the mine site;

v. A plan to reduce suspended solids from entering stream flows, it will incorporate the use of diversions, ditches, furrowing, mulching, and sedimentation ponds that will collect surface-water runoff from disturbed areas prior to entering water courses;

vi. A plan for effective surface-water control for the permit area, which calls for all surface-water drainage to be routed through sedimentation ponds, located in Application section .148. Also provided is a summary of the surface-water control structures for each mine area (Area A, Area B/BX, and Area E);

vii. A commitment to use the best technology currently available ("BTCA") to limit contributions of suspended solids to stream flow, to prevent sediment from leaving

the permit area. This goal is generally achieved through proper construction and maintenance of diversions, sedimentation ponds, and other siltation structures; and

viii. A commitment to reclaim disturbed lands to support approved postmine land uses.

c. SMECI has provided an adequate long-term surface-water monitoring ("LTSM") plan that meets the requirements of §12.146(c) of the Regulations. Staff provided a list of the application components addressing this paragraph, as follows:

Item(s)	Description	Location
Pages 146B-37 and 37a	*Surface-Water Monitoring Plan*	Supp. 2
Tables 146B-7 through 10	*Monitoring and Reporting Requirements*	*
Table 146B-1	*Water Rights*	*
Figures 146B-12 through 19	*Cross Sections and Rating Curves*	*
Exhibit 146B-1	*Surface Water Features and Monitoring Locations*	*

* Initial Application submittal (July 27, 2018)

i. As summarized by Staff, the LTSM plan has two main objectives: (1) to demonstrate that direct impacts during mining are effectively controlled and mitigated in order to comply with effluent limitations, and (2) to demonstrate, using monitoring data, that mining operations have minimized disturbance to the surface-water hydrologic balance in the permit and adjacent areas, prevented damaging effects outside the permit area, ensure the quality of water is suitable for the approved postmining land use, and demonstrate that water rights of other users have been protected. To achieve compliance with these requirements, the LTSM plan consists of two correlative parts: (1) the monitoring of point-source discharges from final sedimentation impoundments or treatment impoundments, and (2) hydrologic-balance monitoring via a selection of representative undisturbed and disturbed watersheds, before, during and through the postmine reclamation process. Monitoring data from TPDES point-source monitoring will be used to support Phase II release from reclamation liability obligations. The hydrologic-balance monitoring data will be used to support Phase III release from reclamation liability obligations.

ii. SMECI's proposed plan indicates that surface-water monitoring will continue to be conducted to document compliance with wastewater discharge permits and to monitor and verify predictions of surface water impacts. SMECI proposes that the current discharge monitoring program of quarterly and annually monitoring for the parameters as specified in Table .146B-10 be continued.

Laboratory Analytical Parameters (Quarterly)

Total dissolved solids (TDS)	Acidity
Total suspended solids (TSS)	Iron (total and dissolved)(Fe)
Settleable solids (SS)	Manganese (total and dissolved)(Mn)
Sulfate (SO_4)	Calcium (Ca)
Boron (B)	

Field Analytical Parameters

Electric Conductivity (EC)	Temperature
pH	Flow
Dissolved oxygen	

Laboratory Analytical Parameters (Annually)

Aluminum (Al)	Mercury (Hg)
Arsenic (As)	Molybdenum (Mo)
Barium (Ba)	Nickel (Ni)
Cadmium (Cd)	Selenium (Se)
Chromium (Cr)	Silver (Ag)
Copper (Cu)	Zinc (Zn)
Lead (Pb)	Alkalinity (carbonate + bicarbonate)
Magnesium (Mg)	Sodium (Na)
Fluoride (F)	Nitrate-Nitrogen (NO_3)

The proposed continuing surface-water monitoring plan consists of eight monitoring stations. Monitoring stations 1E, 2A, MK001, MK001A, MK002, SM005, MK003, MK004, as shown on Application Exhibit .146B-1, comprise the LTSM stations and will serve as measuring points for runoff and effluent discharges from the permit area. These stations have been surveyed; however, there is no permanent structure constructed by SMECI at the monitoring stations. Samples are proposed to be taken as grab samples from the flowing portion of the stream. A cross section and rating curve for each of these sites are provided on Figures .146B-12 through .146B-19. These sites will be monitored for water quality of La Jarita Creek, La Parita Creek, and Metate Creek prior to and after the influence of proposed mining activities. The LTSM stations will also be used to detect seasonal variations in both water quantity and quality upstream and downstream of the permit area. SMECI commits to update the surveys and rating curves at each monitoring location after each 10-year/24-hour storm event or annually, whichever comes first, and provide these updates to the Commission. SMECI will submit, within 30 days following the end of each calendar quarter, a report of analyses of the surface-water monitoring data for that previous quarter in electronic and paper formats. SMECI will report individual water-quality analyses and quantity data for each final discharge pond on

a monthly basis if discharge occurs during the month. A chain-of-custody form will accompany the samples from the site, to the courier, and finally to the analytical laboratory.

iii. Water quantity and quality data from LTSM stations will be used to support Phase II and III release following completion of mining and reclamation activities. Long-term monitoring quality data will be compared to baseline data as described in the Commission's Advisory Notice AD-BO-312. If the long-term water-quality data at the downstream stations is similar to baseline data, it will be concluded that mining activities were conducted in a manner that minimized impacts to the hydrologic balance. If the data are not similar, SMECI will further evaluate in order to explain the differences. If the differences cannot be reasonably explained, the potential impacts to downstream water users or the nearest downstream TCEQ stream segment will be assessed. Discharges of surface water from reclaimed areas to receiving streams generally represent only a very small percentage of the flow into the nearest downstream TCEQ stream segment; therefore, only slight to moderate changes in surface-water quality exiting the permit boundary will be significantly diluted when mixing with the significantly greater flow downstream of the permit area.

iv. Monitoring of all final discharge ponds is required in accordance with the parameters and frequency requirements listed in TPDES Permit No. WQ000204300 until final release of the performance bond of the pond's respective watershed or determination that monitoring requirements can be modified in accordance with §12.350(b)(3) of the Regulations. Current TPDES outfalls are depicted on Application Exhibit .148-1. Ponds with discharges that exceed TPDES effluent limits will be reported to the Commission via email or fax within 24 hours of SMECI becoming aware of the violation. SMECI will notify the Commission of the activation, deactivation, or change in status of a final discharge pond, and provide an updated sedimentation pond map within 30 days of the end of the year in which the change occurred. If no changes have occurred to the TPDES outfalls during the calendar year, SMECI may submit notification during the first quarter of the subsequent year indicating that no changes occurred to the TPDES outfalls during the previous year.

d. Since 2004, several saline seeps have been identified and monitored within Area A of the San Miguel Lignite Mine. Staff requested in its initial TA that SMECI provide a seep remediation plan to address these features that have developed in the reclaimed surface, and include remediation costs for the seeps and seep areas in its reclamation cost estimate required at §12.145(b)(2) of the Regulations. SMECI provided a remediation plan and revised the cost estimate in Supp. 2 of the Application, and

subsequently revised it in Supps. 3, 4, and 5 to include an enforceable plan for disposal of water in the end pits, changes the reporting time frame for monitoring reports, correct inconsistencies in and between the text and the exhibits so as to clarify the plan components, specify time frames and contingencies for remediation steps, and to add acidity as a monitored and mitigated parameter. Staff indicates that the proposed remediation plan should be satisfactory to address the current seep issues at the San Miguel Lignite Mine.

e. SMECI provided an updated PHC determination for surface water in the Application meeting the requirements of §12.146(d). The updated PHC determination is based on all baseline hydrologic, geologic, and other related information contained or referenced in the Application.

i. SMECI indicates that if acid or toxic seeps developed within the reclaimed area, it recognizes its responsibility to mitigate such conditions. SMECI also indicates on page 146B-6 that a detailed discussion of its material handling plan is provided in section .139 and section .145 of the Application.

ii. SMECI provides sediment yield calculations as summarized in Table 146B-4. Sediment yield is generally predicted to increase in the during-mine period when compared to the premine period, and that as mined land is revegetated, the sediment yield generally decreases to less than that of the premine period.

iii. SMECI describes the potential impacts of the proposed operation as summarized in Table 146B-9, *Area Impact Matrix*. The process of surface mining causes the concentration of dissolved salts to increase in waters draining the disturbed area. By exposing the overburden materials to oxidation, weathering and saturation, the mining operation may create an environment conducive to the leaching of soluble salts that can increase the TDS concentrations in the surface water. Sodic characteristics [i.e., elevated sodium adsorption ratio ("SAR") and electrical conductivity (EC)] and high boron levels encountered in the overburden materials may result in a some postmine groundwater containing elevated levels of dissolved solids. The impact of the sodic constituents on the water quality within the postmine spoil mass will vary depending on the presence or absence of sodic layers within the overburden units. For areas where high TDS concentrations in the spoil groundwater are present that have given rise to identified surface-water seeps, SMECI's Surface-Water Management Plan ("SWMP") for Area A contained in the Application will be employed to protect surface-water resources downstream from the propose permit area.

iv. SMECI provides the locations of the disturbed and undisturbed long-term stream monitoring stations (Exhibit 146B-1). SMECI proposes that the current discharge LTGM program of quarterly and annually monitoring for the parameters specified in Table 146B-10 be continued. Some monitoring stations receive runoff from areas disturbed by mining and other monitoring stations receive runoff from undisturbed areas. Ponds and their watersheds pertinent to the surface-water control plan are described in Table 146B-6. Some LTSM stations receive runoff from areas disturbed by mining and other LTSM stations receive runoff from adjacent undisturbed areas. Mining operations alone are not expected to cause TCEQ stream standards for dissolved solids, measured as TDS, to be exceeded in receiving streams. Baseline concentrations of dissolved-solids constituents were observed to be generally above the maximum for Stream Segment No. 2107 of the Atascosa River. Based on impacted water quality observed at Station A2 on La Jarita Creek and Station MK002 on La Parita Creek, historic mining activities have not caused any stream segments or their tributaries to exceed respective TCEQ criteria.

v. Backfilling and grading to approximate original contour, and implementing the proposed reclamation plan described in the Application in section .145, are expected to return the reclaimed areas to premining runoff conditions. Surface-water quantity and quality will be maintained during the active-mining and postmining periods via implementation of the proposed surface-water control and reclamation plans. Temporary detention of surface-water runoff in sedimentation ponds will result in the temporal shifting of surface-water hydrographs. No diminution of surface-water resources will result from this hydrograph shifting. Mining will not adversely affect adjudicated surface-water rights downstream (Finding of Fact No. 38.b.ii., *supra*). For areas where groundwater to surface water seeps have been identified, the SWMP described in an above paragraph will protect surface-water resources downstream from the proposed permit area. any determination of whether an unanticipated adverse impact constitutes material damage to the hydrologic balance outside the permit area will be based on the continued hydrologic monitoring program proposed in the Application. In addition, it is not expected that mine operations will impact on flooding, including downstream crossings or streamflow alterations. However, if any downstream crossings are impacted by mine operations, SMECI will mitigate such impacts. SMECI has proposed to monitor flows when water is released from sediment ponds to ensure proper steps are taken to address any possible impact on downstream crossings. In sum, no adverse impacts or material damage are predicted due to the proposed surface coal mining and reclamation activities.

vi. Staff concludes that SMECI's surface-water PHC determination satisfies the requirements of §12.146(d) to identify the likely effects to the surface-water hydrologic balance as a result of the proposed mining activities.

39. In Appendix I of TAAddm 2, Staff provided a summary of its cumulative hydrologic impact assessment ("CHIA") for surface-water and ground-water systems as a result of current, proposed and otherwise anticipated mining operations within a defined cumulative impact area ("CIA"). The complete CHIA is located in Staff's May 10, 2017, TA for the San Miguel Lignite Mine, F, G and H Area Mine (Docket No. C14-0020-SC-00-A). Staff determined that a new CHIA was not necessary, and none was conducted. The Commission finds that the approved CHIA conducted for Docket No. C14-0020-SC-00-A, wherein material damage is not predicted to occur, remains sufficient to meet §12.146(e) and §12.216(3) of the Regulations.

40. The Application contains an updated postmine land-use plan sufficient to meet the requirements of §12.147 and §12.399 of the Regulations. SMECI provided a description of its proposed postmine land use and how it is to be achieved to obtain to following postmine acreages, as depicted on its Exhibit 147-1, *Postmine Land Use*:

Permit No. 11F Renewal/Revision Comparison of Pre and Postmining Land Uses of Disturbed Land				
Land Use	**Premine Area (Acres)**	**Percent**	**Reclaimed Area (Acres)**	**Percent**
Grazingland	11,547	98.8%	0	0.0%
Pastureland	55	0.5%	10,728	91.8%
Industrial/Commercial ("I/C")	5	<0.1%	430	3.7%
I/C Exempt	0	0%	97	0.8%
Developed Water Resources	86	0.7%	436	3.7%
Residential	<1	<0.1%	0	0.0%
TOTALS	11,691	100.0%	11,691	100.0%

a. SMECI refers to its proposed revegetation plan in section .145 of the Application to address how it plans to achieve reconstruction and revegetation of all reclaimed land, particularly those with fish and wildlife, pastureland, and industrial/commercial land uses. Additionally, SMECI commits to reconstruct and reclaim the land in accordance with the revegetation and success criteria specified under §12.395.

b. SMECI indicates that the proposed postmine land uses will be accomplished by backfilling, grading, recontouring, selective handling of approved soil materials, and revegetating disturbed areas. In addition to other management practices described in section .145, SMECI indicates that it may use prescribed burning to reduce

accumulation of biomass in pastureland and as a general management tool in fish and wildlife land-use areas.

c. Pastureland, which has a long-term use of cattle production in this area of the State, will be managed for brush control when grazing and haying. Grazing may be requested by landowners on revegetated areas (pastureland and fish and wildlife habitat), and may be allowed as a support activity to enhance the stand of forage grass or to improve wildlife habitat and plant diversity. Woody plantings to enhance fish, wildlife, and related environmental values are described in Application sections .144 and .145.

d. Alternative postmine land uses are proposed on both lands owned by SMECI and on leased tracts. SMECI has provided copies of written landowner consultations for tracts that are leased. Where applicable to the restoration of waters of the U.S., including wetlands, the postmine land use will be returned to the premine land use.

e. Proposed pastureland, industrial/commercial, industrial/commercial exempt, and developed water resource postmine land uses are compatible with adjacent land uses and are consistent with surface-owner plans. The disturbed areas within the proposed permit area will be reclaimed to blend with adjacent undisturbed areas, both within and outside the permit boundary. Assistance and guidance from the NRCS will be employed during reclamation activities to attain approved postmine land uses and comply with applicable Commission rules and regulations. Should the proposed postmine land-use change during development of land-use plans and/or pursuant to discussions with landowners, the Commission will be notified and adjustments made as appropriate. No state or local land-use plans or programs are known to be implemented on the proposed permit area.

f. SMECI indicates that surface-owner comments regarding postmine land use are included in Appendix 147-1 of the Application. Surface and/or mineral owners may have contractual agreements with oil and gas exploration and production companies that are unrelated to coal mining, and cannot be required to supply copies of such documents; this necessitates that postmine land-use changes related to these activities be made on an as-needed basis. Because the Commission is the only agency with jurisdiction regarding land-use changes, no other State or local agencies will have to initiate, implement, approve, or authorize proposed postmine land uses.

g. As set for the in Commission Order for Docket No. C18-0001-26-F, dated February 27, 2018, officially noticed by the ALJ in the instant docket, "Industrial/Commercial Exempt" is not a defined postmine land use permissible under §12.147 of the Regulations (Findings of Fact Nos. 12 and 13 in the February 27, 2018, Order).

These areas must be considered as industrial/commercial land use. The ALJ proposes and the Commission adopts Permit Provision No. 2 in Appendix I of this Order, requiring SMECI to, within a specified time period after permit issuance, submit a revised Table 147-1 and revised Exhibit 147-1 to correct this error.

h. As described by Staff in its TAAddm 2, and with adoption of Permit Provision No. 2, the information provided in the Application is adequate to meet the postmining land use requirements of §12.147 of the Regulations.

41. The Application meets the requirements of §12.148 of the Regulations. SMECI provides a general plan for each proposed sedimentation pond, water impoundment, and coal processing waste bank, dam, and embankment within the proposed permit area proposed for construction during the permit term.

a. Staff lists the information provided by SMECI in the Application as follows:

Item(s)	**Description**	**Location**
Page 148-1 and 148-9	*Ponds, Impoundments, Banks, Dams, and Embankments*	Initial Ren/Rev
Table 148-1	*Sedimentation Pond Characteristics*	Initial Ren/Rev
Table 148-2	*Reclamation Pond Characteristics*	Initial Ren/Rev
Table 148-3	*Ditches and Levees Characteristics*	Supp. 3
Exhibit .148-1 (Sheets 1 & 2)	*Water Control Plan*	Supp. 2

b. As summarized by Staff in its initial review, SMECI has addressed the requirements of this section as follows:

i. Section .148 was certified by a licensed professional engineer on page No. 148-9. [§12.148(a)(1)(A)].

ii. General design plans were provided in Table No. 148-2 (basic design information) and Table No. 148-3 (approximate in-service dates). No design cross sections were provided. [§12.148(a)(1)(B)].

iii. Preliminary hydrologic and geologic information were provided in Table Nos. 148-2 and 148-3, and the structure locations are depicted on Exhibits 148-1 and 148-2. [§12.148(a)(1)(C)].

iv. No survey was provided describing the potential effect on each structure from subsidence of the subsurface strata resulting from past underground mining operation, if underground mining has occurred; however, no past underground

mining is identified in the application. No underground mining operations are proposed. [§12.148(a)(1)(D)].

v. SMECI provided a commitment on page 148-8 that detailed design plans will be submitted for approval prior to final construction. The schedule for submittal of detailed design plans is provided in Tables 148-2 and 148-3. [§12148(a)(1)(E)].

vi. No detailed design plans for impoundments were provided in the Application. A commitment is provided that detailed design plans will be submitted for approval prior to construction. [§12.148(a)(2), §12.148(a)(3), and §12.148(b)].

vii. No detailed design plans for impoundments were provided in the Application. A commitment is provided that detailed design plans will be submitted for approval prior to construction. No MSHA structures are proposed. If any MSHA structures are required, design plans will be submitted for approval and plans required by MSHA [CFR 77.216(a)] will be submitted at a later date prior to construction. [§12.148(c)].

viii. No coal processing waste banks are proposed. [§12.148(d)].

ix. No coal processing waste dams and embankments are proposed. [§12.148(e)].

x. No structure 20 feet or higher or that impounds more than 20 acre-feet is proposed. [§12.148(f)].

A. No detailed design plans for drop structures have been submitted in the Application.

B. In Table 148-3 (Supp. 3), SMECI provides general-plan information for ditches and levees. A commitment is provided on page 148-8 that detailed design plans will be submitted for approval prior to construction.

C. No temporary miscellaneous flow diversions (MFD) are proposed. SMECI will be required to provide notice within five (5) days of initiating construction. Perennial or intermittent streams will not be diverted without prior approval. MFDs will not be constructed in areas without adequate bonding or used as a boundary of surface-water control. SMECI will need to reclaim or submit MFDs as permanent structures before entrance into the Extended Responsibility Period (ERP) or submittal of an application for Phase I bond release; and

D. No dewatering wells ahead of mining are proposed.

c. Staff indicates in TAAddm 2 that SMECI has satisfied the surface-water impoundment plan requirements of §12.148.

42. There are no known underground mines within the proposed permit area. The information provided is adequate to address the requirements of §12.149 and §12.367(a) of the Regulations.

43. The Application meets the requirements of §12.150 of the Regulations. SMECI has provided descriptions, including maps and cross sections, of stream-channel diversions to be constructed within the proposed permit area to achieve compliance with §12.341. Staff indicates that the information provided is adequate to meet the requirements of §12.150.

44. The Application meets the requirements of §12.151 of the Regulations. SMECI has provided a treatment and protection plan for cultural resources, and also indicates that there are no publicly owned parks in the permit area. Staff indicates that the information contained in the Application demonstrates compliance with §12.151.

45. Diversion design information is provided in section .148 of the Application as part of the proposed surface-water control plan provided therein. Staff indicates that it has reviewed the diversion information provided in the Application, and the Application meets the requirements of §12.152 of the Regulations.

46. The Application meets the requirements of §12.153 of the Regulations. SMECI states the entire volume of spoil is required to achieve approximate original contours within the area where overburden has been removed, that no excess spoil will be produced, and that the requirements of §12.153 regarding the disposal of excess spoil are not applicable. Staff agrees that no excess spoil will be produced at the San Miguel Lignite Mine.

47. The Application meets the requirements of §12.154 of the Regulations regarding road systems and support facilities. The permit area will be operated in accordance with the requirements of §12.403.

a. As described by Staff, SMECI provided the following in the Application:

Item(s)	**Description**	**Location**
Pages 154-1 and 154-3	*Road Systems and Support Facilities*	Initial Ren/Rev
Page 154-2	*Road Systems and Support Facilities*	Supp. 2
Pages 154-4 and 154-5	*Road Systems and Support Facilities*	Supp. 3

Item(s)	Description	Location
Exhibit .154-1 (2 sheets)	*Transportation Facilities*	Supp. 2
Table .154-1	*Road System*	Supp. 2

b. As summarized by Staff, the following is provided in the Application to meet the requirements of §12.154:

i. Table 154-1 listing primary and ancillary roads located outside of surface-water control and showing them on Exhibit 154-1;

ii. a plan indicating that ancillary roads, which will be used for mining and reclamation activities (i.e., built to access ponds, electrical installations, and other mine facilities), will be designed with adequate drainage and will typically vary in width from 12 to 20 feet;

iii. a plan indicating that dragline walkways will be considered ancillary roads, but will be 150 to 200 feet wide;

iv. a plan indicating that roads will be inspected regularly and that when no longer needed, the roads will be reclaimed (topsoil and revegetation will occur following removal or regrading according to the approved reclamation plan);

v. a commitment that detailed design plans for any road requested by the landowner to remain as permanent in the postmine surface will be submitted for approval prior to the reclamation date indicated in Table .154-1;

vi. a description (pages 154-2 and 154-3) of the approved temporary primary roads [including the North (Main) Haul Road, B-North Haul Road and D North Haul Road];

vii. a description of approved permanent primary roads (Ranch Roads 1, 2, 3, 8, 8A, 9, 10, 13, 14 and E2);

viii. a description of approved temporary ancillary roads (B-North Dragline Walkway and D-North Dragline Walkway);

ix. a description of the conditions that will be met by limited-use vehicular pathways; and

x. a commitment indicating that no limited-use vehicular pathways are proposed in this Application, and, if any such pathways are required, appropriate

documentation of the limited-use vehicular pathway will be submitted to the Commission for approval.

c. SMECI, in Supp. 3, provided revised pages 154-4 and 154-5. On revised page 154-4, SMECI indicated that the Marion Dragline was moved in January 2018 to Area B, where it will remain until planned mining operations were completed. SMECI also indicated that the D-North Dragline Walkway was no longer needed because lignite removal in Area C is completed.

d. The information provided in the Application meets the road-systems and support-facilities requirements of §12.154 of the Regulations.

48. The required Application fee of $3,000 was submitted [§12.108(a), Regulations]. contained in three volumes, was submitted on July 27, 2018, less than 180 days prior to the expiration date of the permit [§12.106(b)(2), Regulations].[9] SMECI has met the general requirements for format and contents of the Application, as supplemented. Form SMRD-1C was filed, and it contains information required by §§12.116-12.154 [§12.107(a), Regulations]. The information in the Application is current, presented clearly and concisely, and is supported by appropriate references [§12.107(b), Regulations]. Maps and plans contained in the Application meet the requirements under §12.207(f) of the regulations. Technical data have been submitted as required [§12.107(c) and (e), Regulations], and the Application information was prepared by or under the direction of professionals in the subjects analyzed [§12.107(d), Regulations]. A responsible official of the applicant verified the Application under oath that the information is true and correct to the best of the official's information and belief [§12.107(g), Regulations].

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[9] The 180th day prior to the end of the five-year permit term was October 14, 2018; therefore, the Application was submitted 98 days prior to the end of the term. The Application was not submitted in accordance with 16 Texas Admin. Code §12.106(b)(2), nor was it submitted in accordance with §134.078 of the Tex. Nat. Res. Code, which requires that a renewal application be submitted no less than 120 days before the permit expires. Nevertheless, consideration of an untimely filed application is allowed within the discretion of the Commission. In further support, the ALJ takes note of the position of the federal regulatory authority, the Office of Surface Mining Reclamation and Enforcement (OSM) as set forth in the *Federal Register* at 71 FR 54590 (https://www.federalregister.gov/documents/2006/09/18/E6-15445/pennsylvania-regulatory-program), wherein OSM indicated that "In response to a commenter who asserted that the filing of an untimely renewal application (i.e., an application filed within 120 days of expiration) violates subsection 506(d)(3) of SMCRA [federal Surface Mining Control and Reclamation Act of 1977], we stated that: (W)e agree with the commenter that the untimely filing of a renewal application can constitute a violation of Section 506(d)(3) * * * We do not agree, however, that allowing the filing of a late renewal application violates Section 506(d)(3). Instead, we believe this provision is sufficiently flexible to allow consideration of an untimely application, so long as the permit renewal procedures, which include public participation, are properly followed." Given that the Application has been processed in accordance with 16 Texas Admin. Code, Subchapter G, Division 11. Review, Public Participation, and Approval of Permit Applications and Permit Terms and Conditions, the ALJ has allowed docketing of the application for renewal and for processing to therein proceed.

49. The Application, as modified by the permit provisions contained in Appendix I and the Soil Testing Plan contained in Appendix II, meets the requirements of §12.216 of the Regulations as set out below and as included in the Findings of Fact in this Order.

a. The permit application, as amended and supplemented, is accurate and complete. All requirements of the Act and Regulations have been met as set out in these Findings of Fact, with adoption of the permit provisions contained in Appendix I and with the Soil Testing Plan contained in Appendix II to this Order.

b. SMECI has demonstrated that surface coal mining and reclamation operations, as required by the Act and the Regulations, can be feasibly accomplished under the mining and reclamation plan contained in the permit renewal/revision application.

c. SMECI has submitted all required information for documentation of right of entry required under §12.117 of the Regulations.

d. The information provided in the application is adequate to address the requirements of §12.116 (Regulations), as addressed in Finding of Fact No. 9, *supra*. All required fees have been paid. SMECI is current in payment of required franchise taxes. The report from the AVS database (operated by the OSM) is contained in Appendix VI of Staff's TA Addendum No. 8 (January 15, 2021); the information in the AVS database indicates that there are no pending violations that remain uncorrected, or the violations are in the process of being corrected or are subject to a valid, good faith appeal of the alleged violation. SMECI has demonstrated compliance with §12.215(e) of the Regulations and has satisfied the requirements for submissions and demonstrations under §12.216(7).

e. The Applicant/Violator System report has been reviewed. The report included no indication that required reclamation fees have not been paid.

f. The surface coal mining and reclamation operations to be performed at the San Miguel Lignite Mine will not be inconsistent with other such operations anticipated to be performed in areas adjacent to the proposed permit area.

g. As addressed in Finding of Fact No. 51, *infra*, the accepted blanket bond for Permit Nos. 11G, 52A, and 60, in the amount of $140,000,000, is sufficient in total to cover the increased reclamation costs proposed in this Application.

h. The proposed permit renewal and revision is located east of the 100th Meridian West Longitude and, by definition, contains no alluvial valley floors; therefore, the

requirements of §12.202 of the Regulations are not applicable. SMECI has, with respect to prime farmland, satisfied the requirements of §§12.138 and 12.201 of the Regulations as set out in this Order. The postmining land uses depicted in the application are in accordance with the requirements of §12.399.

i. All specific performance-standard approvals required under Subchapter K of the Regulations have been made by the Commission.

j. The proposed activities will not affect the continued existence of endangered and threatened species or result in the destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 U.S.C. Sec. 1531 et seq.) with the adoption of the permit provisions.

k. The requirements in §12.390 for a long-term, intensive agricultural postmine land use are not applicable during the requested permit term because no postmine cropland land use is proposed or required.

50. Official notice has been taken of the current franchise tax account status pages available on the Texas Department of Insurance (TDI) and Texas Comptroller of Public Accounts' (TCPA) websites that evidence an active license and right to transact business in Texas. SMECI and NACG are current in payment of required franchise taxes. Also, official notice of Commission Orders has been taken to clarify negative farmland determinations and the "I/C-Exempt" land-use classification. The parties were afforded the opportunity to contest official notice of the documents prior to their admittance into the record.[10]

51. SMECI provided a reclamation cost summary for San Miguel Lignite Mine, Permit No. 11G, in a table titled, *Permit 11G Renewal Reclamation Cost Estimate*, contained in Appendix 145-1. Areas A and E are bonded using an area bond method and Areas B and BX are bonded using a worst-case pit methodology. A detailed summary of reclamation costs and the supporting calculations are provided in Appendix 145-1 of the renewal/revision application (Supp. 5). Detailed reclamation cost calculations and bond maps are provided in Appendix .145-1a for Areas A and E, and detailed reclamation cost

[10] By letter dated September 30, 2020, the ALJ requested official notice for clarity of the record, as follows: Attachment 1 Active Insurance License, Ace American Insurance Company, TDI's website printout, September 29, 2020; Attachment 2 Franchise Tax, SMECI, Texas Comptroller of Public Accounts website, September 28, 2020; Attachment 3 Commission Order dated November 17, 1998, Docket No. C8-0016-SC-11-C (negative farmland determination); Attachment 4 Commission Order dated, March 3, 1999, Docket No. C9-0009-SC-11-B (negative farmland determination); Attachment 5 Commission Order dated, October 22, 2013, Docket No. C8-0024-SC-11-C (negative farmland determination); Attachment 6 Advisory AD-BO-306(e) Section III, I/C-Exempt Postmining Land-Use Classification Criteria, eff. February 7, 2018; Attachment 7 Commissioner Order dated February 27, 2018, Docket No. C18-0001-SC-26-F (criteria for I/C-Exempt). Attachment 8 SMECI's letter dated March 31, 2020 and Audited Financial Statement (NACG, mine operator); and Attachment 9 Franchise Tax, NACG, Texas Comptroller of Public Accounts website, October 7, 2020.

and bond maps are provided in Appendix .145-1b for Areas B and BX. Both sub-appendices are contained in Appendix 145-1. On Exhibit 145-1a-1, *Area A and E Permit 11G Renewal Bond Map,* Sheets 1 through 3 of 3, SMECI delineates areas of each of the several bonding categories. Exhibit 145-1b-1, *Area A and E Permit 11G Renewal Bond Map,* Sheets 1 and 2 of 2, contains depictions of the proposed bonding areas. Exhibit 145-1b-2, *Permit 11G Renewal Worst Case Pit Reclamation Cross sections,* Sheet 3 of 3, contains pit cross sections used for volume calculations in the cost analysis. SMECI's total reclamation cost estimate for Permit No. 11G is $84,633,598 [Areas A and E $41,708,439 - area bond method (plus seep remediation), and Area B and BX $42,758,736 - worst-case pit method). Staff's reclamation cost estimate is contained in TAAddm 4, as follows: Areas A and E $41,903,538, and Area B and BX $42,730,060. The Regulations at §12.306(a) state that liability under a performance bond shall continue until all reclamation, restoration and abatement work required of persons who conduct surface coal mining and reclamation operations under requirements of the Act, the Regulations, and the provisions of the permit has been completed, and the permit terminated by release of the permittee from any further liability in accordance with §§12.312 and 12.313; addressing procedures, criteria, and schedule for release of performance bond. Alternatively, an existing bond may be replaced with a separate bond if the liability which has accrued against a permittee on the permit area covered by the bond is transferred to an *acceptable* replacement [§12.310]. The bond may be released if the Commission has approved an *acceptable* replacement bond to assure completion of the reclamation plan prior to demonstrating reclamation has been accomplished in accordance with §§12.312 and 12.313 [*see* §12.310(b)].

52. The proposed order was properly circulated to the parties, and the required public posting of the consideration of this application by the Commission has occurred.

53. This application was processed in accordance with the procedures contained in the Regulations, Act, Commission Practice and Procedure and in accordance with the Administrative Procedure Act.

CONCLUSIONS OF LAW

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

1. The Commission has jurisdiction under §134.051 and §134.075 of the Act and §12.216 of the Regulations to approve this application for permit renewal and revision as contained in this Order, and as set out in Appendices I and II to this Order (Findings of Fact Nos. 35.f. and 49, *supra*).

2. The application for renewal and revision of Permit No. 11G, with reference in this Order to the adopted permit provisions (Appendix I) and soil testing plan (Appendix II), meets all requirements for approval as set out in the Act, the Regulations, the APA, and the Commission's *Practice and Procedure*, as set forth in the Findings of Fact.

3. Based upon the Findings of Fact, the application was submitted to the Commission by SMECI and was processed, circulated, and reviewed in accordance with the requirements of the Act, §§134.058 and 134.059; the Regulations, §12.207; the Commission's *Practice and Procedure*, 16 Tex. Admin. Code §1.1 et seq.; and the Administrative Procedure Act ("APA"), Tex. Gov't Code Ch. 2001 (Vernon Supp. 2020).

4. A public hearing was not held or required given that no person with an interest which was or may have been adversely affected timely requested a hearing on the application pursuant to §12.211 of the Regulations. Open meeting notice has been made as required.

5. Based upon the Findings of Fact, SMECI's current blanket bond in the amount of $140,000,000 (self-bond with third-party guarantee, approved by Order dated December 8, 2020), including the currently approved bonded amounts for Permit Nos. 52A and 60, is sufficient to cover the cost of reclamation for the proposed operations estimated to be $84,633,598.

6. Based upon the updated compliance history filed by SMECI in accordance with §12.116(a)(2) and §12.215(g) of the Regulations, and the AVS Report, a renewed and revised permit may be approved and issued for the San Miguel Lignite Mine, as Permit No. 11H for a 5-year term from the date of this Order.

7. In accordance with the authority of the Commission in §134.011(4) of the Act to issue orders requiring a permittee to take actions that are necessary to comply with the Act and Regulations, the Commission may require SMECI to submit a bond application that proposes to increase the amount of the bond for the permit in a sufficient amount based on Staff's updated reclamation cost estimate as set forth in this Order.

IT IS THEREFORE ORDERED that the Findings of Fact, Conclusions of Law, Permit Provisions set out in Appendix I, and Soil Testing Plan set out in Appendix II, as contained in this Order, are hereby adopted;

IT IS FURTHER ORDERED that SMECI's Application for renewal and revision of Permit No. 11G is approved and issued for the San Miguel Lignite Mine, as set out in this Order;

IT IS FURTHER ORDERED that Permit No. 11G is hereby renumbered as Permit No. 11H;

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 April 13, 2021.

RAILROAD COMMISSION OF TEXAS

DocuSigned by:
Christi Craddick
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CHAIRMAN CHRISTI CRADDICK

DocuSigned by:
Wayne Christian
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COMMISSIONER WAYNE CHRISTIAN

DocuSigned by:
Jim Wright
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COMMISSIONER JIM WRIGHT

ATTEST:
DocuSigned by:
Callie Farrar
3581C80BFDE0470...
Secretary, Railroad Commission of Texas

APPENDIX I
PERMIT PROVISIONS
DOCKET NO. C18-0017-SC-11-C

1. Within 60 days following permit issuance, SMECI shall submit revised reclamation cost estimates for this permit consistent with the approved reclamation plan and considering the time value of money, specifically considering anticipated changes in equipment and manpower costs for necessary reclamation activities proposed to be performed as great as 42 years following final coal removal, which occurred in 1990. Also within 60 days following this permit issuance, to ensure that the blanket bond held by the Commission for three mines, consisting of this permit and Permit Nos. 52A and 60, is sufficient, SMECI shall also submit updated reclamation cost estimates for Permit Nos. 52A and 60. After receipt of SMECI's reclamation cost estimates, Staff shall conduct independent reclamation cost estimates for the three permits, and, for issued Permit No. 11H, shall consider the anticipated time value of the costs of equipment and manpower to complete the reclamation requirements consistent with the approved reclamation plan. Staff shall provide these estimates to SMECI no later than 60 days following receipt of SMECI's estimates. If necessary, SMECI shall, within 60 days following receipt of Staff's three reclamation cost estimates, file an appropriate replacement bond.

2. Within 60 days following permit issuance, SMECI shall submit a revision application under §12.226 of the Regulations to correct Table 147-1 and Exhibit 147-1, removing the postmine land-use acreage errantly classified as "industrial/commercial exempt", and change this acreage to the regulatorily defined classification of industrial/ commercial land use.

APPENDIX II

SOIL TESTING PLAN AND POSTMINE-SOIL PERFORMANCE STANDARDS DOCKET NO. C18-0017-SC-11-C

[Derived from *Appendix VII - Soil Testing Plan and Postmine Performance Standards*, as proposed in Staff's TA Addendum No. 3 (see Finding of Fact No. 35.f., *supra*)

All areas within the Area A Mine Block will be monitored in six-acre grids (417' × 625'); all areas within the Area E and B Mine Blocks will be monitored in 5.7-acre grids (500' × 500'). A grid map (Exhibit .145-2) is provided showing the 5.7 and 6.0-acre grids, along with the bank boundary for grids in Areas A, B, and E that are selected for banking.

AREA A MONITORING PLAN

The reclaimed soil profile in Area A (monitored on six-acre grids) consists of respread topsoil over mixed overburden. An initial one-time soil sampling will be performed and will consist of composite samples from each six-acre grid as may be delineated by the advance of spoil leveling. Adjacent soil samples will be taken with no less than 200 feet between them. Six soil samples per grid, one sample per acre, will be mixed to make one composite sample per depth increment. The samples will be collected under the direction of an agronomist or soil scientist using standard techniques for sampling soils and overburden. The composite samples will be collected to a depth of four feet. Each composite sample will be sectioned into the following depth increments: 0"- Topsoil Depth (TSD), TSD-24", 24"-36", and 36"-48" and analyzed for the following chemical and physical parameters:

1. Standard soil testing procedures for the 0"-TSD increment will be used for:
   a. pH
   b. plant available nitrate-nitrogen
   c. plant available phosphorus (Olsen Method)
   d. plant available potassium (Ammonium Acetate Method)
   e. electrical conductivity (EC) (post January 9, 1989 grids only)

2. Standard soil testing procedures for the TSD-24", 24"-36", and 36"-48" intervals will be used for:
   a. pH
   b. pyritic sulfur
   c. potential acidity
   d. exchangeable acidity
   e. neutralization potential
   f. acid-base accounting (ABA)
   g. USDA texture
   h. EC (post January 9, 1989 grids only)
   i. sodium adsorption ratio (SAR) (post January 9, 1989 grids only)

A random 10 percent of the six-acre grids will be sampled on a one-time basis and analyzed for water-soluble boron (B) and total cadmium (Cd), copper (Cu), molybdenum (Mo), selenium (Se), and uranium (U) in the TSD-24", 24"-36", and 36"-48" increments.

The analyses results and a map showing the area represented by each composite sample will be submitted to the Commission within two years of rough backfilling and grading and prior to Phase I bond release, except where noted in the section entitled *Partially Reclaimed Grids.* In the event that the postmine soil-monitoring program identifies possible AFM or TFM, the Commission may require additional testing. A contingency plan will be developed to identify and remediate the problem, as discussed below in the section entitled *Contingency Plan.*

The samples will be collected from representative areas, as determined by an agronomist or soil scientist, using standard techniques for sampling soils and overburden. The analysis results, annual fertilizer application and liming rates, and a map (scale of 1" = 400' to 1" = 500') of the area represented by each sample, including northing and easting index marks, will be submitted to the Commission.

AREAS E, B, AND A (post January 9, 1989) MONITORING PLAN

The reclaimed soil profile in Areas B and E (monitored on 5.7-acre grids) and Area A (monitored on 6-acre grids) consists of respread topsoil over mixed overburden; contiguous grids selected by SMECI in Area B (monitored on 5.7-acre grids) consist of respread four-foot haulback obtained from premine material in the depth increments of TSD to four feet. Initial, one-time spoil sampling will consist of composite samples from each 5.7-acre grid (6-acre grids in Area A) as may be delineated by the advance of soil leveling. Adjacent soil samples will be taken at a spacing of approximately one subsample per acre per depth increment, with no less than 200 feet between each subsample. Six soil samples per grid will be mixed to make one composite sample per depth increment. Composite samples will be representative of the 0"-TSD and TSD-48" increments. The samples will be collected under the direction of an agronomist or soil scientist using standard techniques for sampling soils and overburden. SMECI will continue to report the topsoil depths to the Commission.

1. Standard soil testing procedures for the 0"-TSD increment will be used for:
   a. pH
   b. plant-available nitrate-nitrogen
   c. plant-available phosphorus (Olsen Method)
   d. plant-available potassium (Ammonium Acetate Method)
   e. EC

2. Standard soil testing procedures for the TSD-48" increment will be used for:
   a. pH
   b. pyritic sulfur

c. potential acidity
d. exchangeable acidity
e. neutralization potential
f. ABA
g. USDA texture
h. EC
i. SAR

A random 10 percent of the 5.7-acre grids (or larger size grid) will be sampled on a one-time basis and analyzed for water-soluble boron (B) and total cadmium (Cd), copper (Cu), molybdenum (Mo), selenium (Se), and uranium (U) in the TSD-48" increment.

Postmine soil data collected from grids with topsoil replacement over selected overburden (Areas A, B, and E) and from selected grids with respread four-foot haulback (Area B) and reported to the Commission will include bank acreage balance tables (bank accounts) for critical parameters. Bank accounts for EC, SAR, B, and U will be provided, based on acres reported to date.

AREAS E AND B HAULBACK MONITORING PLAN

Areas E and B (monitored on 5.7-acre grids) consist of respread four-foot haulback obtained from material in the premine depth increments of 0" to TSD and TSD to four feet. Initial, one-time soil sampling will consist of composite samples from each 5.7-acre grid as may be delineated by the advance of soil leveling. Adjacent soil samples will be taken with no less than 200 feet between them. Six soil samples per grid will be mixed to make one composite sample per depth increment. Composite samples will be representative of the 0"-TSD and TSD-48". The samples will be collected under the direction of an agronomist or soil scientist using standard techniques for sampling soils and overburden. Grids that are not approved for inclusion in the bank account will be monitored as follows:

1. Standard soil testing procedures for the 0"-TSD increment will be used for:
   a. pH
   b. plant-available nitrate-nitrogen
   c. plant-available phosphorus (Olsen Method)
   d. plant-available potassium (Ammonium Acetate Method)
   e. depth of placement (reported per each core)

2. Standard soil testing procedures for the TSD-48" increment will be used for:
   a. pH
   b. depth of placement

ADDITIONAL ELEMENTS OF THE SOIL-TESTING PLAN:

Maps

The soil monitoring report will include a map of the area monitored to date, including the area under review, in paper and electronic formats. The map will be at a scale of 1"=2,000' or larger (i.e., 1"=1,000', etc.) and will illustrate the following information:

a. A grid system of the mine area consisting of six-acre blocks in Area A and 5.7-acre blocks in Areas E and B,
b. Index marks identifying the Texas coordinate numbering system, and
c. Bank boundary for grids proposed for banking.

For four-foot haulback areas that are not included in the bank account area shown on the attached map, an isopach map of the top four-foot haulback removal area and cross sections for the replacement areas will be supplied on 1,500-foot centers, perpendicular to the pit alignment, by the end of the first quarter of the year following removal/replacement. The depth of haulback will be checked by surveying at every pit advance (i.e., 120 feet) the surface before and after haulback placement.

Initial Sampling

An initial, one-time composite soil sample will be obtained from each grid. The samples will be collected, analyzed, and the results reported to the Commission within two years of rough backfilling and grading and prior to submitting a request for Phase I bond release, except where noted in the section entitled *Partially Reclaimed Grids*. Initial soil sampling will consist of composite samples from each 5.7-acre or six-acre grid as may be delineated by the advance of spoil leveling. Adjacent soil samples will be taken with no less than 200 feet between them. Six soil samples in Areas A, E, and B, representing one sample per acre, will be mixed to make one composite sample per depth increment. Partial grids less than two acres in size will be sampled with an adjacent grid at a density of one sample per acre. Topsoil thickness for each core taken from each grid sampled for analysis will be provided.

Analytical procedures will be in accordance with Commission recommendations dated May 16, 1989, including Attachment A (*Overburden Parameters and Procedures*) and Attachment B (*Soil Testing Procedures, March 1980, Texas Agricultural Extension Service*) for plant-available nutrients, with the exception of P and K, which will use the Olsen and ammonium acetate methods, respectively.

The analytical results and a map showing the area represented by each composite sample will be submitted to the Commission in electronic and paper formats.

Final Sampling

During the fourth year of the ERP, a random 10 percent of the 5.7-acre grids (or approved larger size grids) will be sampled and analyzed according to the initial sampling requirements. The analysis results and a map showing the grids sampled will be provided to the Commission no later than the end of the first quarter of the fifth year of the ERP. In the event that chemical and physical properties of the postmine soils warrant further investigation, the Commission may require additional testing.

Augmentation Sampling

The 0"-TSD interval will be sampled for fertilizer augmentation and analyzed for pH, nitrate-nitrogen, and plant-available P (Olsen method), and K (ammonium acetate method), according to the methods for plant-available nutrients found in Commission overburden parameters and procedures list, at the end of the growing season in the year prior to the first year of productivity assessment and during the first and second years of productivity assessment. Samples will be collected and analyzed for nutrients prior to both the first and second years of productivity assessment when the years of assessment are nonconsecutive. Analytical results and a map showing the area involved will be provided to the Commission by the end of the first quarter of the year following each reporting period.

Sub-samples will be collected from areas of like land use and management within ERAs (management units) at a rate of approximately one sub-sample per 10 acres. Composite sub-samples will represent management units no larger than 100 acres for sampling and monitoring purposes. Management units larger than 100 acres will be subdivided where practical for sampling and monitoring purposes, each part being no larger than 100 acres. A grid line or a natural boundary, such as a road or an obvious land use change, will serve as the dividing line for separating sampling units.

Partially Reclaimed Grids

Partially reclaimed grids adjacent to areas with approved variances from contemporaneous backfilling and grading and/or temporary cessation of operations including coal combustion products placement areas, or which contain temporary structures, will be sampled as a complete grid or partial grid upon reclamation of the entire grid or partial grid and analyzed according to the approved soil-testing plan. If an entire grid or partial grid is included in a variance or is composed of a temporary structure, samples will be collected to the depth of disturbance, to a maximum depth of four feet. Survey data will be utilized to construct an isopach map of any area with less than four feet of disturbance to verify that less than four feet of soil was disturbed.

Demonstration that the material used to reconstruct the minesoil below the respread topsoil depth has comparable root development qualities as the premine material, will be based on productivity assessment and postmine soil testing.

Contingency Plan

In the event the postmine-soil monitoring program identifies problems, an alternate soil-monitoring program will be initiated. Soil samples will be collected from the 0 to 1-ft, 1 to 2-ft, 2 to 3-ft, and 3 to 4-ft increments at a density of one sample per acre for each affected grid and will be analyzed for those parameters identified by the SMRD and/or SMECI in the postmine monitoring program as a potential problem. This intensified sampling scheme will assist in identifying the extent of the soil problem. SMECI will notify the Commission of its re-sampling schedule to allow members of the Commission Staff to be present during this sampling. Splits of each sample taken during the re-sampling effort will be procured upon sample processing (after drying and grinding) and one provided to the Commission. The results of these analyses and a remediation plan will be submitted to the Commission. Once SMECI remediates the affected area, SMECI will again collect soil samples from the 0 to 1-ft, 1 to 2-ft, 2 to 3-ft, and 3 to 4-ft increments at a density of one sample per acre for each remediated grid will be analyzed for all postmine soil parameters. SMECI will submit results and a map showing the impacted areas to the Commission to verify the successful correction of any soil problems previously identified in the postmine-soil monitoring program.

Demonstration of Soil Suitability

Demonstration that the material used to reconstruct the minesoil below the respread topsoil depth has comparable root development qualities as the premine material, will be based on soil banking and productivity assessment.

Success of postmine quality will be based on a comparison of the values of the premine and post-mine parameter frequency distributions, supplemented with suggested guidelines as described in Technical Release SA-2, with the following exceptions:

Area A disturbed prior to January 9, 1989:

pH ≥ 4.0

ABA > -5 tons/1000 tons (t/kt).

The banking system of acreage accounting will be used to assess postmine-soil quality in the following areas:

1. Areas of the A Area disturbed prior to January 9, 1989 (boron and uranium only);
2. Portions of Areas A, B, and E disturbed after January 9, 1989. Soil bank accounts exist for all applicable physicochemical parameters for areas with respread topsoil over selected mixed overburden; and
3. Selected grids in Area B. Soil bank accounts will be provided for all applicable physicochemical parameters for approved areas with four-foot haulback material.

SAN MIGUEL LIGNITE MINE, PERMIT NO. 11G
AREALLY-WEIGHTED FREQUENCY DISTRIBUTIONS
POSTMINE SOIL PERFORMANCE STANDARDS - A AREA
(PRIOR TO JANUARY 9, 1989)

Characteristic of materials considered suitable for use in the construction of postmine soils

pH ≥ 4.0 s.u.

Soil Depth	-- % area --
0 - Topsoil Depth (TSD)	100
TSD - 24"	100
24" - 36"	100
36" - 48"	100

ACID-BASE ACCOUNTING > -5 tons/kton

Soil Depth	-- % area --
0 - TSD	100
TSD - 24"	100
24" - 36"	100
36" - 48"	100

Cadmium (Cd)	≤ 0.7 ppm
Copper (Cu)	≤ 100 ppm
Selenium (Se)	≤ 2 ppm

B, ppm

Soil Depth	6	7	8	9	10	11	12
	% of Area						
0 - TSD	1	1	--	1	--	--	1
TSD - 48"	5	5	--	--	--	1	--

Mo, ppm

Soil Depth	6	7	8	9
	% of Area			
0 - TSD	--	--	--	--
TSD - 48"	2	--	--	--

U, ppm

Soil Depth	5	6	7	8	9	10	11	12	13	14	15	16
	% of Area											
0 - TSD	8	4	1	1	1	1	--	1	1	--	1	--
TSD - 48"	4	5	2	2	2	--	1	--	--	--	--	1

POSTMINE SOIL PERFORMANCE STANDARDS
A AREA (AFTER JANUARY 9, 1989) MONITORED ON 6-ACRE GRIDS
B AND E AREAS WITH RESPREAD TOPSOIL OVER MIXED OVERBURDEN, 5.7-ACRE GRIDS
B AREA WITH RESPREAD TOPSOIL OVER NATIVE MATERIAL: TSD TO 4 FT, 5.7-ACRE GRIDS

pH 5.0 - 8.4 s.u.

Soil Depth	-- % area --
0 - Topsoil Depth (TSD)	100
TSD - 48"	100

ACID-BASE ACCOUNTING > 0 tons/kton

Soil Depth	-- % area --
0 - TSD	100
TSD - 48"	100

Cadmium (Cd)	≤ 0.7 ppm
Copper (Cu)	≤ 100 ppm
Selenium (Se)	≤ 2 ppm

ELECTRICAL CONDUCTIVITY (EC), mmhos/cm

Soil Depth	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	24	25	26
	% of Area																			
0 - TSD	2	3	1	1	1	--	1	--	1	--	2	1	--	--	--	--	--	--	--	--
TSD - 48"	14	4	6	2	2	5	2	--	1	3	--	1	1	1	1	1	1	3	1	--

SODIUM ADSORPTION RATIO (SAR)

Soil Depth	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	33	34	37	39	43	46	49	56	78
	% of Area																										
0 - TSD	2	1	1	1	--	2	2	1	1	1	--	1	--	--	--	--	1	1	1	--	1	--	--	--	--	--	--
TSD - 48"	3	2	4	1	1	2	--	2	1	--	2	1	3	3	1	2	1	--	1	1	--	--	1	1	1	2	1

B, ppm

Soil Depth	6	7	8	9	10	11	12
	% of Area						
0 - TSD	1	1	--	1	--	--	1
TSD - 48"	5	5	--	--	--	1	--

Mo, ppm

Soil Depth	6	7	8	9
	% of Area			
0 - TSD	--	--	--	--
TSD - 48"	2	--	--	--

U, ppm

Soil Depth	5	6	7	8	9	10	11	12	13	14	15	16
	% of Area											
0 - TSD	8	4	1	1	1	1	--	1	1	--	1	--
TSD - 48"	4	5	2	2	2	--	1	--	--	--	--	1

POSTMINE SOIL PERFORMANCE STANDARDS
E AND B AREAS (NOT SELECTED FOR BANKING) WITH RESPREAD TOPSOIL OVER PREMINE MATERIAL FROM TOPSOIL DEPTH TO FOUR FEET MONITORED ON 5.7-ACRE GRIDS

pH 5.0 - 8.4

Soil Depth	-- % area --
0 - (TSD)	100
TSD - 48"	100

Depth of Placement (ft)
0 - TSD
TSD - 48"