APPENDIX J

CONSTRUCTION DETAILS
40 CFR 146.86

Jasper County Storage Facility

1 FACILITY INFORMATION

Facility Name: Jasper County Storage Facility

Facility Contact: Claimed as PBI
501 Westlake Park Blvd., Houston, Texas 77079
Claimed as PBI

Well Location: Jasper County, Texas

Claimed as PBI

2 INTRODUCTION

On October 27, 2023, BP Carbon Solutions LLC (BP) submitted this section of the Class VI application for the Jasper County Storage Facility (Site), and the application was deemed administratively complete on November 22, 2023. In this Revision 2, the Construction Details section has been updated to reflect an optimized well design that aligns with downhole conditions observed in the appraisal well (BP America A469 #1), as well as with updated injection rates. This change has also shifted locations of the injection wells and decreased the number of injection wells Claimed as PBI
Additionally, the Area of Review (AoR) model has been updated to incorporate additional appraisal and offset well data, providing an enhanced understanding of the subsurface. These updates are expected to reduce project risk by moving away from known faults within the AoR, minimizing the AoR extent, optimizing injection well operations, and reducing interactions with legacy wells.

BP intends to sequester carbon dioxide (CO_2 Claimed as PBI
is estimated to be stored at the Site during the injection period. The calculations and supporting documentation for injection rates and volume are provided in **Appendix B** (Area of Review and Corrective Action Plan).

This Construction Detail Plan describes the actions that BP will take in accordance with 40 CFR 146.86 to drill and construct Claimed as PBI. The injection wells will be used to support the storage of CO_2 at the Site.

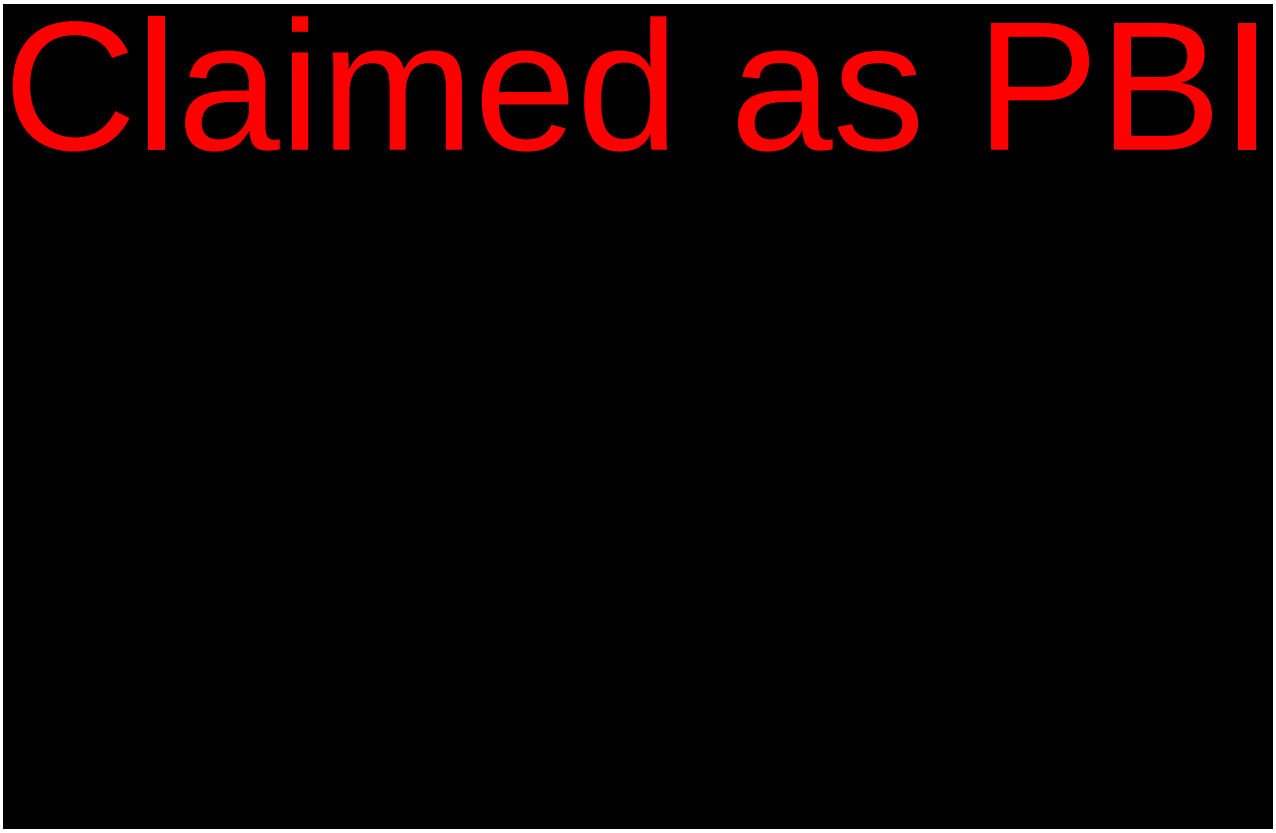
The Site will include Claimed as PBI and infrastructure related to the construction, operations, and post-injection site care and closure.

If changes to the Construction Details become necessary due to any geologic or other mitigating factors encountered in the AoR, these changes will be provided in an interim submission and communicated to the Underground Injection Control (UIC) Program Director prior to construction.

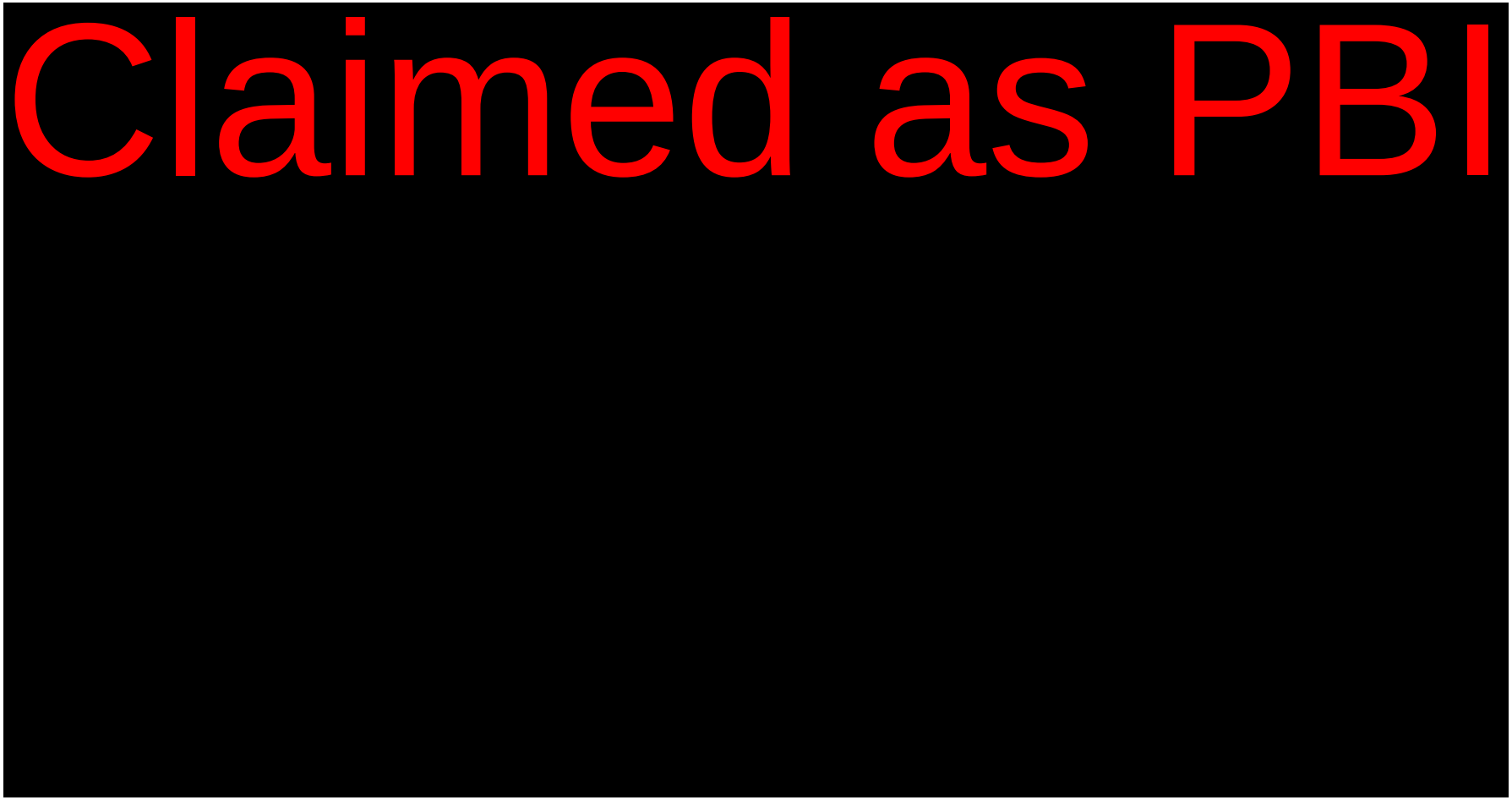
3 INJECTION WELL DETAILS

In general, the construction details provided below Claimed as PBI The depth intervals will be based on site-specific geology with the general diameters, casing, tubing, and packer specifications shown in the below tables. The depth to the injection zone (Frio Formation) is Claimed as PBI. Lithology of the injection and confining zones is described in **Section 2.1** (Regional Geology, Hydrogeology, and Local Structural Geology) and **Section 2.4** (Injection and Confining Zone Details) of the **Application Narrative**.

Claimed as PBI Additional details for the proposed CO_2 stream are provided in the **Application Narrative**, **Section 7.2** (Proposed CO_2 Stream). The proposed operational parameters and conditions are shown in **Table 1** (Proposed Operational Parameters and Conditions) below.



All injection wells will be drilled as vertical wells with the same bottomhole location as surface location. If surface features require moving the surface location, the well plans may change to a deviated design. Note that wellbore construction elements are subject to change based on vendor and material availability and operational constraints. As explained above, should construction details change, BP will provide the UIC Program Director with a supplemented final Construction Plan prior to well installation.


Claimed as PBI

In accordance with 40 CFR 146.86(b)(1), all casing and cement used in the construction of the Class VI wells will have sufficient structural strength and be designed to maintain that strength for the life of the project. Additionally, all materials used for construction of the Class VI wells will be compatible with fluids with which they are expected to come into contact and will meet the relevant American Petroleum Institute (API) standards, ASTM International standards, or other comparable standards acceptable to the UIC Program Director. BP will assess material use to justify proposed material selections including cement and tubulars.

Surface Casing: As required by 40 CFR 146.86(b)(2), the surface casing will extend through the base of the lowermost underground source of drinking water and be cemented to the surface using a single string of casing and cement. Claimed as PBI [redacted]. The hole diameters and intervals are shown in **Table 2** (Open Hole Diameters and Specifications). The casing specifications are shown in **Table 3** (Casing Specifications).

Long-string Casing: Claimed as PBI [redacted] The hole diameters and intervals are shown in **Table 2** (Open Hole Diameters and Specifications). The casing specifications are shown in **Table 3** (Casing Specifications).

[redacted]

Injection Tubing: Consistent with 40 CFR 146.86(c)(1), the tubing and packer materials will be compatible with all fluids with which they are expected to come into contact and will meet the relevant API standards, ASTM International standards, or other comparable standards acceptable to the UIC Director. [redacted] Pressure and temperature gauges will be installed on the tubing above the packer in accordance with 16 Texas Administrative Code 3.17 (Statewide Rule 17). Surface gauges will be installed to monitor annulus and tubing. Injection rate and injection volumes will also be monitored. The tubing specifications are shown in **Table 4** (Tubing Specifications); **Table 5** (Packer Specifications) and **Table 6** (Packer Ratings and Diameters) illustrate the downhole tubing packer specifications and ratings.

[redacted]

3.2 Injection Well Construction Diagrams

The general well construction diagram for all the planned wells is presented below in **Figure 1** (General Well Construction Diagram). Each well will be drilled based on site-specific conditions.