

Attachment H: Injection Well Plugging Plan

Claimed as PBI

Carbon America

(40 CFR 146.92(b))

Revision	Date	Notes	Written By	Approved By
A	03/12/2024	Issued for Approval		R. Keeling

Claimed as PBI

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H-1 Claimed as PBI

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H-1 Claimed as PBI

H-2 Claimed as PBI

1. Facility Information

- Facility Name: Claimed as PBI

- Well Name: Claimed as PBI

- Facility Contact: Claimed as PBI

- Proposed Well Location: Claimed as PBI

2. Claimed as PBI Plugging and Abandonment Objective

Upon the cessation of injection operations, the Claimed as PBI injection well will undergo a comprehensive plugging and abandonment (P&A) process, designed to align with the stringent requirements of 40 CFR 146.92. This regulatory framework is critical for ensuring the long-term integrity and safety of decommissioned wells.

The P&A design for Claimed as PBI as shown in Figure H-1, was developed with a focus on using materials and engineering techniques that are specifically tailored to prevent fluid movement within the wellbore and surrounding formations. This is crucial for safeguarding against any potential contamination or migration of fluids into underground sources of drinking water (USDWs).

Additionally, given that Claimed as PBI, the P&A design incorporates materials that are highly resistant to CO₂ exposure and corrosion. The selection of such materials is imperative to maintain the integrity of the well structure over an extended period, effectively mitigating the risks associated with the corrosive properties of CO₂.

Following the procedural requirements set forth by 40 CFR 146.92, all plugging plans and designs for Claimed as PBI will be thoroughly documented and submitted for review and approval by the Underground Injection Control (UIC) Program Director prior to the commencement of P&A operations. This submission will include Claimed as PBI
Claimed as PBI

Through this rigorous planning and approval process, the Claimed as PBI P&A operations will be executed with the utmost regard for environmental safety, regulatory compliance, and the long-term protection of USDWs, demonstrating a commitment to responsible stewardship in the realm of carbon capture and storage.

3. Planned Tests or Measures to Determine Bottomhole Reservoir Pressure

Prior to P&A operations at Claimed as PBI

Claimed as PBI

Claimed as PBI

Claimed as PBI pursuant to the requirements of 40 CFR 146.92(a). Claimed as PBI

Claimed as PBI This step is crucial for ensuring stability and integrity before proceeding with P&A operations.

4. Planned External Mechanical Integrity Test(s)

Claimed as PBI will conduct at least one of the tests listed in Table H-1 to verify external mechanical integrity prior to plugging the injection well as required by 40 CFR 146.92(a).

Table H-1. Planned Mechanical Integrity Tests

Test Description	Location
Claimed as PBI	Claimed as PBI
Claimed as PBI	Claimed as PBI

Claimed as PBI The survey data obtained will be analyzed for anomalies that suggest a loss of mechanical integrity, in accordance with the definition provided in 40 CFR 146.89(a). If Claimed as PBI Claimed as PBI

5. Information on Plugs

Claimed as PBI will use the materials and methods noted in Table H-2 to plug the injection well. Claimed as PBI

Claimed as PBI
Claimed as PBI The cement formulation and required certification documents will be submitted to the agency with the final well plugging plan. The owner or operator will report the wet density and will retain duplicate samples of the cement used for each plug.

Table H-2. Plugging Details

Plug Information	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Diameter of boring in which plug will be placed (inches)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Depth to bottom of tubing or drill pipe (ft MD KB)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Sacks of cement to be used	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Slurry volume to be pumped (gallons)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Slurry weight (pounds per gallon)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Calculated top of plug (ft MD KB)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Bottom of plug (ft MD KB)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Type of cement or other material	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI
Method of emplacement (e.g., balance method, retainer method, or two-plug method)	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI	Claimed as PBI

6. Narrative Description of Plugging Procedures

6.1 Notifications, Permits, and Inspections

In compliance with 40 CFR 146.92(c), Voyager will notify the UIC Program Director at least 60 days before plugging the well, and will provide an updated Injection Well Plugging Plan, if applicable.

6.2 Plugging Procedures

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4. Claimed as PBI
5. Claimed as PBI
6. Claimed as PBI

7. Plugging Report

In compliance with the requirements of 40 CFR 146.92(d), Claimed as PBI will prepare and submit a Plugging Report to the UIC Program Director within Claimed as PBI after plugging the well. Claimed as PBI
Claimed as PBI

Figure

Claimed as PBI