

TCEQ DOCKET NO. 2024-1115-EAQ

IN THE MATTER OF	§	BEFORE THE
EDWARDS AQUIFER	§	
WATER POLLUTION ABATEMENT	§	TEXAS COMMISSION ON
PLAN NO. 13001906 BY VULCAN	§	
CONSTRUCTION MATERIALS, LLC	§	ENVIRONMENTAL QUALITY

**VULCAN CONSTRUCTION MATERIALS, LLC’S RESPONSE TO
MOTIONS TO OVERTURN THE EXECUTIVE DIRECTOR’S DECISION
TO ISSUE WPAP NO. 13001906**

TO THE HONORABLE COMMISSIONERS OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY:

Pursuant to the Texas Commission on Environmental Quality (“**TCEQ**”) General Counsel’s August 13, 2024 notice, Vulcan Construction Materials, LLC (“**Vulcan**”) files this response (“**Response**”) to the Motions to Overturn (“**MTO**”) the TCEQ Executive Director’s (“**TCEQ ED**”) approval¹ of Vulcan’s Application for Edwards Aquifer Protection Program (“**EAPP**”) Water Pollution Abatement Plan (“**WPAP**”) No. 13001906 (“**Vulcan’s WPAP application**”) filed by Preserve Our Hill Country Environment and Preserve Our Hill Country Environment Foundation’s (“**PHCE**”), landowners Robert Carrillo, Cheryl Johnson, John Casimir Kucewicz Jr., and Douglas E. Smith (“**Landowners**”)², Milann and Prudence Guckian (“**Guckian**”), and Kira Olson (“**Olson**”) (each a “**Movant**” and collectively, “**Movants**”)³).

The TCEQ ED conducted a thorough technical review of Vulcan’s WPAP application and properly determined that the application will comply with all applicable EAPP requirements.⁴

¹ Pursuant to 30 TEX. ADMIN. CODE § 213.1(3), the TCEQ ED must review and act on a Chapter 213 WPAP application.

² The MTOs filed by PHCE and Landowners are virtually identical except for the descriptions of the organizations and individual Movants and sequencing of attachments.

³ This Response collectively addresses the MTOs filed by Movants PHCE, Landowners, Guckian, and Olson.

⁴ July 8, 2024 approval letter from Lori Wilson, TCEQ EAPP Director, to Richard Spry, Vulcan’s Vice-President of Operations.

Movants have not identified any legal or factual evidence that would controvert the validity or accuracy of the TCEQ ED's approval of Vulcan's WPAP.

The approved WPAP⁵ authorizes Vulcan to construct the Vulcan Comal Quarry on the southwest corner of FM 3009 and State Highway 46 in Comal County (the "**Site**") on the recharge zone of the Edwards Aquifer with associated plant areas, office, shop areas, and driveway on approximately 1,515.16 acres. Over the life of the quarry, nine mining areas will comprise approximately 956 acres; floodplain and buffer/berm areas will comprise approximately 545 acres; and construction of the plant, truck loading, and haul roads will comprise approximately 13.81 acres.⁶ As required by 30 TEX. ADMIN. CODE §§ 213.2, 213.5(b)(4), Vulcan's Technical Report outlines temporary and permanent Best Management Practices ("**BMPs**") that will be implemented to protect water quality in the Edwards Aquifer for its regulated activity over the Edwards' Recharge Zone.⁷ The Geologic Assessment ("**GA**") for Vulcan's Application was completed on August 1, 2023, and is a geological evaluation of the Site's boundaries, existing conditions, and geologic and manmade features at the Site consistent with the requirements in 30 TEX. ADMIN. CODE §§ 213.4(b)(2)(A), 213.5(b)(3) and TCEQ guidance.⁸

As discussed below, the TCEQ ED appropriately determined that Vulcan's WPAP application: (1) complies with the applicable provisions of 30 TEX. ADMIN. CODE Chapter 213 and related TCEQ guidance; (2) will ensure protection of water quality and recharge capabilities of the

⁵ Vulcan's approved WPAP consists of Vulcan's March 21, 2024 initial WPAP application, the TCEQ EAPP's technical notices of deficiencies and information requests related to the application dated May 20, 2024, June 11, 2024, June 28, 2024, and July 2, 2024; Vulcan's responses received by the TCEQ EAPP on June 5, 2024, June 25, 2024, July 1, 2024, and July 3, 2024; and the TCEQ EAPP's approval on July 8, 2024.

⁶ Vulcan's WPAP Application, General Information Form, Attachment C at 1.

⁷ See Vulcan's WPAP Application, Temporary Stormwater Section, Attachment D; Permanent Stormwater Section, Attachments B, C, D.

⁸ Vulcan's WPAP Application, Geologic Assessment Form, TCEQ-0585.

Edwards Aquifer, and (3) warranted the TCEQ ED's approval. None of the assertions in the MTOs demonstrates or indicates otherwise. Movants' MTOs offer inadequate support and irrelevant explanations and fail to demonstrate that the approved WPAP contained any specific deficiency that would warrant the TCEQ Commissioners second-guessing the TCEQ ED's July 8, 2024 approval. Accordingly, Vulcan respectfully requests that that TCEQ Commissioners deny all Movants' MTOs.⁹

I. Standard of Review for Motions to Overturn Executive Director's WPAP Approval

An MTO is a movant's available mechanism to advance complaints about the TCEQ ED's approval of a WPAP.¹⁰ The MTO must identify with particularity the subject of the complaint and must state the legal and factual basis for the claimed error.¹¹ Accordingly, the scope of relevant issues in a MTO for an approved WPAP application such as Vulcan's is limited to specific issues regarding the WPAP application or its approved WPAP. The TCEQ Commissioners' reconsideration is limited to the criteria the TCEQ ED used to evaluate Vulcan's WPAP application.¹² For this reason, policy criticisms and rulemaking suggestions have no place in the context of an MTO.

Movants' MTOs primarily raise general concerns that do relate to Vulcan's WPAP application or approved WPAP. As explained below, in their MTOs, Movants did not identify and sufficiently define any legal or factual basis to support most of their complaints about Vulcan's

⁹ 30 TEX. ADMIN. CODE § 50.139(f).

¹⁰ 30 TEX. ADMIN. CODE §§ 50.139(a), 213.1(3).

¹¹ 30 TEX. ADMIN. CODE § 50.119(d) (motion must identify with particularity the subject of the complaint and must state the legal and factual basis for the claimed error).

¹² See 30 TEX. ADMIN. CODE § 50.131(d) ("If the rules under which the executive director evaluates a registration application provide criteria for evaluating the application, the commission's reconsideration will be limited to those criteria").

approved WPAP that would provide a basis for the TCEQ Commissioners to correct Movants' speculative claims. If a movant's MTO fails to meet the legal standards for specificity, the movant may not supplement its MTO complaints in a reply brief to get a "second bite at the apple."¹³ Thus, the plain language of TCEQ's rules require the text of an MTO to include specific legal and factual bases of support. To exhaust administrative remedies,¹⁴ an MTO must "be sufficiently definite to apprise the regulatory agency of the error claimed and to allow the agency opportunity to correct the error or to prepare to defend it."¹⁵ Therefore, the TCEQ Commissioners need not consider, and Vulcan's Response need not address any of the statements in any of the MTOs filed in this docket outside the scope articulated in TCEQ rules.¹⁶

II. Movants' Assertions Related to Groundwater Availability and Usage Are Speculative and Irrelevant to the TCEQ ED's Approval of Vulcan's WPAP

The scope of the TCEQ Commissioners' review is limited to Vulcan's WPAP application and TCEQ ED's approval of the WPAP. After citing generalized concerns regarding water quality and groundwater recharge, Movants express worries about access to groundwater in the future, a presumed taking of water rights absent any activity on site, and Vulcan's ability to source a necessary volume of water in the future for its quarry operations. Groundwater availability is not within the scope of the EAPP program.¹⁷ Whether any activity at Vulcan's Site amounts to an unlawful taking of groundwater without compensation in the future is necessarily hypothetical. As

¹³ Vulcan reserves the right to respond to any issue or discussion Movants include in their reply briefs that were not included in their respective MTOs, and to respond to any issues which are included in Movants' MTOs and which Movants attempt to rehabilitate by expanding or by providing additional detail which is lacking in their MTO.

¹⁴ See TEX. WATER CODE § 5.351 (stating that "a person affected by a ruling, order, or decision on a matter delegated to the [ED] under Section 5.122 or other law may, after exhausting any administrative remedies, file a petition to review, set aside, modify, or suspend the ruling, order, or decision") (emphasis added).

¹⁵ *Suburban Utility Corp. v. Public Utility Com.*, 652 S.W.2d 358 at 365 (Tex. 1983) (emphasis added).

¹⁶ *Id.*

¹⁷ See 30 TEX. ADMIN. CODE § 213.1 (relating to the regulation of activities that pose a threat to water quality).

a result, Movants' concerns are outside the scope of Vulcan's approved WPAP and should thus be disregarded.

Movants' water availability hypothetical complaints are misplaced. Consideration of the volume or source of water needed for quarry operations is not a relevant issue in Vulcan's WPAP application or the TCEQ ED's approval of the WPAP. Movants speculate that in the future Vulcan will acquire water from an existing onsite well or future drilled and completed wells.¹⁸ 30 TEX. ADMIN. CODE Chapter 213 and related TCEQ guidance contain no language that requires a WPAP application to specify the source or volume of water for quarry operations. Accordingly, TCEQ would not have the legal authority to disapprove Vulcan's WPAP application based on Vulcan not specifying where and how it will meet obligations not regulated by the WPAP.

Movants' wholly conjectural assertions that the TCEQ ED's approval of Vulcan's future regulated activities at the Site constitutes an unlawful taking of groundwater without compensation are similarly misplaced. Based on a series of assumptions about what may happen in the future, Movants complain that the TCEQ ED's approval of Vulcan's WPAP authorizes activity Movants believe will impact groundwater availability. Movants' stated assumptions are that: (1) Vulcan will consume available groundwater to operate the quarry; (2) approval of Vulcan's WPAP authorizes activity that will result in increased groundwater withdrawal; (3) such future groundwater withdrawals "would result in the contamination of groundwater beneath nearby properties"; and (4) nearby landowners "may be deprived of the opportunity to produce their 'fair share' of groundwater" that amounts to an unlawful taking.¹⁹ Movants' assumptions about future

¹⁸ PHCE MTO at 9 (speculatively concluding that "water required to support quarry development and production operations will be acquired from an existing on-site well or future to-be-drilled and completed wells."); Landowners MTO at 6.

¹⁹ PHCE MTO at 8-9; Landowners MTO at 5; Guckian MTO at 3; Olson MTO at 1.

groundwater usage and availability scenarios serve only stir up alarm about issues unrelated to the specific WPAP requirements upon which the TCEQ ED's evaluation and approval of Vulcan's WPAP are based.²⁰ The TCEQ Commissioners should consequently properly reject Movants' out-of-scope misplaced assumptions.

III. Vulcan Satisfied All Applicable WPAP Public Notice Requirements and Movants' Exercised All Available Forms of Public Participation

Section 213.4(a)(2) of the TCEQ's Edwards Aquifer rules requires the appropriate TCEQ regional office to provide copies of WPAP applications to affected incorporated cities, groundwater conservation districts, and counties in which the proposed regulated activity will be located.²¹ To facilitate the TCEQ regional office's completion of this requirement and to satisfy 30 TEX. ADMIN. CODE § 213.4(a)(2), Vulcan submitted additional copies of its WPAP application to the TCEQ regional office for distribution.²² The TCEQ San Antonio regional office distributed copies of Vulcan's WPAP application to the Edwards Aquifer Authority Groundwater Conservation District, the City of Bulverde, and Comal County.²³ During the public comment period for Vulcan's WPAP application, the TCEQ received 21 public comments between April 2, 2024, and April 22, 2024, including comments submitted by Movants.²⁴ Movants participated in the TCEQ ED's review process by providing public comments.²⁵ In addition, all four Movants filed MTOs and the TCEQ

²⁰ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan's WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

²¹ 30 TEX. ADMIN. CODE § 213.4(a)(2).

²² 30 TEX. ADMIN. CODE § 213.4(c)(1).

²³ See TCEQ's Central Registry Correspondence Tracking, available at https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=iwr.cordetail&addn_id=427364462024082&re_id=422364452024082 (last accessed August 27, 2024).

²⁴ *Id.*

²⁵ See e.g., PHCE MTO, Exhibits B, E, H, K; Landowners MTO, Exhibits B, G, E (second Exhibit E), K.

General Counsel on her own motion extended the required time for the TCEQ Commissioners to act on the MTOs.²⁶

Movants acknowledge that public notice and a public meeting are not required regulatory components for WPAP applications.²⁷ Nonetheless, Movants suggest that notice of Vulcan's WPAP application should have been provided to area landowners, that TCEQ should have held a public meeting, and that the TCEQ ED should have responded in writing to commentors.²⁸ TCEQ's rules and established WPAP review and approval processes simply do not require the features to which Movants believe they should be entitled. Movants' unsupported complaints about TCEQ's established WPAP review and approval process are policy invitations rather than substantive assertions related to a specific WPAP requirement applicable to Vulcan's approved WPAP. The TCEQ Commissioners should decline to consider these complaints because they are outside the scope of MTOs of the TCEQ ED's approval of Vulcan's WPAP.²⁹

IV. Vulcan's WPAP Application Satisfied All Applicable EAPP Requirements

Movants generally assert that the TCEQ ED's approval of Vulcan's WPAP application was arbitrary because Movants believe the approved WPAP's pollution prevention demonstration is deficient. The TCEQ Commissioners should reject this assertion because Movants failed to offer any relevant support for this assertion. Movants' concerns do not identify any defects in the

²⁶ 30 TEX. ADMIN. CODE § 50.139(e).

²⁷ PHCE MTO at 12 ("The WPAP review and approval process does not include any notice to area landowners...no public meetings are required...the Executive Director does not respond to public commentors in writing..."); Landowners MTO at 9.

²⁸ PHCE MTO at 12-13; Landowners MTO at 8-9; Guckian MTO at 7; Olson MTO at 1.

²⁹ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan's WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

geologic assessment (“**GA**”) in Vulcan’s approved WPAP and Movants’ opinions are largely unsubstantiated or irrelevant to the WPAP.

A. Potential Pathways are Appropriately Identified and Addressed in the WPAP, Including Sensitive Features

TCEQ rules require the GA for a WPAP application to be performed by a licensed professional geoscientist with the requisite training, credentials, and experience in groundwater hydrology to enable sound professional judgments regarding identification of sensitive features located in the recharge zone.³⁰ Mr. Henry Stultz III, P.G., the Pape-Dawson Engineering Consultants, LLC project geoscientist for Vulcan’s WPAP application, performed the GA and included all elements required by applicable TCEQ rules, guidance, and instructions.³¹ As indicated in the Affidavit of Henry Stultz III, P.G., enclosed as Attachment A (“***Stultz Affidavit***”), Mr. Stultz maintains a current license with the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice, as is required by 30 TEX. ADMIN. CODE § 213.3(21).³² Licensed professional geoscientists like Mr. Stultz exercise professional judgment using experience and training and by following TCEQ guidance for conducting GAs for WPAP applications. Mr. Stultz conducted the GA in accordance with TCEQ-0585, *Instructions for Geologists for Geologic Assessments in the Edwards Aquifer Recharge/Transition Zones* (2004) (the “**GA Instructions**”). The GA Instructions are the applicable criteria for a GA’s compliance with 30 TEX. ADMIN. CODE § 213.5(b)(3).

³⁰ GA Instructions at 1.

³¹ See 30 TEX. ADMIN. CODE § 213.5(b)(3); Vulcan’s WPAP Application, Geologic Assessment Form, Attachment A (Geologic Table), Attachment B (Stratigraphic Column), Attachment C (Site Geology), and Attachment D (Site Geologic Maps); TCEQ-0585, *Instructions for Geologists for Geologic Assessments in the Edwards Aquifer Recharge/Transition Zones* (2004); TCEQ RG-500, *Best Management Practices for Quarry Operations* (2012) at 5-6.

³² Stultz Affidavit at 1, Paragraph 2.

The GA in Vulcan's WPAP application correctly and accurately identified all potential pathways for contaminant movement to the Edwards Aquifer as required by 30 TEX. ADMIN. CODE § 213.5(b)(3). Seven sensitive, natural geologic features were identified and included in the GA, including three caves.³³ Based on the size of the Site and the frequency distribution of sensitive features, the GA assessed the overall potential for fluid migration to the Edwards Aquifer for the Site as low.³⁴ As Mr. Stultz attested in his affidavit, buffer areas in the WPAP serve to preserve water quality and protect sensitive features identified in the GA.³⁵ The appropriately protective engineering response for the seven sensitive features is a natural vegetative buffer around each of the sensitive features, in accordance with guidance in TCEQ RG-348, *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices* (2005).³⁶

Based on Mr. Stultz's data and observations he gathered in the field study he conducted at the Site, he made a professional assessment of each geologic and manmade feature on the Site and the relative probability for infiltration.³⁷ Descriptions of his assessments are included in the GA in Vulcan's WPAP application.³⁸ An important purpose of the GA is to hypothesize where the potential for rapid infiltration has the highest probability of occurring using the information observed at the feature and entered on the Geologic Assessment Table in the GA.³⁹ As Mr. Stultz explained in his affidavit, analysis of the relative infiltration rate in a WPAP GA for the identified features is critically informed by a geologist's field-based assessment and visual observations at

³³ See Vulcan's WPAP Application, GA, Geologic Assessment Table; *id.* at Attachment C at 2-3.

³⁴ Vulcan's WPAP Application, GA, Attachment C at 1.

³⁵ Stultz Affidavit at 3, Paragraph 7.d.

³⁶ Vulcan's WPAP Application, GA, Attachment C at 1; TCEQ RG-348, *Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices* (2005) as amended to include Errata Sheet (2009) and Addendum Sheet (2017) at Chapter 5.

³⁷ Stultz Affidavit at 2, Paragraph 5.b.

³⁸ Vulcan's WPAP Application, GA, Geologic Assessment Table, Attachment C at 2 (Feature Descriptions).

³⁹ GA Instructions at 11.

the project site, TCEQ's established criteria in the GA Instructions for evaluating relative infiltration rate, and that professional judgment is checked by referring to the flowchart on page 13 of the GA Instructions.⁴⁰ The GA in Vulcan's WPAP application prepared by Mr. Stultz is by nature scientific because he is a professional geoscientist.

Two TCEQ EAPP staff also conducted site assessments of Vulcan's property on April 22, 2024 and April 24, 2024 as part of the technical review of Vulcan's WPAP application to observe existing Site conditions and evaluate the Site against the GA.⁴¹ Each TCEQ investigator independently determined the Site to be generally as described in the GA in Vulcan's application and did not identify any additional sensitive features beyond those described in the GA in Vulcan's WPAP application. Consistent with TCEQ requirements, the geologic and manmade features discovered on the Site during the field investigation are shown and labeled on the Site Geologic Map and are described in the Geologic Assessment Table.⁴²

Despite Mr. Stultz's GA and TCEQ EAPP staff's confirmation of the GA, Movants assert that Vulcan's approved WPAP insufficiently identifies potential pathways to the Edwards Aquifer based simply on a comparison of the number of sensitive features documented on two independent real property parcels (Vulcan's Site and a 158-acre parcel to the north of Highway 46 from the Site).⁴³ Without reference to the GA Instructions or conducting any onsite field study or observations, Dr. Brian Smith opined that "there is a high probability that significantly more sensitive features are present very near the surface at Vulcan's property" and that the comparatively

⁴⁰ Stultz Affidavit at 3, Paragraph 7.c.; GA Instructions at 1, 13; 30 TEX. ADMIN. CODE § 213.3(14), (21).

⁴¹ July 8, 2024 approval letter from Lori Wilson, TCEQ EAPP Director, to Richard Spry, Vulcan's Vice-President of Operations at 2.

⁴² 30 TEX. ADMIN. CODE § 213.5(b)(3)(A)-(E).

⁴³ See PHCE MTO at 15-17; Landowners MTO at 12-14.

“low” number of identified sensitive features on Vulcan’s Site suggests a discrepancy of the GA.⁴⁴ As explained below, Movants’ characterizations are baseless.

TCEQ defines “sensitive features” as permeable geologic or manmade features located on the Edwards Aquifer recharge zone or transition zone where a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer exists and rapid infiltration to the subsurface may occur.⁴⁵ As Mr. Stultz explained in his affidavit, in Dr. Brian Smith’s affidavit and report, Dr. Smith’s use of the term “sensitive feature” is incorrect because it is not based on the GA Instructions and because Movants failed to include any specific documentation in their MTOs to support Smith’s claim of 38 so-called “sensitive” features in the 158-acre tract used in his comparison.⁴⁶ Mr. Stultz further stated that [“t]he geomorphology of an area does not presume equal distribution of features in that area, even within the same geologic formation. Porosity of formations can vary over local distances. For example, burrowing organisms may be local to a small area but absent in nearby areas, affecting the porosity in those areas separately.”⁴⁷ A physical field study is essential to conducting a GA or opining about geologic or manmade features on land. Smith’s comparison of the specific number of sensitive features on two real property parcels is not relevant to Vulcan’s WPAP because Smith’s opinion is not based on the GA Instructions, does not take geomorphology into account, and was not based on personal observations at the Site. As such, Smith’s opinion is incorrect, unfounded, and should not be given any consideration.

⁴⁴ *Id.*

⁴⁵ 30 TEX. ADMIN. CODE § 213.3(29).

⁴⁶ Stultz Affidavit at 3, Paragraph 7.a.; *see* PHCE MTO at 15-17; *id.* at Attachment I, Exhibit 2 at 7; Landowners MTO at 12-14; *id.* at Attachment H, Exhibit 2 at 7. Mr. Olivier’s use of the term “sensitive” in concluding that “the entire Edwards Aquifer Recharge Zone is sensitive” is also incorrect in the WPAP context because it lacks any connection to the TCEQ regulatory definition of “sensitive feature.” PHCE MTO, Exhibit D at 3; Landowners MTO, Exhibit I at 3.

⁴⁷ Stultz Affidavit at 3, Paragraph 7.b.

Movants' concerns as expressed by Dr. Smith's opinions⁴⁸ do not identify any defects in the GA and are hypothetical or irrelevant to the WPAP. For example, Movants' general concerns about contaminants' impact to lithologies beneath the Site⁴⁹ fail to identify any specific issue with the GA in Vulcan's approved WPAP. Such concerns amount to a collateral challenge to the adequacy of TCEQ's EAPP Program rather than a challenge to the TCEQ ED's determination that the Vulcan's GA demonstrated that it meets applicable TCEQ requirements for GAs.

Movants' concerns as expressed by Mr. Olivier's opinions⁵⁰ do not identify any regulatory discrepancies or relate to the TCEQ ED's approval of Vulcan's WPAP. Mr. Olivier's complaint that TCEQ's guidance document TCEQ RG-500, *Best Management Practices for Quarry Operations* (2012) is outdated and criticism of TCEQ's required method of ranking sensitive karst features⁵¹ are critiques of TCEQ's EAPP program, not of Vulcan's approved WPAP. As explained above, Mr. Olivier's characterization of the relative infiltration rate of a feature in a GA as based "solely on professional judgment rather than scientific evidence"⁵² is a contradiction in terms and a groundless criticism of Vulcan's GA. In addition, although some types of features are naturally less likely to be ranked as sensitive, all features have the potential to be ranked as sensitive under TCEQ's sensitivity ranking in the GA Instructions.⁵³ Mr. Olivier's suggestion that "more caves could be expected at the Vulcan Site" purports to be based on a 2005 regional study of lithology as a predictive tool of cave entrances, but Movants do not articulate with any specificity how

⁴⁸ PHCE MTO, Attachment I, Exhibit 1 (Dr. Smith's resume depicting lack of professional experience with geologic assessments and only limited expertise in surface karst); Landowners MTO, Attachment H, Exhibit 1.

⁴⁹ PHCE MTO at 17; Landowners MTO at 14.

⁵⁰ See PHCE MTO, Attachment D, Exhibits 2-4; Landowners MTO, Attachment I, Exhibits 2-4; *see also id.* at Attachment D, Exhibit 1 (Mr. Olivier's resume depicting lack of professional experience with geologic assessments and karst terrain).

⁵¹ PHCE MTO at 17; Landowners MTO at 14.

⁵² PHCE MTO at 18; Landowners MTO at 15, citing TCEQ RG-500 at 11.

⁵³ GA Instructions at 13 (providing nonexclusive criteria for types of features).

information in the study supports Mr. Olivier’s speculative characterization.⁵⁴ The GA considered cave systems in the features evaluation under the GA Instructions.⁵⁵ Similarly, Movants assert that sinkholes are “generally not given protection because their water infiltration rate is often difficult to judge,” but omit any support or relevant connection to Vulcan’s WPAP application or approved WPAP.⁵⁶ Tests such as tracer studies are not required for the GA of any feature⁵⁷ but Movants nonetheless suggest that a dye tracer study be conducted,⁵⁸ in contradiction of the GA Instructions that WPAP applicants and licensed professional geoscientists must follow in conducting a GA for a WPAP application.⁵⁹ Finally, Movants’ reference to a study of a diesel spill in 2000 at another location in Comal County⁶⁰ likewise lacks any connection or relevance to the Site or Vulcan’s approved GA and WPAP.

Critically, Movants’ concerns expressed by Dr. Smith and Mr. Olivier lack any connection to the GA Instructions, which are the relevant criteria for assessing whether a particular feature meets TCEQ’s 30 TEX. ADMIN. CODE § 213.3(29) definition of a “sensitive feature.” Movants’ irrelevant criticisms do not indicate any deficiencies in Vulcan’s approved WPAP application or the TCEQ ED’s approval of the WPAP. Therefore, the TCEQ Commissioners need not reconsider the TCEQ ED’s proper approval of Vulcan’s GA and its WPAP application.⁶¹

⁵⁴ See also Guckian MTO at 5-6 (describing “Cave-Prone Zone” without any specific relevance to Vulcan’s WPAP application or approved WPAP).

⁵⁵ Vulcan’s WPAP Application, GA, Attachment C at 2.

⁵⁶ Guckian MTO at 6; PHCE MTO, Attachment C at 6.

⁵⁷ GA Instructions at 3.

⁵⁸ PHCE MTO at 19; Landowners MTO at 16; Olson at 1.

⁵⁹ GA Instructions at 3.

⁶⁰ PHCE MTO at 18; Landowners MTO at 15.

⁶¹ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan’s WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

B. Separation of Excavation Depth and Groundwater Elevation Satisfies EAPP Requirements

Vulcan’s approved WPAP demonstrates an appropriate depth limit for mining activity.⁶² TCEQ’s established WPAP guidance document for quarries – TCEQ RG-500, *Best Management Practices for Quarry Operations* (2012) – requires a 25-foot separation distance between the floor of the quarry and the water surface elevation.⁶³ The guidance explains that “[t]he best way to estimate [the water surface] level is to use the water level measured in a water supply well or boring on-site for which historical data are available.”⁶⁴ TCEQ accepts the water table elevation measured in December 2007 either on-site or in the nearest off-site well as the elevation from which the 25-foot separation applies.⁶⁵

Vulcan’s WPAP application initially proposed 1,041 feet above mean sea level (“*ft msl*”) as the quarry pit floor. However, TCEQ EAPP staff determined based on Well Report No. 520690 that the expected depth of the limit for mining activity is required to be 1,047 ft msl.⁶⁶ The GA in Vulcan’s WPAP application includes Well Report No. 520690, which shows that water was encountered at a depth of 136 feet where surface elevation is 1,158 feet, making the water surface elevation for the well 1,022 ft msl.⁶⁷ Considering the 25-foot vertical buffer, the appropriate depth of the quarry pit floor is properly 1,047 ft msl. Vulcan revised the WPAP application Project Description to reflect the required limit of 1,047 ft msl as the limit of mining activity.⁶⁸ In addition,

⁶² Vulcan’s WPAP Application, General Information Form, Attachment C (Project Description).

⁶³ TCEQ RG-500 at 2, 2.1.

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ May 20, 2024 letter from Lillian Butler, EAPP Section Manager, to Caleb Chance, P.E., Pape-Dawson Project Manager, Comment 1.

⁶⁷ Vulcan’s WPAP Application, General Information Form, Attachment C (Project Description).

⁶⁸ June 3, 2024 letter from Caleb Chance, P.E., to TCEQ EAPP staff James Slone, Response to Comment 1 in May 20, 2024 letter.

Vulcan removed the statement in the Project Description of its initial WPAP application regarding continuous water level monitoring of which Movants complain.⁶⁹

Movants assert that the authorized excavation depth and the monitoring plan do not meet the requirements of 30 TEX. ADMIN. CODE §§ 213.5(b)(4)(B)(i), (ii), and (iii). The basis of their assertions is Dr. Jim Doyle's claims that other water level data points are higher than the WPAP required limit of 1,047 ft msl and a statement that a 1,047 ft msl mining floor level could lead to "increased infiltration of contaminants."⁷⁰ The apparent support for this assertion is that water levels in "this area" have been higher four times in 21 years, so "there is no reason to think it will not happen again" during the 65- to 90-year life of the Site.⁷¹ Dr. Doyle's conclusion about what may happen in the future does not identify specific criteria he believes were not met nor does his unsubstantiated opinion controvert the TCEQ ED's review of Vulcan's WPAP application and direction to set the mining depth limit at 1,047 ft msl.

Movants characterize the "proposed a mining pit" as a manmade feature in basement purportedly based on the GA Instructions.⁷² And Movants complain that Vulcan's WPAP application does not provide sensitive feature protection of a mining pit.⁷³ Movants' claims do not specify any particular criteria in the GA Instructions to support their assertions.⁷⁴

As previously discussed, an WPAP GA involves a field study and trained observations of a licensed professional geoscientist in accordance with the GA Instructions like Mr. Stultz

⁶⁹ PHCE MTO at 19-20; Landowners MTO at 16.

⁷⁰ PHCE MTO at 21, citing Attachment I, Exhibit 2; Attachment J; Landowners MTO at 18 citing Attachment H, Exhibit 2; Attachment J.

⁷¹ PHCE MTO, Attachment J; Landowners MTO, Attachment J.

⁷² PHCE MTO at 22; Landowners MTO at 19.

⁷³ *Id.*

⁷⁴ *See, e.g.*, PHCE MTO Attachment I, Exhibit 2 (Dr. Smith's 12-page report excluded the GA Instructions in the list of references to the report); Landowners MTO Attachment H, Exhibit 2.

conducted for the GA in Vulcan's WPAP application.⁷⁵ As Mr. Stultz explained in his attached affidavit, he has the requisite training and experience in groundwater hydrology and geoscience that enable him to make sound professional judgments regarding identification of sensitive features located in the recharge zone of the Edwards Aquifer, as required by 30 TEX. ADMIN. CODE § 213.5(b).⁷⁶ Based on his professional evaluation, the GA demonstrates proper classification of sensitive features in line with the GA Instructions.⁷⁷ Vulcan's excavation depth limit complies with GA and technical plan requirements in TCEQ RG-500, and GA Instructions.⁷⁸ Movants fail to identify any applicable discrepancies in TCEQ EAPP's determination of the authorized excavation depth, and none exists. Accordingly, the TCEQ Commissioners need not consider such extraneous noise and should dismiss Movants' MTOs.⁷⁹

C. Vulcan's WPAP Properly Identifies Required Potential Sources of Contamination

Like other TCEQ-approved WPAPs, multiple parts of Vulcan's WPAP application provide for protection of the water quality of the underlying aquifer and groundwater. The temporary and permanent BMPs in the approved WPAP are designed to prevent pollution as defined in 30 TEX. ADMIN. CODE § 213.3(24) to protect surface streams, sensitive features, and the aquifer as required by 30 TEX. ADMIN. CODE § 213.5(b)(4)(B)(iii). The TCEQ ED approved Vulcan's WPAP application because it was proposed in compliance with 30 TEX. ADMIN. CODE Chapter 213, and

⁷⁵ See Stultz Affidavit at 2, Paragraph 5.b.

⁷⁶ See also 30 TEX. ADMIN. CODE §§ 213.3(14) (defining "geologist"), (21) (defining "licensed professional geoscientist").

⁷⁷ Vulcan's WPAP Application, GA, Geologic Assessment Table; see 30 TEX. ADMIN. CODE § 213.3(29) (defining "sensitive feature"); GA Instructions at 3, 7-12 (explaining evaluation necessary to complete the Geologic Assessment Table).

⁷⁸ See Vulcan's WPAP Application, General Information Form, Attachment C (Project Description).

⁷⁹ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan's WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

includes construction plans, design information, BMPs and measures to protect the Edwards Aquifer subject to the Standard Conditions of approval and applicable state rules.⁸⁰

The Temporary Stormwater Section of Vulcan’s WPAP application describes temporary activities or processes that may be a potential source of contamination affecting surface water quality during construction as required by 30 TEX. ADMIN. CODE 213.5(b)(4).⁸¹ The Permanent Stormwater Section of Vulcan’s WPAP application explains that while blasting agents will be utilized in the mining process, such materials will not be stored onsite over the recharge zone.⁸² Movant’s characterization of Vulcan’s WPAP technical report as identifying only “temporary sources during construction and potential sources that may affect stormwater discharges from the site after development” is therefore misplaced.⁸³

Vulcan’s approved WPAP is an authorization to conduct certain regulated activities over the Edwards, but mining or blasting are not specifically WPAP-regulated activities. TCEQ rules define “regulated activity” as “any construction-related or post-construction activity on the recharge zone of the Edwards Aquifer having the potential for polluting the Edwards Aquifer and hydrologically connected surface streams.”⁸⁴ Movants’ assumptions in their MTOs that any mining or blasting at the Site will automatically result in pollution of the Edwards Aquifer and hydrologically connected surface streams are speculative and unsubstantiated.

⁸⁰ July 8, 2024 approval letter from Lori Wilson, TCEQ EAPP Director, to Richard Spry, Vulcan’s Vice-President of Operations at 1, 2-4 (Standard Conditions 1-16).

⁸¹ Vulcan’s WPAP Application, Temporary Stormwater Section at 2, Paragraph 4; Attachment B (Potential Sources of Contamination).

⁸² Vulcan’s WPAP Application, Permanent Stormwater Section, Attachment I.

⁸³ PHCE MTO at 23; Landowners MTO at 20; *see also* Guckian MTO at 4; Olson MTO at 1.

⁸⁴ *See* 30 TEX. ADMIN. CODE § 213.3(28) (defining “regulated activity”).

Vulcan's WPAP application detailed how its BMPs and measures will prevent pollution of surface water, groundwater, surface streams, sensitive features, and the aquifer.⁸⁵ Structural measures including erection of rock berms with silt fencing for secondary protection, designation of vegetative buffers, and installation of stabilized construction entrance/exits and construction staging areas.⁸⁶ Vulcan's approved WPAP includes a permanent BMP of a 100-foot buffer adjacent to all neighboring properties.⁸⁷ Movants contend that a 100-foot buffer is insufficient protection but fail to identify any basis for such an assertion, much less any relevance to Vulcan's WPAP application or approved WPAP.⁸⁸

Movants' characterization of Vulcan's identification of potential sources of contamination as somehow "limited" because blasting agent information is not listed as a potential contamination source ignores the robust and broad scope of temporary and permanent BMPs in the approved application.⁸⁹ Movants' belief that a blasting agent such as ANFO⁹⁰ should be identified as a potential source of information does not make it a WPAP requirement. Had TCEQ wanted to include more specific requirements for WPAP applications, TCEQ could have included them in the rule or guidance, but TCEQ did not do so. Movants failed to identify any other TCEQ-approved WPAP applications for quarries over the recharge zone that included blasting agent as a potential source of contamination. Movants' complaints are further unsupported because they lack any clear

⁸⁵ Vulcan's WPAP Application, Temporary Stormwater Section, Attachment D at 1-2.

⁸⁶ Vulcan's WPAP Application, Temporary Stormwater Section, Attachment F (Structural Practices); Exhibit 1 (Temporary Water Pollution Abatement Plan); Exhibit 2 (Permanent Water Pollution Abatement Plan).

⁸⁷ Vulcan's WPAP Application, Permanent Stormwater Section, Attachment I; July 8, 2024 approval letter from Lori Wilson, TCEQ EAPP Director, to Richard Spry, Vice-President of Operations, Vulcan Construction Materials, LLC at 2 (requiring permanent BMPs to be operational prior to occupancy or use of the proposed quarry project).

⁸⁸ PHCE MTO at 22-23; Landowners MTO at 19-20.

⁸⁹ Vulcan's WPAP Application, Temporary Stormwater Section, Permanent Stormwater Section.

⁹⁰ ANFO is a dry powder commercial blasting agent in pelletized solid form that is 94% porous prilled ammonium nitrate (NH₄NO₃) fertilizer which acts as the oxidizing agent and absorbent for the fuel, and 6% number 2 fuel oil. <https://en.wikipedia.org/wiki/ANFO>.

basis in applicable TCEQ EAPP rules and detailed technical guidance, which do not require blasting agent materials used in mining to be included on the list of potential contamination sources in the WPAP technical report.⁹¹

Movants further speculate about what blasting materials Vulcan may utilize in mining at the Site and make numerous assumptions about hypothetical scenarios, concentration levels, and general proximity of wells to quarries, each of which has no demonstrated relevance to Vulcan's WPAP or the TCEQ ED's decision to approve it. Although TCEQ's Edwards Aquifer rules do not require a well monitoring program, Movants' insistence that such a program should be required⁹² lacks any connection to Vulcan's approved WPAP. Accordingly, the TCEQ Commissioners should decline to give any consideration to Movants' speculative assertions about issues outside the scope of review of Movants' MTOs.⁹³

V. Vulcan's Approved WPAP Does Not Involve an Underground Injection Well

All water wells, including any injection wells, must be identified in the GA for a WPAP application and must comply with the requirements in 16 TEX. ADMIN. CODE Chapter 76.⁹⁴ As Mr. Stultz attested in his affidavit, in conducting the GA for Vulcan's WPAP application, he did not identify any injection wells on the Site⁹⁵ and Vulcan specifically acknowledged in its WPAP application that waste disposal wells regulated under 30 TEX. ADMIN. CODE Chapter 331 are "prohibited on the Recharge Zone and not proposed for this project."⁹⁶ Vulcan's approved WPAP

⁹¹ See generally RG-500 (lacking any reference to blasting materials used in mining).

⁹² PHCE MTO at 26; Landowners MTO at 23.

⁹³ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan's WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

⁹⁴ Vulcan's WPAP Application, GA at 3; GA Instructions at 9.

⁹⁵ Stultz Affidavit at 2, Paragraph 5.c.; see also Vulcan's WPAP Application, GA, Well Reports.

⁹⁶ Vulcan's WPAP Application, General Information Form at 3.

complies with 30 TEX. ADMIN. CODE § 213.8(c) because the WPAP does not authorize any waste disposal wells or other injection wells that transect or terminate in the Edwards Aquifer.

Without any references to Vulcan's WPAP application or approved WPAP, Movants speculatively assume that the unidentified "boreholes which Vulcan proposes to complete and insert ANFO within" would someday in the future constitute a prohibited injection well in the Edwards Aquifer.⁹⁷ Movants' assumptions about injection wells have no connection to Vulcan's WPAP application, the approved WPAP, or any particular criteria related to the TCEQ ED's decision to approve Vulcan's WPAP.

As previously discussed, the method of using a blasting agent for mining activities is not within the scope of regulated activity under the TCEQ Edwards Aquifer rules.⁹⁸ The existence on Vulcan's property of a borehole does not, without more, support a conclusion that Vulcan would take actions to either complete any well at the borehole much less inject any fluid material into the aquifer water table. The pit depth limit based on RG-500 guidance and established in Vulcan's approved WPAP is at least 25 feet above the groundwater elevation,⁹⁹ a measure that serves to protect the aquifer.

Movants' complaints related to future supposed mining or blasting activity are outside the scope of Vulcan's WPAP application and approved WPAP. The TCEQ Commissioners should therefore not give any consideration to them.¹⁰⁰

⁹⁷ PHCE MTO at 29-30; Landowners MTO at 26-27 (citing 30 TEX. ADMIN. CODE § 213.8(c)).

⁹⁸ See 30 TEX. ADMIN. CODE § 213.3(28) (defining "regulated activity").

⁹⁹ Vulcan's WPAP Application, General Information Form, Attachment C (Project Description); TCEQ RG-500 at 2, 2.1.

¹⁰⁰ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan's WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

VI. Endangered Species Concerns Are Outside the Scope of the EAPP and Vulcan's WPAP

TCEQ lacks jurisdiction to enforce the federal Endangered Species Act.¹⁰¹ Vulcan's approved WPAP and TCEQ's EAPP rules in Chapter 213 do not address or require applicants to include measures to prevent takings of endangered species. Even though no regulated activity has taken place at the Vulcan Comal Quarry, Movants assert that the TCEQ ED's approval of Vulcan's WPAP will result in activities at the Site *in the future* that could result in a prohibited taking of a listed endangered species.¹⁰² Because endangered species are not within the scope of a WPAP application, the TCEQ Commissioners need not consider the assertions related to the Endangered Species Act in Movants' MTOs.

The hypothetical, broad-brush opinions expressed by Dr. Doyle and Dr. Smith on topics such as solubility of ammonium nitrate, decreased groundwater availability, and ecological sensitivity of the Site's location¹⁰³ have no connection to the applicable requirements for WPAP applications or the TCEQ ED's proper evaluation of Vulcan's WPAP application. The TCEQ Commissioners should therefore reject Movants' assertions about issues outside of TCEQ's jurisdiction in the context of the TCEQ ED's approval of Vulcan's WPAP.¹⁰⁴

¹⁰¹ The U.S. Fish and Wildlife Service enforces federal regulations pertaining to federally listed species under the Endangered Species Act while the Texas Parks and Wildlife Department enforces Texas regulations pertaining to state listed species.

¹⁰² See PHCE MTO at 31-33; Attachment D, Attachment I, Exhibit 2, Attachment J; Landowners MTO at 28-30, Attachment H, Exhibit 2, Attachment I, Attachment J; Guckian MTO at 4, Attachment A.

¹⁰³ See PHCE MTO at 31-32; Landowners MTO at 28-29.

¹⁰⁴ As discussed in Section I of this Response, relevant issues in the MTOs are limited to specific issues regarding Vulcan's WPAP application or the approved WPAP and the criteria the TCEQ ED used to evaluate such issues. 30 TEX. ADMIN. CODE §§ 50.119(d), 50.131(d).

VII. Prayer

For the reasons discussed above, Movants' MTOs fail to identify any basis for the TCEQ Commissioners to grant them. Movants' assertions of inadequacy failed to demonstrate that Vulcan's approved WPAP contained any particular deficiency necessary for the TCEQ Commissioners to consider their MTOs. Therefore, Vulcan respectfully requests that the TCEQ Commissioners deny all MTOs filed by Movants or allow them to be overruled by operation of law.

Respectfully Submitted,

By: /s/Lisa Uselton Dyar

Lisa Uselton Dyar
State Bar No. 00788570
MCGINNIS LOCHRIDGE LLP
1111 W. 6th Street, Bldg. B, Ste. 400
Austin, Texas 78703
(512) 495-6000
ldyar@mcginnislaw.com

COUNSEL FOR VULCAN
CONSTRUCTION MATERIALS, LLC

CERTIFICATE OF SERVICE

I hereby certify that a true and complete copy of the above and foregoing document was served on the parties indicated below via email on August 27, 2024.

<p>For Movant PHCE: Eric Allmon Lauren Alexander Perales, Allmon & Ice, P.C. 1206 San Antonio St. Austin, Texas 78701 eallmon@txenvirolaw.com lalexader@txenvirolaw.com</p> <p>For Movant Landowners: Eric Allmon Lauren Alexander Perales, Allmon & Ice, P.C. 1206 San Antonio St. Austin, Texas 78701 eallmon@txenvirolaw.com lalexader@txenvirolaw.com</p> <p>For Movant Guckian: Milann and Prudence Guckian 30954 FM 3009 New Braunfels, Texas 78132 bgr@gvtc.com</p> <p>For Movant Olson: Kira Olson 245 Saur Road Bulverde, Texas 78163-3909 kirafallspring@gmail.com</p> <p>For Alternative Dispute Resolution: Kyle Lucas TCEQ Alternative Dispute Resolution MC 222 P.O. Box 13087 Austin, Texas 78711-3087 512/239-0687 FAX 512-239-4015 Kyle.lucas@tceq.texas.gov</p>	<p>For the Executive Director: Michael Parr TCEQ Environmental Law Division MC 173 P.O. Box 13087 Austin, Texas 78711-3087 michael.parr@tceq.texas.gov</p> <p>Lori Wilson Edwards Aquifer Protection Program TCEQ Austin Regional Office MC R11 P.O. Box 13087 Austin, Texas 78711-3087 Lillian.Butler@tceq.texas.gov</p> <p>Ryan Vise TCEQ External Relations Division MC 118 P.O. Box 13087 Austin, Texas 78711-3087 pep@tceq.texas.gov</p> <p>For the Office of Public Interest Counsel: Eli Martinez Josiah T. Mercer TCEQ Office of Public Interest Counsel MC 103 P.O. Box 13087 Austin, Texas 78711-3087 eli.martinez@tceq.texas.gov josiah.mercer@tceq.texas.gov</p> <p>For the Office of Chief Clerk: Docket Clerk TCEQ Office of Chief Clerk MC 105 P.O. Box 13087 Austin, Texas 78711-3087 512/239-3300 FAX 512/239-3311 https://www14.tceq.texas.gov/epic/efiling/</p>
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/s/Lisa Uselton Dyar
Lisa Uselton Dyar

ATTACHMENT A

Affidavit of Henry Stultz III, P.G.

TCEQ DOCKET NO. 2024-1115-EAQ

IN THE MATTER OF EDWARDS AQUIFER WATER POLLUTION ABATEMENT PLAN NO. 13001906 BY VULCAN CONSTRUCTION MATERIALS, LLC	§ § § § §	BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
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AFFIDAVIT OF HENRY STULTZ III, P.G.

STATE OF TEXAS

COUNTY OF BEXAR

BEFORE ME, the undersigned notary public, on this day personally appeared Henry Stultz III, P.G., who known to me to be the person whose name is subscribed below, and who after being duly sworn by me, did upon his oath, state and depose as follows:

1. My name is Henry Stultz III, P.G. I am over 21 years of age, am of sound mind, and am fully competent to make this affidavit. Each statement contained in this affidavit is based upon my personal knowledge, and each statement is true and correct.
2. I am a licensed Professional Geoscientist in the State of Texas and a Project Geoscientist at Pape-Dawson Engineers ("***Pape-Dawson***"). I maintain my current P.G. license No. 12121 with the Texas Board of Professional Geoscientists in accordance with its requirements for professional practice. A P.G. license is required by the Texas Commission on Environmental Quality ("***TCEQ***") rule 30 TEX. ADMIN. CODE § 213.3(21) for Geologic Assessments ("***GA***") for Edwards Aquifer Protection Plan ("***EAPP***") Water Pollution Abatement Plan ("***WPAP***") applications.
3. I have more than 19 years of professional experience as a geoscientist, more than 13 of those years conducting GAs for EAPP WPAP applications under the applicable provisions of 30 TEX. ADMIN. CODE Chapter 213 and related TCEQ guidance. During my career, I have prepared or supervised the preparation of more than 150 EAPP GAs covering more than 5,000 acres of karst terrain and have coordinated with regulatory agencies such as TCEQ. Through this work, I have developed specific expertise evaluating sensitive karst features consistent with TCEQ's guidance in *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones* (2004) (the "***GA Instructions***"). My training and experience in groundwater hydrology and geoscience enable me to make sound professional judgments regarding the identification of sensitive features located in the recharge zone of the Edwards Aquifer, as required by 30 TEX.

ADMIN. CODE § 213.5(b). My professional qualifications are further described in my resume, which is attached to this affidavit.

4. Pape-Dawson Consulting Engineers, LLC ("***Pape-Dawson***") is the authorized representative of Vulcan Construction Materials, LLC ("***Vulcan***") for the purpose of preparing and submitting Vulcan's March 21, 2024 application for WPAP No. 13001906 to the TCEQ for review and approval of regulated activities for the Vulcan Comal Quarry site (the "***Site***") in Comal County, Texas. I am the Pape-Dawson geoscientist of record for and performed the GA for Vulcan's WPAP application. I also reviewed and supported Pape-Dawson's June 3, 2024, June 21, 2024, July 1, 2024, and July 3, 2024 responses to the TCEQ's May 20, 2024, June 11, 2024, June 28, 2024, and July 2, 2024 technical notices of deficiencies and information requests ("***NODs***"), which collectively constitute Vulcan's WPAP application.
5. Based on my professional experience and expertise preparing or supervising GAs for WPAP applications consistent with the applicable provisions of 30 TEX. ADMIN. CODE Chapter 213 and related TCEQ guidance:
 - a. The TCEQ Executive Director ("***TCEQ ED***") implements the EAPP through its rules in 30 TEX. ADMIN. CODE Chapter 213 and related guidance. The EAPP is designed to authorize activities through WPAPs that protect water quality and recharge capabilities of the Edwards Aquifer, and includes engineering, geologic, and technical requirements to do so;
 - b. I prepared the GA in Vulcan's WPAP application consistent with the methodology and requirements in the GA Instructions. I followed the procedures dictated by the GA Instructions, researched information, performed a field survey at the Site from July 10, 2019 through September 17, 2019, evaluated data, returned to the Site as necessary, developed conclusions, and prepared a report of geologic feature assessments and recommendations.
 - c. In accordance with the GA Instructions, I recorded all observed sinkholes on the Site as sensitive features in the GA. I did not identify any injection wells on the Site. The GA in Vulcan's WPAP application complies with the applicable provisions of 30 TEX. ADMIN. CODE Chapter 213 and related TCEQ guidance;
 - d. TCEQ ED staff in the EAPP processed and reviewed the GA in Vulcan's WPAP application consistent with how they process and review all other GAs for WPAP applications on which I have worked or for which I have knowledge. It is common for TCEQ ED staff in the EAPP to send NODs like those identified above to WPAP applicants. NODs for a WPAP application show that TCEQ EAPP staff are conducting a thorough and detailed review of a WPAP application, including the GA, to ensure WPAP applications comply with applicable requirements in TCEQ rules and guidance; and

- e. Since Vulcan's GA and WPAP application were prepared in accordance with the applicable provisions of 30 TEX. ADMIN. CODE Chapter 213 and related TCEQ guidance, reviewed extensively by TCEQ ED staff in the EAPP, and then approved by the TCEQ ED, Vulcan has demonstrated that its WPAP is protective of water quality and recharge capabilities of the Edwards Aquifer.

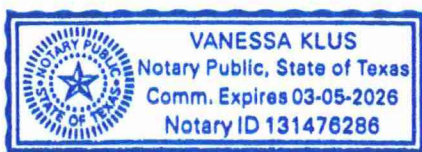
Therefore, in my opinion and based on my experience and expertise with GAs for WPAP applications, 30 TEX. ADMIN. CODE Chapter 213, and related TCEQ guidance, the TCEQ ED properly approved Vulcan's WPAP application.

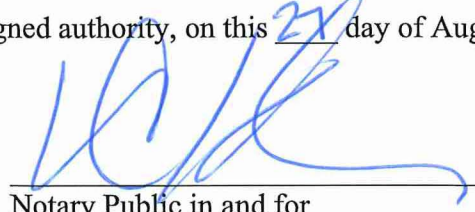
- 6. I have reviewed and evaluated the assertions in the Motions to Overturn the TCEQ ED's decision to approve Vulcan's WPAP application ("**MTO**") filed by Preserve Our Hill Country Environment and Preserve Our Hill Country Environment Foundation, landowners Robert Carrillo, Cheryl Johnson, John Casimir Kucewicz Jr., and Douglas E. Smith, Milann and Prudence Guckian, and Kira Olson (collectively, the "**Movants**"). Following my review and evaluation of the MTOs, I continue to hold the same opinions described in Paragraph 4 above.
- 7. I have also reviewed Vulcan's Response to the MTOs, and I agree that all statements therein are accurate, specifically including the following:
 - a. TCEQ defines "sensitive features" as permeable geologic or manmade features located on the Edwards Aquifer recharge zone or transition zone where a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer exists and rapid infiltration to the subsurface may occur. In his affidavit and report, Dr. Brian Smith's use of the term "sensitive feature" is incorrect. Movants failed to include any specific documentation in their MTOs to support Smith's claim of the number and types of so-called "sensitive" features in the 158-acre tract.
 - b. The geomorphology of a project area does not presume equal distribution of features in that area, even within the same geologic formation. Porosity of formations can vary over local distances. For example, burrowing organisms may be local to a small area but absent in nearby areas, affecting the porosity in those areas separately.
 - c. Analysis of the relative infiltration rate in an WPAP GA for the identified features is critically informed by a geologist's field-based assessment and visual observations of karst terrain at the project site, TCEQ's established criteria in the GA Instructions for evaluating relative infiltration rate, and professional judgment is checked by referring to the flowchart on page 13 of the GA Instructions.
 - d. Buffer areas in the WPAP serve to preserve water quality and protect sensitive features identified in the GA.

Further, affiant sayeth not.


Henry Stultz III, P.G.

Sworn to and signed before me, the undersigned authority, on this 27 day of August 2024.




Notary Public in and for
The State of Texas

My Commission Expires: 3-5-2026

Commission No. 131476286