VIA ELECTRONIC MAIL TO: david.sheppard@denbury.com

David E. Sheppard Executive Vice President and Chief Operating Officer Denbury Gulf Coast Pipelines, LLC 5851 Legacy Circle, Suite 1200 Plano, Texas 75024

Re: CPF No. 4-2022-017-NOPV

Dear Mr. Sheppard:

Enclosed please find the Consent Order incorporating the terms of the Consent Agreement between the Pipeline and Hazardous Materials Safety Administration (PHMSA) and Denbury Gulf Coast Pipelines, LLC, which was executed on March 24, 2023. Service of the Consent Order and Consent Agreement by electronic mail is deemed effective upon the date of transmission and acknowledgment of receipt, or as otherwise provided under 49 C.F.R. § 190.5.

Thank you for your cooperation in this matter.

Sincerely,

Alan K. Mayberry Associate Administrator for Pipeline Safety

Enclosure

cc: Mr. Bryan Lethcoe, Director, Southwest Region, Office of Pipeline Safety, PHMSA Mr. George C. Hopkins, Counsel for Denbury Gulf Coast Pipelines, LLC, Vinson & Elkins, ghopkins@velaw.com

CONFIRMATION OF RECEIPT REQUESTED

U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION OFFICE OF PIPELINE SAFETY WASHINGTON, D.C. 20590

In the Matter of Denbury Gulf Coast Pipelines, LLC, Respondent.)) (CPF No. 4-2022-017-NOPV)))
CONSENT	ORDER
By letter dated May 26, 2022, the Pipeline and Haz of Pipeline Safety, issued a Notice of Probable Vi Compliance Order ("Notice") to Denbury Gulf Co	iolation, Proposed Civil Penalty, and Proposed
On July 25, 2022, pursuant to 49 C.F.R. § 190.208, a Request for Settlement Conference and Hearing discussions that resulted in the Consent Agreement that settles all of the allegations in the Notice.	g, after which the parties engaged in settlement
Accordingly, the Consent Agreement is hereby ap Order. Denbury is hereby ordered to comply with immediately.	- · · · · · · · · · · · · · · · · · · ·
Pursuant to 49 U.S.C. § 60101, et seq., failure assessment of civil penalties as set forth in 49 C.F.	± *
The terms and conditions of this Order are effects § 190.5.	ive upon service in accordance with 49 C.F.R.
Alan K. Mayberry Associate Administrator for Pipeline Safety	Date Issued

U.S. DEPARTMENT OF TRANSPORTATION PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION OFFICE OF PIPELINE SAFETY WASHINGTON, D.C. 20590

In the Matter of)	
)	
Denbury Gulf Coast Pipelines, LLC,)	CPF No. 4-2022-017-NOPV
)	
Respondent.)	
)	

CONSENT AGREEMENT

On May 26, 2022, pursuant to 49 C.F.R. § 190.207, the Pipeline and Hazardous Materials Safety Administration ("PHMSA"), Office of Pipeline Safety ("OPS" or "Agency"), issued a Notice of Probable Violation, Proposed Civil Penalty, and Proposed Compliance Order ("Notice") to Denbury Gulf Coast Pipelines, LLC ("Denbury" or "Respondent"). The Notice alleged that Respondent committed probable violations of 49 C.F.R. Part 195, proposed a civil penalty, and proposed certain actions be taken by Denbury. The claims in the Notice relate to a release of CO₂ on February 22, 2020, from Denbury's pipeline in the vicinity of Satartia, Mississippi including Denbury's associated response and reporting related to the incident (the "Satartia Release").

After receiving an extension of time to respond, on July 25, 2022, Denbury responded to the Notice by timely submitting a Request for Settlement Conference and Hearing pursuant to 49 C.F.R. § 190.208(a)(4). Settlement discussions were held virtually on August 10, August 19, and September 22, 2022.

As a result of these settlement discussions, PHMSA and Denbury (collectively, the "Parties") agreed that settlement of the Notice will avoid further administrative proceedings or litigation and will serve the public interest by promoting safety and protection of the environment. Pursuant to 49 C.F.R. Part 190, and upon consent and agreement of Denbury and PHMSA, the Parties hereby agree as follows:

I. General Provisions

1. Respondent acknowledges that it is the operator of a 111-mile CO₂ pipeline that runs from Jackson Dome, Mississippi to Delhi, Louisiana (the "Delta Pipeline") and that the Delta Pipeline is subject to the jurisdiction of the federal pipeline safety laws, 49 U.S.C. § 60101, et seq., including the regulations and administrative orders issued thereunder. For purposes of this Consent Agreement ("Agreement"), Respondent acknowledges that it received proper notice of PHMSA's action in this proceeding and that the Notice states claims upon which relief may be

granted pursuant to 49 U.S.C. § 60101, et seq., including the regulations and orders issued thereunder.

- 2. After Denbury returns this signed Agreement to PHMSA, the Agency's representative will present it to the Associate Administrator for Pipeline Safety, recommending that the Associate Administrator adopt the terms of this Agreement by issuing an administrative order ("Consent Order" or "Order") incorporating the terms of this Agreement. The terms of this Agreement constitute an offer of settlement until a Consent Order is issued by the Associate Administrator.
- 3. Respondent consents to the issuance of the Consent Order, and hereby waives any further procedural requirements with respect to its issuance. Respondent waives all rights to contest the adequacy of notice, or the validity of the Consent Order or this Agreement, including all rights to administrative or judicial hearings or appeals, except as set forth herein. Respondent agrees to withdraw its request for an administrative hearing regarding the Notice.
- 4. This Agreement shall apply to and be binding upon PHMSA, and upon Denbury, its officers, directors, and employees, and its successors, assigns, or other entities or persons otherwise bound by law. Respondent agrees to provide a copy of this Agreement and any incorporated compliance orders and schedules to all of Denbury's officers, employees, and agents whose duties might reasonably include compliance with this Agreement.
- 5. This Agreement constitutes the final, complete, and exclusive agreement and understanding between the Parties with respect to the settlement embodied in this Agreement. PHMSA acknowledges that the claims asserted in the Notice constitute all claims of probable violations that it will assert against Denbury arising out of the Satartia Release. The Parties acknowledge that there are no representations, agreements, or understandings relating to settlement other than those expressly contained in this Agreement, except that the terms of this Agreement may be construed by reference to the Notice.
- 6. Nothing in this Agreement affects or relieves Respondent of its responsibility to comply with all applicable requirements of the federal pipeline safety laws, 49 U.S.C. § 60101, et seq., and the regulations and orders issued thereunder. Nothing in this Agreement alters PHMSA's right of access, entry, inspection, and information gathering or PHMSA's authority to bring enforcement actions against Denbury pursuant to the federal pipeline safety laws, the regulations and orders issued thereunder, or any other provision of federal or state law except as otherwise resolved through this Consent Order.
- 7. For all direct transfers of complete ownership or operating responsibility of the Delta Pipeline which occur while this Agreement is in effect, Denbury will provide a copy of this Agreement to the prospective transferee at least 30 days prior to such transfer. Denbury will provide written notice of the transfer to the Director no later than 60 days after the transfer occurs, provided, however, that nothing herein shall require Denbury to provide such notice to the Director in connection with financing or other commercial transactions involving the pipeline that include the creation of secured interests.

- 8. This Agreement does not waive or modify any federal, state, or local laws or regulations that are applicable to the Delta Pipeline. This Agreement is not a permit, or a modification of any permit, under any federal, state, or local laws or regulations. Denbury remains responsible for achieving and maintaining compliance with all applicable federal, state, and local laws, regulations, and permits.
- 9. This Agreement does not create rights in, or grant any cause of action to, any third party that is not a party to this Agreement. The U.S. Department of Transportation is not liable for any injuries or damages to persons or property arising from acts or omissions of Respondent or its officers, employees, or agents carrying out the work required by this Agreement. Denbury agrees to hold harmless the U.S. Department of Transportation, its officers, employees, agents, and representatives from any and all causes of action arising from any acts or omissions of Respondent or its contractors in carrying out any work required by this Agreement.
- 10. Respondent does not admit to any of the alleged violations or risks identified in the Notice and has provided PHMSA a detailed response outlining its position. However, for the purposes of this Agreement, Respondent agrees to the findings of violation, and agrees to address the alleged violations and risks identified in the Notice by completing the actions specified in Section VI of this Agreement (Compliance Requirements) and to abide by the terms of this Agreement.
- 11. Except as set forth herein, this Agreement does not constitute a finding of violation of any federal law or regulation and may not be used in any civil proceeding of any kind as evidence or proof of any fact, fault or liability, or as evidence of a violation of any law, rule, regulation, or requirement, except in a proceeding to enforce the provisions of this Agreement or in future PHMSA enforcement actions. Respondent does not admit any allegation or conclusion in the Notice or this Agreement and Order, but agrees, for purposes of this Agreement and Order, to address the alleged risk conditions by completing the terms of this Agreement.

II. <u>Definitions</u>

- 12. The "Director" means the Director, Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety, Southwest Region. The Director's address is 8701 S. Gessner, Suite 630, Houston, TX 77074.
- 13. The "Satartia Release" or "Failure" means the release of carbon dioxide that occurred on Denbury's Delta Pipeline in the vicinity of Satartia, Mississippi, including Denbury's associated response, which Denbury reported to the National Response Center on February 22, 2020.

III. Findings of Violations

14. <u>Item 2 of the Notice</u>: With respect to Item 2, the Notice alleged a violation of 49 C.F.R. § 195.401(b)(1), which Denbury contested. Denbury acknowledges that portions of its pipeline, including the segment of the Delta Pipeline near the failure site, were subject to erosion and sloughing type geohazard risks but failed to recognize this particular geohazard and the associated risk prior to the Satartia Release. Given this acknowledgment, PHMSA instead finds that Denbury violated 49 C.F.R. § 195.402(c)(13) by failing to review its procedures for

monitoring and addressing geohazard risks to determine their effectiveness and by failing to correct deficiencies in the geohazard program. Due to the failure to recognize certain geohazard risks, Denbury also failed to review and revise its procedures in order to ensure that they involved comprehensive measures to detect and mitigate these geohazard risks. This finding of violation shall be considered by PHMSA as a prior offense in any future PHMSA enforcement action taken against Respondent.

- 15. Item 3 of the Notice: With respect to Item 3, the Notice alleged a violation of 49 C.F.R. § 195.402(c)(12) and (e)(7), which Denbury contested. PHMSA finds that Denbury violated 49 C.F.R. § 195.402(c)(12) and (e)(7) by its failure to formally meet with the Tri-Community Volunteer Fire Department as part of its liaison efforts. Information from Denbury demonstrates that Denbury met with relevant emergency responders at the Yazoo County level as part of its liaison efforts and Public Awareness program, but failed to meet formally with the Tri-Community Volunteer Fire Department because Denbury had not identified Satartia as a "could affect" High Consequence Area ("HCA") for this segment. Although Denbury officials had informal contacts with the head of the Fire Department, those contacts were not sufficient to advise and consult on all topics required to be addressed. This finding of violation shall be considered by PHMSA as a prior offense in any future PHMSA enforcement action taken against Respondent.
- 16. <u>Item 4 of the Notice</u>: With respect to Item 4, the Notice alleged a violation of 49 C.F.R. § 195.408, which Denbury contested. Notwithstanding Denbury's objections and denial, PHMSA finds that Denbury violated 49 C.F.R. § 195.408 because it failed to establish communication with local fire, police, and other appropriate public officials during this emergency condition. Denbury became aware of SCADA data suggesting a potential significant pressure drop and immediately dispatched Operations Personnel to confirm whether there was a release and to identify its location. However, because the location of the release had not been confirmed or identified, Denbury did not immediately reach out to the local responders and no external contact with emergency responders occurred until Denbury staff were contacted by the local fire chief approximately 42 minutes after the SCADA indication. This finding of violation shall be considered by PHMSA as a prior offense in any future PHMSA enforcement action taken against Respondent.
- 17. **Item 5 of the Notice**: With respect to Item 5, the Notice alleged a violation of 49 C.F.R. § 195.412, which Denbury contested. Notwithstanding Denbury's objections and denial, PHMSA finds that Denbury violated 49 C.F.R. § 195.412 by failing to conduct adequate right-of-way inspections. The aerial patrolling program failed to record in at least one location on the Delta Pipeline the observation of a sloughing condition that reflected a potential geohazard condition that should have been recorded and followed-up on. In the area where the pipeline rupture occurred, Denbury had not identified any conditions associated with geohazards that were visible in the right-of-way before the event but that were not recorded on the aerial patrolling reports. This finding of violation shall be considered by PHMSA as a prior offense in any future PHMSA enforcement action taken against Respondent.
- 18. <u>Item 6 of the Notice</u>: With respect to Item 6, the Notice alleged a violation of 49 C.F.R. § 195.440, which Denbury contested. PHMSA finds that with respect to the Satartia area, Denbury violated 49 C.F.R. § 195.440 by failing to conduct the activities described in both its written operations and maintenance (O&M) plan and its Public Awareness and Damage Prevention

Program developed to comply with § 195.440 with respect to the town of Satartia. Specifically, the events of February 22, 2020 showed that the earlier PHAST dispersion analysis was wrong and that the town of Satartia was a "could-affect" HCA and should have been included in Denbury's Public Awareness and Damage Prevention Program. Denbury also had not chosen as a discretionary matter to increase its buffer zone which it could have done under its policy, notwithstanding the modeling that showed Satartia to be outside the expected impact zone. This finding of violation shall be considered by PHMSA as a prior offense in any future PHMSA enforcement action taken against Respondent.

- 19. <u>Item 7 of the Notice</u>: With respect to Item 7, the Notice alleged a violation of 49 C.F.R. § 195.452(d), which Denbury contested. Denbury now considers Satartia as being in a "could affect" HCA because Denbury has reassessed all segments on all of its lines that are located within two miles of an HCA where the terrain creates a risk that a leak of carbon dioxide "could affect" an HCA by supplementing its air dispersion modeling with an overland spread analysis. In consideration of Denbury's agreement to the other findings of violation and remaining terms of the agreement, PHMSA withdraws the alleged violation of § 195.452(d). However, Denbury agrees to perform the proposed Compliance Requirements for Item 7, as described below.
- 20. <u>Item 8 of the Notice</u>: With respect to Item 8, the Notice alleged a violation of 49 C.F.R. § 195.452(f)(6) and (i)(1), which Denbury contested. Notwithstanding Denbury's objections and denial, PHMSA finds that Denbury violated 49 C.F.R. § 195.452(f)(6) and (i)(1) by failing to conduct a risk analysis that evaluated geohazards and by failing to identify and take preventive and mitigative measures to address geohazard risks in all HCAs and "could affect" HCAs. This finding of violation shall be considered by PHMSA as a prior offense in any future PHMSA enforcement action taken against Respondent.

IV. <u>Civil Penalties</u>

- 21. <u>Item 2 of the Notice</u>: With respect to Item 2, the Notice proposed a civil penalty of \$2,251,334. With respect to culpability, Denbury asserted that the comments from the District Manager were not referring to geohazards at the failure location. Therefore, PHMSA finds it appropriate to reduce the culpability determination to "[t]he operator failed to comply with an applicable requirement." Without admission, Respondent agrees to pay a reduced civil penalty of \$1,935,300 for Item 2 of the Notice.
- 22. <u>Item 3 of the Notice</u>: With respect to Item 3, the Notice proposed a civil penalty of \$46,600. Without admission, Respondent agrees to pay a civil penalty of \$46,600 for Item 3 as proposed in the Notice.
- 23. <u>Item 4 of the Notice</u>: With respect to Item 4, the Notice proposed a civil penalty of \$46,600. Without admission, Respondent agrees to pay a civil penalty of \$46,600 for Item 4 as proposed in the Notice.
- 24. <u>Item 5 of the Notice</u>: With respect to Item 5, the Notice proposed a civil penalty of \$46,600. Without admission, Respondent agrees to pay a civil penalty of \$46,600 for Item 5 as proposed in the Notice.

- 25. <u>Item 6 of the Notice</u>: With respect to Item 6, the Notice proposed a civil penalty of \$46,600. Without admission, Respondent agrees to pay a civil penalty of \$46,600 for Item 6 as proposed in the Notice.
- 26. <u>Item 7 of the Notice</u>: With respect to Item 7, the Notice proposed a civil penalty of \$46,600. For the reasons set forth above, PHMSA withdraws the underlying allegation of violation for this Item. As such, PHMSA also withdraws the civil penalty for Item 7 of the Notice.
- 27. <u>Item 8 of the Notice</u>: With respect to Item 8, the Notice proposed a civil penalty of \$1,382,400. With respect to gravity, PHMSA reduces the gravity of the violation from "increased the severity of an accident/incident" to "occurred within an HCA" in light of information presented that had Denbury conducted a geohazard risk analysis, it would not have decreased the "severity" of the release. Without admission, Respondent agrees to pay a reduced civil penalty of \$746,400 for Item 8 of the Notice.
- 28. Respondent agrees to pay an adjusted civil penalty amount of \$2,868,100 within 20 calendar days of the Effective Date pursuant to the instructions PHMSA has provided for payment.

V. Warning Item

29. <u>Item 1 of the Notice</u>: With respect to Item 1 of the Notice, alleging a probable violation of 49 C.F.R. § 195.52, this Item was issued as a warning item. Respondent accepts the warning as alleged in the Notice.

VI. <u>Compliance Requirements</u>

- 30. <u>Items 2 and 8 of the Notice:</u> Denbury agrees to update its geohazard program to address hazards on all of its pipelines as well as include preventative and mitigative measures to enhance public safety and safe operation of its pipeline system. The geohazard program must include substantive information regarding hazard identification on each pipeline, assessment, remediation, and hazard recognition training for employees responsible for identifying geohazard issues.
- 31. <u>Items 3 and 6 of the Notice:</u> Utilizing the revised dispersion modeling calculations performed following the Satartia Release and taking into account all newly identified HCAs or "could affect" HCAs pipeline segments, Denbury agrees to:
 - i. Identify all federal, state, and local government organizations that may respond to a pipeline emergency that were not formerly identified and included within Denbury's liaison program and ensure that they are included within Denbury's liaison activities as specified in Denbury's manual for operations pursuant to 49 C.F.R. § 195.402(c)(12) and § 195.402(e)(7);
 - ii. Identify all federal, state, and local government organizations that may respond to a pipeline emergency that were not formerly identified and included within Denbury's Public Awareness program and ensure that they are included within Denbury's Public Awareness program as specified in Denbury's manual for operations pursuant to 49 C.F.R. § 195.440;

- iii. Identify a comprehensive list of stakeholders for the Delta Pipeline and revise its written procedure OMO 0232 Damage Prevention and Public Awareness Section 3.3 Stakeholder Groups (Revised 2/12/2012);
- iv. Meet with all federal, state, and local government organizations that may respond to a pipeline emergency that were not formerly identified and included within either Denbury's liaison program or Public Awareness program, or that were not on the prior list of stakeholders in Section 3.3 Stakeholder Groups, in each case to ensure that they are aware of the Delta Pipeline in their response areas and provide a copy of the district area emergency response procedures.
- v. Maintain documentation of its compliance with the requirements of paragraph 31 (i) through (iv) and submit such documentation to the Director; which shall include:
 - (1) Record of invitation to each local responder;
 - (2) Name and contact information (address, county, and phone numbers);
 - (3) Attendance sheet with signatures of those in attendance;
 - (4) Procedures and other information covered/discussed;
 - (5) Record of documents provided to attendees; and
 - (6) Record of documents mailed/provided to non-attendees.
- 32. <u>Item 5 of the Notice:</u> Denbury agrees to complete a review of its written procedure O&M 0215, Patrolling and Leak Detection, and, based on that review, to include within O&M 0215 additional guidance for the identification of potential geohazard sites and the training of personnel on the amended procedures.
- 33. <u>Items 7 and 8 of the Notice:</u> Denbury agrees to update its dispersion model and buffer zone assessment by employing a model that considers the characteristics of CO₂ and the effects of the specific terrain surrounding the Delta Pipeline, including effects of both elevation changes and channeling, upon the release of CO₂ to the atmosphere. Additionally, Denbury agrees to assess the extent and coverage of potential vapor cloud releases by updating its dispersion model to allow for variable inputs relating to foreseeable weather and pipeline operating conditions. Denbury agrees to incorporate newly identified HCAs or "could affect" HCA pipeline segments in its Integrity Management Program and Public Awareness Program and conduct a baseline assessment. Denbury agrees to conduct a risk analysis and will identify additional preventive and mitigative measures to enhance public safety or environmental protection for all HCAs or "could affect" HCA pipeline segments.
- 34. If PHMSA disputes either the sufficiency of Denbury's measures or the adequacy of its documentation with respect to the requirements of paragraphs 30 through 33, the parties shall

first informally attempt to resolve any disputes before engaging in dispute resolution according to paragraph 38. Unless PHMSA presents any dispute regarding the sufficiency of Denbury's measures or the adequacy of its documentation with respect to the above paragraphs within 60 days, the Director will promptly confirm in writing to Denbury that the obligations in paragraphs 30 through 33 are satisfied in accordance with paragraph 41.

- 35. Denbury must complete item v in paragraph 31 within 60 days of the Effective Date. The Director will determine if such compliance requirement is adequate within 60 days after submission and timely fulfill its obligations pursuant to Section XI.
- 36. Denbury agrees to maintain documentation of the safety improvement costs associated with fulfilling this Compliance Order and submit the total to the Director. It is requested that these costs be reported in two categories: 1) total cost associated with preparation/revision of plans, procedures, studies, and analyses, and 2) the total cost associated with replacements, additions, and other changes to pipeline infrastructure.

VII. Enforcement

37. This Agreement is subject to all enforcement authorities available to PHMSA under 49 U.S.C. § 60101, *et seq.*, and 49 C.F.R. Part 190, including administrative civil penalties as specified in 49 U.S.C. § 60122 and 49 C.F.R. § 190.223 (presently up to \$239,142 per violation for each day the violation continues) and referral of the case to the Attorney General for judicial enforcement, if PHMSA determines that Respondent is not complying with the terms of this Agreement in accordance with determinations made by the Director, or if appealed, in accordance with decisions of the Associate Administrator. The maximum administrative civil penalty amounts are adjusted annually for inflation. *See* 49 C.F.R. § 190.223.

VIII. Dispute Resolution

38. The Director and Denbury will informally attempt to resolve any disputes arising under this Agreement, including, but not limited to, any decision of the Director. If Denbury and the Director are unable to informally resolve the dispute within 15 calendar days after the dispute is first raised, in writing, Denbury may submit a written request for a determination resolving the dispute from the Associate Administrator for Pipeline Safety. The written request for a determination must be provided to the Director, counsel for the Southwest Region, and to the Associate Administrator no later than 10 calendar days after the 15-day deadline for informal resolution referenced in this paragraph. Along with its request, Denbury must provide the Associate Administrator with all information Denbury believes is relevant to the dispute. Determinations of the Associate Administrator under this paragraph constitute final Agency action. The existence of a dispute and PHMSA's consideration of matters placed in dispute, will not excuse, toll, or suspend any term or timeframe for completion of any work to be performed under this Agreement during the pendency of the dispute resolution process, except as agreed upon by the Director or Associate Administrator in writing.

IX. <u>Effective Date</u>

39. The term "Effective Date," as used herein, is the date on which the Consent Order is issued by the Associate Administrator, PHMSA, incorporating the terms of this Agreement.

X. Modification

40. The terms of this Agreement may be modified by mutual agreement of the Parties. Such modifications must be in writing and signed by both parties.

XI. <u>Termination</u>

41. This Agreement will remain in effect until the Compliance Requirements in Section VI are satisfied, as reasonably and timely determined by the Director. The Consent Agreement shall not terminate until the Director confirms, in writing, that the Consent Agreement is terminated in accordance with this paragraph. Nothing in this Agreement prevents Respondent from completing any of the obligations earlier than the deadlines provided for in this Agreement or seeking dispute resolution regarding the question of whether the Compliance Requirements have been satisfied.

XII. Ratification

- 42. The Parties' undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this Agreement and to execute and legally bind such party to this document.
 - 43. The Parties hereby agree to all findings, conditions, and terms of this Agreement.

For Denbury Gulf Coast Pipelines, LLC:

David E. Sheppard
Executive Vice President and Chief Operating Officer
Date
For PHMSA:
Bryan Lethcoe
Director, Southwest Region
Date