August 29, 2023

Via E-mail

Mr. David Albright and Ms. Abigail Farrell
Manager, Groundwater Protection Section
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105

Re: Response to EPA Request for Confidential Business Information Substantiation from an Affected Business, Underground Injection Control (UIC) Class VI Permit Application No. R9UIC-CA6-FY23-3.1 to 3.8 (CTV IV)

Dear Mr. Albright and Ms. Farrell,

I am responding to your letter dated July 19, 2023, requesting substantiation of claims of confidential business information ("CBI") asserted in conjunction with Safe Drinking Water Act ("SDWA") Underground Injection Control ("UIC") Program Class VI permit application No. R9UIC-CA6-FY23-3.1 to 3.8 for the Carbon TerraVault IV (CTV IV) Storage Project, submitted to the U.S. Environmental Protection Agency Region 9 ("EPA") by Carbon TerraVault Holdings, LLC, a wholly owned subsidiary of California Resources Corporation ("CRC," together the "Companies"). This response is submitted timely based on your email of August 7, 2023, granting a 15 working day extension to the original response deadline of August 9, 2023 (*i.e.,* 15 working days after July 19, 2023).[1] Provided below is the Companies' response to EPA's request and justification regarding the need to protect the Companies' CBI from disclosure under the Freedom of Information Act ("FOIA"), 5 U.S.C. § 552.

As described below, the information identified as CBI in CRC's Class VI permit application No. R9UIC-CA6-FY23-3.1 to 3.8 (CTV IV) should not be disclosed to the public because the information is exempt from disclosure under FOIA, 5 U.S.C. § 552. Specifically, the information constitutes "commercial or financial information obtained from a person and privileged or confidential," *id.* § 552(b)(4), the disclosure of which would harm an interest protected by exemptions enumerated in the statute. EPA thus can and should withhold this information from disclosure. *Id.* § 552(a)(8)(A). This conclusion is supported by the discussion below, which is organized as follows: (I) a summary of the CBI submitted as part of Class VI permit application No. R9UIC-CA6-FY23-3.1 to 3.8 (CTV IV), (II) a recitation of the relevant legal requirements for exemptions from disclosure under FOIA and application to the CBI submitted, and (III) responses to the specific questions presented in EPA's July 19, 2023 letter.

[1] Working days exclude weekends and federal holidays. 40 C.F.R. § 2.201.

Also, as a threshold matter, the Companies are unaware of whether EPA has received a FOIA request seeking all or any portion of the CBI submitted by the Companies. In the event that EPA has received or receives such a FOIA request, the Companies hereby request that EPA withhold the information designated by the Companies as CBI when responding to any such FOIA request. And, in the event that EPA decides to release any portion of the Companies' CBI, the Companies hereby request that EPA provide them with sufficient notice to take whatever measures the Companies deem necessary in order to prevent any such release. The Companies expressly reserve all rights to file an action in their own names and on their own behalf to prevent the release of any and all records.

I. Summary of Confidential Information Submitted

As part of the UIC Class VI permit application No. R9UIC-CA6-FY23-3.1 to 3.8 (CTV IV), the Companies submitted certain information that is confidential and the disclosure of which would harm the Companies' competitive interests. This information was thus redacted as CBI. Attachment 1 to this letter is an index of the permit application documents containing information redacted as CBI. The information claimed as CBI falls into a few general categories, including project location and size information, corrective action determinations, plugging plans, sensitive financial information, well schematics, and simulation files.

In view of the Companies' desire to effect the greatest possible transparency while maintaining necessary protections over its most critical CBI, the Companies have determined that some discrete portions of the information previously marked as CBI can instead be treated as non-confidential. Specifically, whereas the Companies previously claimed the entirety of the Financial Responsibility cost estimates as CBI, the Companies are now withdrawing the CBI claim for those tables.

Revised redacted documents containing CBI claims that generally conform to EPA's instructions to display information claimed as CBI more clearly within documents wherever possible for documents containing partial CBI claims (*i.e.*, the specific information claimed as CBI is highlighted and shown within a box without fully redacting the relevant text) are submitted herewith as attachments to this letter. No redacted version is submitted for the well simulation files, which are claimed as CBI in their entirety.

The Companies clearly asserted claims of confidentiality over the CBI at the time of submission and, moreover, provided these files to EPA *via* an alternative process to the Geologic Sequestration Data Tool ("GSDT") to ensure confidentiality. The Companies have taken efforts to limit the scope of information claimed as CBI to the greatest extent possible including redacting only specific portions of documents that contain CBI wherever possible. Moreover, while the Companies assert that information regarding the project's location and size and its Wellbore Table with Corrective Action Assessment constitute CBI that must not be disclosed at present, these CBI claims are subject to an important temporal limitation. Specifically, the Companies assert that all location and size information and the Wellbore Table with Corrective Action Assessment that has been redacted as CBI in the permit application materials are CBI now and will be until either the Companies have secured sufficient contractual arrangements both for land and storage rights in

the project area and carbon dioxide sources or EPA Region 9 issues a draft permit, whichever is earlier.

The CBI represents significant investment by the Companies in the resource and development of its technical and operational processes, and thus is of a type that customarily would be treated as confidential and in which the Companies have a clear commercial interest. Additionally, as discussed in detail below, the Companies have taken steps to ensure the CBI has actually been kept confidential, including by asserting a claim of confidentiality in submitting it to EPA and taking care to submit the CBI via a process that facilitates maintaining its confidentiality. Disclosure of the CBI, as described below, is likely to cause substantial harm to the Companies' competitive position.

II. Legal Analysis in Support of Exemption from Disclosure

The Companies object to disclosure of any portion of the CBI submitted as part of their UIC Class VI permit application No. R9UIC-CA6-FY23-3.1 to 3.8 (CTV IV) and maintained as CBI based on the discussion in Section I above because all of the CBI is exempt from disclosure under FOIA. Under FOIA, an agency shall withhold information if it "reasonably foresees that disclosure would harm an interest protected by an [enumerated] exemption" or "is prohibited by law." 5 U.S.C. § 552(a)(8)(A)(i). The Companies' CBI constitutes "trade secrets [or] commercial or financial information obtained from a person" that is "privileged or confidential," 5 U.S.C. § 552(b)(4), and is thus exempt from disclosure under an enumerated statutory exemption. Certain information—specifically, the simulation files—is also exempt from disclosure under another enumerated FOIA exemption for "geological and geophysical information and data, including maps, concerning wells," *Id.* § 552(b)(9). Disclosure of this CBI would severely harm the Companies' resource interests and its competitive position among the first movers with respect to carbon sequestration in saline reservoirs and in connection with its ability to secure contractual arrangements with certain area landowners and important sources of carbon dioxide, as well as its ability to obtain favorable terms for its financial assurance instruments. Disclosure is also prohibited by law pursuant to the Trade Secrets Act. 18 U.S.C. § 1905; *see CNA Fin. Corp. v. Donovan*, 830 F.2d 1132, 1151-52 (D.C. Cir. 1987) (finding information protected by FOIA Exemption 4 also falls within the Trade Secrets Act scope).[2] Moreover, the CBI is segregated to the greatest extent possible to allow for partial release of other information in the application while maintaining the Companies' protected interests in their CBI. Thus, consistent with FOIA and EPA's implementing regulations, EPA must not release any of the CBI in response to any current or future FOIA request(s) or otherwise.

a. The Companies' CBI is Exempt Under FOIA Exemption 4

Information protected from disclosure under Exemption 4 must be either (i) "trade secret[]" or (ii) "commercial or financial information," that is "obtained from a person," and "privileged or

[2] Whether this "co-extensive" relationship has been disturbed by the Supreme Court's broader interpretation of "confidential" information in *Food Marketing Institute v. Argus Leader* is uncertain. 139 S. Ct. 2356 (2019). Regardless, any information that met the pre-*Argus Leader* standard of confidential commercial information under Exemption 4 should remain prohibited by law from disclosure.

confidential." 5 U.S.C. § 552(b)(4). Because select portions of the Companies' CBI is trade secret, and because all of the Companies' CBI falls within the latter category of "commercial or financial information", and all of the CBI was "obtained from a person" and is "privileged or confidential," its disclosure is prohibited by law and would harm the Companies' interests, and thus must not be disclosed. *Id*. § 552(a)(8)(A)(i).

i. Trade Secret

Certain of the Companies' CBI—the simulation files—must be protected from disclosure under Exemption 4 as trade secret. Courts have interpreted "trade secret" for purposes of Exemption 4 as "a secret, commercially valuable plan, formula, process, or device that is used for the making, preparing, compounding, or processing of trade commodities and that can be said to be the end product of either innovation or substantial effort," provided there is a "direct relationship" between the trade secret and productive process. *Pub. Citizen Health Research Grp. V. FDA*, 704 F.2d 1280, 1288 (D.C. Cir. 1983); *see also Anderson v. HHS*, 907 F.2d 936, 944 (10th Cir. 1990) (adopting D.C. Circuit's "trade secret" definition) *partially abrogated on other grounds by Argus Leader,* 139 S. Ct. 2356. Trade secrets may include things such as blueprints and manufacturing process information. *See Herrick v. Garvey*, 200 F. Supp. 2d 1321, 1326 (D. Wyo. 2000), *aff'd*, 298 F.3d 1184 (10th Cir. 2002); *Citizens Comm'n on Hum. Rts v. FDA*, No. 92-5313, 1993 WL 1610471, at *7 (C.D. Cal. May 10, 1993) (finding information about drug product formulation, composition, manufacturing, and quality control to be trade secret), *aff'd in part & remanded in part on other grounds*, 45 F.3d 1325 (9th Cir. 1995); *but see Freeman v. Bureau of Land Mgmt*., 526 F. Supp. 2d 1178, 1188 (D. Or. 2007) (information on novel process for ore extraction and metals manufacturing was trade secret because process was treated as secret and could yield commercial value but cost information and ore tonnage and grade data is not trade secret).

The simulation files contain information on the Companies' models, which are proprietary and required significant investment to develop. These models are directly connected to developing the carbon sequestration wells for use and the value the Companies expect to derive out of them. The simulation files should, therefore, be deemed trade secret and subject to Exemption 4 protection from disclosure.

ii. Confidential, Commercial Information from a Person

All of the Companies' CBI also qualifies for protection from disclosure under Exemption 4 because it is "commercial or financial information," "obtained from a person" and is "confidential." 5 U.S.C. § 552(b)(9).

First, the CBI is "commercial or financial information" because, although neither FOIA nor EPA's FOIA regulations define "commercial" or "financial" with respect to Exemption 4, courts construe these terms as having their "ordinary meanings" and include information as long as the submitter has a "commercial interest" in it. *See Pub. Citizen Health Rsch. Grp. V. FDA*, 704 F.2d 1280, 1290 (D.C. Cir. 1983); see also *Starkey v. United States Dep't of Interior*, 238 F. Supp. 2d 1188, 1195 (S.D. Cal. 2002) (finding "well and water related information" is commercial or financial information). The Companies have a significant commercial interest in certain categories

of CBI, including the corrective action determinations and simulation files, which represent substantial investment in proprietary techniques to develop a commercially valuable resource and necessary corrective action measures. Finally, the Companies also have an important commercial interest in the project location and size information claimed as CBI, because they represent the Companies' ability to obtain the rights to critical lands and carbon dioxide storage lease agreements necessary for project development. The disclosure of this information—at least until the Companies have either secured sufficient contractual agreements to ensure project viability or until a draft permit must be issued—could allow keen competitors to undermine the Companies' position and compromise project viability. The CBI thus constitutes "commercial information."

Next, the CBI was "obtained from a person" within the meaning of Exemption 4 and EPA's regulations. For purposes of FOIA, a "person" means "an individual, partnership, corporation, association, or public or private organization other than an agency." 5 U.S.C. § 551(2); 40 C.F.R. § 2.201(a). The CBI was obtained by EPA from the Companies, both of which are corporate entities clearly meeting the criteria of "person."

Last, the CBI is also "confidential." Neither FOIA nor EPA's FOIA regulations define "confidential," however, the Supreme Court has established that "[a]t least where commercial or financial information is both customarily and actually treated as private by its owner and provided to the government under an assurance of privacy, the information is 'confidential' within the meaning of Exemption 4." *Food Mktg. Inst. v. Argus Leader Media*, 139 S. Ct. 2356, 2366, 204 L. Ed. 2d 742 (2019). The CBI here meets that test. As explained in more detail in Section III below in response to EPA's Questions, the CBI was developed for the purpose of the Class VI UIC permit application and represents the Companies' significant investment in the development of expertise to develop resources and determine necessary corrective action measures in view of well characteristics. The Companies are aware of competitor interest in how the Companies have developed this expertise and believe that disclosure of this CBI could thus compromise their competitive position. The project location and size information is also strictly confidential at this time because public knowledge of that information at present could allow competitors to undermine the Companies' ability to secure additional critical lands and storage rights or important carbon dioxide sources that are necessary for the project to succeed. As noted above, the confidential nature of this location and size information will change at a yet to be determined date in the future, either once the Companies have secured sufficient contractual rights to lands, storage, and carbon dioxide sources to ensure project viability, in which case the Companies will notify EPA of such developments, or when EPA Region 9 issues a draft permit necessitating public comment on aspects of the permit necessarily requiring location information. The Companies have also actually treated the CBI as private in light of the significance of the CBI, taking measures to protect it from disclosure by storing it exclusively on secure private data storage systems and by producing it to EPA only as necessary to support its permit application and, even then, via a separate submission process than the standard GSDT to ensure its continued confidential protection. The CBI thus is "confidential."

Because the CBI satisfies all the requisite elements for protection of confidential, commercial or financial information, obtained from a person under Exemption 4, it must not be disclosed. The CBI is also properly withheld from disclosure under EPA's regulations

implementing FOIA, which rely directly on the enumerated exemption list in the statute. See EPA, *Freedom of Information Act Regulations Update, Final rule*, 84 Fed. Reg. 30,028, 30,030 (June 26, 2019) (repealing EPA's regulatory list of FOIA exemptions as "unnecessary and redundant of the statute" in favor of "continu[ing] to apply the exemptions found in accordance with 5 U.S.C. 552(b) as appropriate"). EPA has specific rules governing CBI, 40 C.F.R. Part 2, Subpart B, including certain "special rules" applicable to information obtained under the Safe Drinking Water Act. *Id.* § 2.304. These special rules apply to the CBI because it was provided to EPA under a regulatory requirement issued to determine whether the person providing it is acting in compliance with the SDWA and the Companies are a person subject to a UIC program. *Id.* § 2.304(b)(1). The responses to EPA's Questions detailed in Section III below demonstrate that the CBI meets all of the substantive criteria EPA requires for use in confidentiality determinations. 40 C.F.R. §§ 2.208, 2.304(c).

b. Portions of the Companies' Information is Also Exempt Under FOIA Exemption 9

Some of the Companies' CBI also includes "geological and geophysical information and data, including maps, concerning wells," and, therefore, is exempt from disclosure under FOIA pursuant to Exemption 9. 5 U.S.C. § 552(b)(9). Under EPA's regulations, for information withheld from disclosure for reasons other than business confidentiality, EPA may determine to withhold information under one or more FOIA exemptions. 40 C.F.R. § 2.103(b); see also *Id.* §§ 2.304(f), 2.210.[3] Here, the Companies' simulation files also should be withheld from disclosure under Exemption 9.

Exemption 9 applies because the simulation files contain "geological and geophysical information." The D.C. Circuit has held that information concerning "[t]he depth and location of wells straightforwardly qualifies" under this term because it would "necessarily disclose geological or geophysical information." *AquAlliance v. United States Bureau of Reclamation*, 856 F.3d 101, 104 (D.C. Cir. 2017). Moreover, the court further explained that "the location both of groundwater deposits or flows and of aquifers or the water table," revealed from well depth and location information, "is archetypical geological and geophysical information, which is obtained through geophysical processes." *Id*. The simulation files consist of geological modeling data, revealing information about well locations and depths, and is thus clearly the "archetypical geological and geophysical information" countenanced by Exemption 9.

This portion of the Companies' CBI also concerns "wells." A well is not defined in FOIA but generally means "a 'hole or shaft sunk into the earth to obtain a fluid, such as water, oil, or natural gas,'" and includes "boreholes." *Story of Stuff Project v. United States Forest Serv*., 366 F. Supp. 3d 66, 81 (D.D.C. 2019) (quoting *Well*, Black's Law Dictionary (10th ed. 2014)). Although FOIA exemptions are construed narrowly, *Milner v. Dep't of the Navy*, 562 U.S. 562, 564 (2011), the D.C. Circuit has rejected attempts to cabin Exemption 9 so narrowly to encompass only oil and gas wells. *AquAlliance*, 856 F.3d at 105 (affirming district court decision upholding agency withholding of information regarding water well location and depth under Exemption 9). *Accord Story of Stuff Project*, 366 F. Supp. 3d at 82; *Starkey*, 238 F. Supp. 2d at 1196 (well

[3] As noted above, the Information does not pertain to contaminants in drinking water and thus is not excluded from nondisclosure. 40 C.F.R. § 2.304(f).

information about "ground water inventories, well yield in gallons per minute, and the thickness of the decomposed granite aquifer" was exempt from disclosure under Exemption 9). The Companies are unaware of any precedent pertaining specifically to carbon sequestration wells but there appears to be no reason based on existing law why the CBI would not satisfy Exemption 9's criterion of concerning "wells."

c. Disclosure of the Information Would Harm the Companies' Interests

Disclosure of the Companies' CBI would substantially harm their interests.[4] As explained more thoroughly in response to EPA's Questions in Section III below, disclosure of the CBI including its corrective action assessment and its simulation files would compromise the Companies' significant investment in the development of expertise with respect to how to interpret and execute the corrective action plan requirements for its project(s) and its unique competitive position with respect to Class VI permitting for wells located in saline reservoirs. The Companies are also aware of competitor interest in how the Companies have developed this expertise and thus believe that disclosure of this CBI could compromise their competitive position by utilizing the Companies' CBI to assess their own corrective action requirements and, ultimately, expedite development of projects in the region, increasing the competition the Companies face in securing sources of carbon dioxide. For information regarding location or size of the project, disclosure of that information at this juncture would significantly harm the Companies' ability to secure remaining surface access or storage leasing agreements in the project area or to obtain contractual arrangements with sources of carbon dioxide important to eventual project operation. As discussed above, the Companies recognize that this latter CBI claim is temporally limited because at the point when the Companies have secured sufficient contractual rights to land, storage, and key carbon dioxide sources, disclosure of the project location and size information is unlikely to cause the same existential threat to project viability as would disclosure at the present time. Even if that stage does not occur prior to issuance of a draft permit, however, the Companies recognize the necessity of inclusion of project location in a draft permit issued for public comment and believe that while such disclosure could still create risk to its competitive interests, the inability to reach draft permit issuance stage would pose a greater threat to the Companies' investment in the project and anticipated schedule. The Companies' CBI claim over the corrective action assessment tables is similarly time-limited because the Companies anticipate that by the time of draft permit issuance, the Companies' competitors will have developed independent processes for corrective action assessment. Accordingly, EPA must not and should not disclose the CBI. 5 U.S.C. § 552(a)(8)(A)(i).

d. Partial Disclosure is Already Being Made to the Greatest Extent Practicable

EPA is also required to consider if partial disclosure is possible and, if it determines it is, "take reasonable steps to segregate and release nonexempt information." 5 U.S.C. §

[4] We note that EPA's substantive criterion pertaining to whether "the disclosure of information is likely to cause substantial harm to the business's competitive position" is called into question under the Supreme Court's decision in *Argus Leader*, which explicitly rejected reading a "competitive harm" requirement into the term "confidential" under Exemption 4. *Argus Leader* 139 S. Ct. at 2363. Such questions are of no moment here, however, because this letter clearly explains why disclosure of the CBI would cause the Companies substantial harm to their competitive interests.

552(a)(8)(A)(ii); *see also* 40 C.F.R. § 2.202(f). Here, the Companies have already accomplished this by making only time-limited CBI claims regarding project location and size information and corrective action assessment tables for select portions of the vast majority of the Class VI UIC permit application materials, withdrawing the initial CBI claims over the financial assurance cost estimates, and are redacting the minimum amount of information possible while maintaining critical CBI from the application materials in versions to be submitted with the forthcoming permit application revision, as discussed above.

III. EPA Questions

EPA's July 19, 2023 letter poses 12 specific questions to the Companies with respect to each item or class of information claimed as CBI. The Companies' responses to the questions in our letter are provided below and support a finding that the Redacted Information is CBI and should be protected from disclosure.

1. **For what period of time do you request that the information be maintained as confidential (e.g., until a certain date, until the occurrence of a specified event, or permanently)? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.**

As noted above, the Companies are withdrawing their CBI claims for the financial assurance cost estimates. The Companies request that the simulation files be maintain as confidential and protected from disclosure in perpetuity. Most of the Companies' CBI claims in the Class VI permit application materials pertain to project location and size details. For the location and size information, the Companies request that each item of the CBI be maintained as confidential either until the Companies have secured sufficient contractual rights to lands and storage in the project vicinity as well as to key carbon dioxide sources such that disclosure no longer threatens project viability or until issuance of the draft permit. Similarly, the Companies request that the corrective action assessment information claimed as CBI be maintained as confidential until issuance of the draft permit.

2. **Information submitted to the EPA becomes stale over time. Please explain why EPA should protect the information you claim as confidential for the time period specified in your answer to question number 1.**

The simulation files include data and interpretation that is proprietary to the Companies for the entire life of the project, the disclosure of which could compromise the Companies' competitive position. This CBI can be used to assess the Companies' field value, reserves and as-yet undeveloped resources.

For the corrective action assessment information, the Companies believe that the requested period of confidential treatment—*i.e.*, until a draft permit is issued—will provide sufficient protection over their interest in the development of the process to assess corrective action requirements and associated plugging plan details given they are among the first movers on redeveloping saline reservoirs for use in carbon storage. The Companies anticipate that, by the time a draft permit could be issued and the claim for confidential treatment of the CBI expires, other competitors will have already developed independent processes for corrective action assessment. At

the same time, this temporally limited confidentiality claim will balance the interest of the public and stakeholders in an ability to understand and assess the Companies' plans for corrective action and well plugging.

And with respect to project location and size information, the Companies request that each item of the CBI be maintained as confidential either until the Companies have secured sufficient contractual rights to lands and storage in the project vicinity as well as to key carbon dioxide sources such that disclosure no longer threatens project viability or until issuance of the draft permit. As explained above, in the former instance, once the Companies have amassed sufficient contractual rights such that a competitor learning the location and size will no longer undercut the Companies' ability to obtain all such rights necessary for project viability, disclosure will no longer risk the Companies' ability to move forward with the project and realize its substantial investment in project development. In such a case, the Companies will notify EPA Region 9 promptly of this development. In the latter case, in which the project location and size information is disclosed concurrently with the issuance of the draft permit, as noted above, while the Companies recognize the possibility that certain contractual rights to specific carbon dioxide sources may not be secured at that point, the Companies understand the necessity of including location information at that stage to enable meaningful public notice and comment to occur and believe the risk of delays in obtaining a Class VI permit would pose a greater threat to their commercial interests and would thus outweigh the continued interest in confidentiality over project location and size information.

3. **Has EPA, another federal agency, or any court made any determination as to the confidentiality of the information? If so, please attach a copy of the determination.**

No, the CBI submitted to EPA as confidential has not necessitated any determination(s) by another such authority with respect to its confidentiality and, therefore, no such determinations have been made.

4. **Is the information contained in any publicly available material such as patents or patent applications, publicly available databases (including state databases), promotional publications, annual reports, or articles? Yes/No. If you answered "yes," please identify the publicly available information and its location (e.g., patent number or website address).**

No, the CBI submitted to EPA is not available publicly, including via any publicly available databases.

5. **Has your company taken reasonable measures to protect the information claimed as CBI? If so, please identify the measure or internal controls your business has taken to protect the information claimed as confidential:**
    a. **Non-disclosure agreement required prior to access.** Yes
    b. **Access is limited to individuals with a need-to-know.** Yes
    c. **Information is physically secured (e.g., locked in a room or cabinet) or electronically secured (encrypted, password protected, etc.).** Yes
    d. **Other internal control measures(s).** Yes **(If yes, please explain.)**

Yes, the Companies have taken reasonable measures to protect the CBI. The CBI is maintained on CRC's internal data storage systems and is not accessible by persons outside the Companies. These confidential files are stored on secure servers and in secure file locations to which access is limited to only the Companies' personnel associated with the project, each of whom have secure employee logins. Moreover, in submitting the CBI to EPA as necessary to support the Companies' permit application, the Companies took additional precaution to transmit the CBI to EPA via a manner other than the GSDT used for the remainder of the permit application materials, in order to ensure its continued confidential treatment.

6. **Does your company customarily keep the information private or closely-held? If so, please explain the basis for your response.**

This CBI and the data contained therein is always considered proprietary and confidential and thus closely-held by the Companies. As noted in response to Question 5 above, the CBI is not accessible outside of CRC's internal data storage systems.

7. **At the time you submitted the information you claimed as CBI, did EPA provide any express or implied assurance of confidentiality? If so, please explain the specific assurance(s) you received. For example, expressed assurances indicating that information will not be publicly disclosed could include legal authorities (regulation or statute), direct communications, class determinations, etc. Examples of implicit assurances could include a description of the specific context in which the information was received.**

Yes, the Companies relied on both express and implied assurances of confidentiality, as the question above describes them, at the time the CBI was submitted. Specifically, the Companies relied upon the assurances provided by relevant legal authorities, including FOIA and EPA's implementing regulations, which acknowledge explicit protections for confidential business information. 5 U.S.C. § 552(b)(4); 40 C.F.R. §§ 2.208, 2.210, and 2.304. With respect to the simulation files, the Companies also relied upon express assurances of confidentiality provided by FOIA Exemption 9, that information regarding geological and geophysical information regarding wells is exempt from disclosure. 5 U.S.C. § 552(b)(9); *see also AquAlliance v. United States Bureau of Reclamation*, 856 F.3d 101 (D.C. Cir. 2017) (finding Exemption 9 is not limited to oil and gas wells). The Companies also relied upon implied assurances of confidentiality based on the context and manner of submission of the information, which was made via a separate process – a secure FTP site shared with only EPA personnel germane to the permit application by the Companies – from the remainder of the permit application in order to ensure its confidential treatment.

8. **Did the Agency provide any expressed or implied indications at the time the information was submitted that EPA would publicly disclose the information?**

No, EPA provided no indications, either expressed or implied, at the time the Companies submitted the CBI that EPA would publicly disclose it during the time periods for which the Companies are asserting CBI claims.

9. If you believe any submitted information to be a trade secret, please state and explain the reason for your belief. Please attach copies of those pages containing such information with brackets around the text that you claim to be a trade secret.

Yes, the simulation files should be considered trade secret because they provide significant competitive advantage to the Companies given their position as having the only (to the Companies' knowledge) UIC Class VI permit applications for a saline reservoir, and are the result of innovation and substantial effort given the proprietary information contained therein regarding the Companies' significant investment and efforts to evaluate the saline reservoir, and to develop its modeling approach. *See Pub. Citizen Health Research Grp.,* 704 F.2d at 1288; *Anderson*, 907 F.2d at 944. Please see the detailed explanation provided in Section II.a.i. above for further substantiation of the appropriate classification of this CBI as trade secret. Because the entirety of the simulation files are trade secret and are in file formats for which EPA's suggested bracketing process is not feasible (*i.e.* is data accessible only via specialized software), the Companies are not attaching bracketed copies as requested.

10. Are there any means by which a member of the public could obtain access to the information or readily discover the information claimed as confidential through reverse engineering?

No, the Companies are unaware of any means by which a member of the public could access or readily discover the CBI.

11. Please explain why the information claimed as confidential is not emissions data under the Clean Air Act, effluent data under the Clean Water Act, health and safety data under the Toxics Substances Control Act, or any other information that is prohibited from protection under regulation or statute.

As described in Section I above, the CBI consists of project size and location information, simulation files, and the Companies' corrective action assessments for wells encompassed in the project, none of which contains data on emissions regulated under the Clean Air Act, effluent regulated under the Clean Water Act, health and safety data under the Toxic Substances Control Act, or any other information prohibited from protection from disclosure by regulation or statute. The Companies note, in particular, that the CBI does not contain any "information which deals with the existence, absence, or level of contaminants in drinking water" that would be ineligible for protection from disclosure under the Safe Drinking Water Act. *See* 40 C.F.R. § 2.304(e).

12. Explain any other issue or additional information you deem relevant to EPA's determination.

Please refer to the detailed information concerning relevant exemptions from disclosure under FOIA, EPA's implementing regulations, case law and explanations supporting a determination that the Information is exempt from disclosure under FOIA Exemptions 4 and 9 (with respect to the simulation files) in Section II of this letter.

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The Companies respectfully submit these comments to substantiate their claims to maintain the Information as confidential and protected from disclosure under FOIA. As described throughout, the Companies believe that their CBI is entitled to confidential treatment based on the FOIA exemption provided in 5 U.S.C. section 552(b)(4), as well as EPA regulations 40 C.F.R. sections 2.208, 2.210, and 2.304, and that select portions of its CBI are also entitled to protection from disclosure pursuant to FOIA exemption 5 U.S.C section 552(b)(9), as discussed above. Disclosure of the CBI described in Section I above will likely result in substantial harm to CRC's competitive position and commercial interests. As noted above, with respect to certain CBI claims that the Companies have determined to withdraw, redacted versions of those documents identifying more limited CBI claims with respect to the injection and monitoring well schematics, corrective action table, and well-specific plugging plans, will be submitted in the near term, together with the Companies' upcoming planned permit application revision.

The Companies appreciate EPA's consideration of these comments. Further, the Companies will gladly discuss any of the information and rationale provided herein with EPA Region 9 upon request, or will supplement these responses with additional information as required by EPA.

Should you have any questions, please do not hesitate to contact me at faisal.latif@crc.com or at (661) 763-6274.

Sincerely,

Faisal Latif

Faisal Latif
Carbon TerraVault Holdings, LLC

CC: Alexa Engelman, EPA Region 9, Office of Regional Counsel, engelman.alexa@epa.gov

Attachments:
Attachment 1: CTV IV Confidential Business Information Index

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The following table lists the pages for each document which contain redacted information, as well as a description of the type of redacted information, and the relevant FOIA exemption(s). Per EPA's request to provide attachments for pages where not all information is claimed as CBI, the last column indicates whether the document is being provided as an attachment. For those documents where an attachment is provided, CBI is indicated by highlighting the redacted portions.

No.	Document	Page(s)	Description	FOIA Exemption(s)	Attachment (if applicable)
1	Attachment A: Narrative Report	iv, 1-26, 28-32, 35-39, Figures 2.1-1, 2.1-2, 2.1-3, 2.1-4, 2.1-6, 2.1-7, 2.2-1, 2.2-2, 2.2-3, 2.2-4, 2.2-5, 2.2-6, 2.2-7, 2.2-8, 2.2-9, 2.3-1, 2.3-2, 2.4-1, 2.4-2, 2.4-3, 2.4-4, 2.4-5, 2.4-6, 2.4-7, 2.5-1, 2.5-3, 2.5-4, 2.6-1, 2.6-2, 2.7-1, 2.7-2, 2.7-3, 2.7-4, 2.7-5, 2.8-1, 2.8-2, 2.8-3, 2.8-4, 2.10-1, 5.0-1, Tables 2.4-1, 2.4-2, 2.4-3, 2.4-4, 2.4-5, 2.6-1, 2.7-1, 2.7-2,	Location and Size Information	4	Attachment Included
2	Attachment B: Area of Review and Corrective Action Plan	1, 3, 4, 5, 6, 8, 9, 12, Figures 3.1 – 3.7, 3.9, 3.11, 4.1, 4.2, 4.4-5.1, Tables 3.1-3.5	Location Information	4	Attachment Included
3	Attachment C: Testing and Monitoring Plan	1, 5, 6, 14, All Figures, Tables 2, 4, 5, 6, 8, 10	Location Information	4	Attachment Included
4	Attachment D: Injection Well Plugging Plan	1	Location Information	4	Attachment Included
5	Attachment E: Post-Injection	1-6, Figures (All), Tables 1, 2, 4, 6	Location and Size Information	4	Attachment Included

	Site Care and Closure Plan				
6	Attachment F: Emergency and Remedial Response Plan (ERR)	1-2, Figure 1	Location and Size Information	4	Attachment Included
7	Attachment G (1-8): Construction and Plugging Plan (CP)	1-5, Table 3, Figures (All), All footers	Location Information	4	Attachments Included
8	Attachment H: Financial Responsibility	2-8* *CRC is withdrawing the CBI claims as described in the letter.	Confidential Financial Information	4	
9	Attachment I: Pre-Operational Testing Plan	1	Location Information	4	Attachment Included
10	Appendix 2: Applicable Federal Acts and Consultation	1, 3, 4, 5, 7	Location Information	4	Attachment Included
11	Appendix 3: Geochemical Modeling	1, 2, 3, 7, 8, 9, 10, Tables 2, 4, 6, 8,* 9, 10 *Note limited additional CBI claim in Table 8, which was not claimed at time of submission.	Location Information	4	Attachment Included
12	Appendix 4: Operational Procedures	1-18	Location and Size Information	4	Attachment Included
13	Appendix 5: Injection and Monitoring Well Schematics	Figures 1-30* *Note limited additional CBI claims in Figures 18 and 21-28 which were not	Location and Size Information	4	Attachment Included

		claimed at time of submission.			
14	Appendix 6: Wellbore List with Corrective Action Assessment	Entire Document (except page 1)	Confidential Interpretation with Competitive Advantage	4	
15	Appendix 7: Critical Pressure Calculation	1, 2, Figures (All)	Location and Size Information	4	Attachment Included
16	Appendix 8: Quality Assurance and Surveillance Plan (QASP)	8, 11, 12, Table 7, Figure 2	Location and Size Information	4	Attachment Included
17	Appendix 9 (1-8): Summary of Requirements	1	Location Information	4	Attachments Included
18	Simulation Files	Entire File	Location Information and Proprietary Modeling	4, 9	