

Attachment K: Financial Assurance Demonstration

SYD Denova 1

Carbon America

(40 CFR 146.85)

Revision	Date	Notes	Written By	Approved By
A	11/22/2023	Issued for Approval		R. Keeling

Contents

1. Facility Information	1
2. Financial Responsibility	1
3. Cost Estimates	1
3.1 Corrective Action on Wells in the Area of Review (AoR).....	2
3.2 Plugging of the Injection Well	2
3.1 Post-Injection Site Care and Site Closure	2
3.2 Emergency and Remedial Response	3
3.3 Updates to Financial Assurance [40 CFR 146.85(C)(2)(3)(4)]	4

Tables

K-1	Cost Estimates for Activities to be Covered by Financial Responsibility
K-2	Injection Well Plugging Cost Estimate
K-3	Post-Injection Site Care Cost Estimate
K-4	Site Closure Cost Estimate
K-5	Emergency and Remedial Response Costs – [REDACTED]
K-6	Emergency and Remedial Response Costs – [REDACTED]

1. Facility Information

- █
- █
- █

2. Financial Responsibility

█ is providing financial responsibility pursuant to 40 CFR 146.85. █ is currently evaluating qualifying financial instruments to fulfill the requirements of: injection well plugging, post-injection site care (PISC), site closure, and emergency and remedial response (ERRP). Corrective action will be executed prior to injection activities; thus, financial assurance is not required (see discussion in Section 3.1). █ anticipates that one or more qualifying financial instruments will be employed to demonstrate financial accountability, likely a combination of █ is also █ will keep the Underground Injection Control (UIC) Program Director informed of their financial instrument selections as they are finalized, and will submit the necessary documentation once the instruments are obtained and before the permit is granted.

The estimated costs of each of these activities, as provided by █ are presented in Table K-1.

3. Cost Estimates

Cost estimates provided in Table K-1 were generated by █ using third-party bids to include all required activities per 40 CFR 146.85 (c). All cost estimates are reported in current 2023 U.S. dollars (USD), and include a █ contingency designed to capture associated costs associated with utilizing third-party service providers. Figures are rounded to the nearest hundred dollars.

Table K-1. Cost Estimates for Activities to be Covered by Financial Responsibility

Activity	Estimated Cost
█	█
█	█
█	█
█	█
█	█
█	█

3.1 Corrective Action on Wells in the Area of Review (AoR)

As detailed in **Attachment B: Corrective Action Plan**, [REDACTED] has chosen to execute the necessary corrective measures on wells within the Area of Review (AoR) before commencing injection activities. As a result, anticipated expenses are set at [REDACTED] and there is no requirement for a financial instrument to cover the corrective action.

3.2 Plugging of the Injection Well

Attachment H: Well Plugging Plan describes the proposed plugging procedures for the [REDACTED]. Table K-2 details the cost estimate for injection well plugging.

Table K-2. Injection Well Plugging Cost Estimate

Activity	Unit	Unit Cost	Estimated Cost
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
		[REDACTED]	[REDACTED]

Notes: (1) Internal well plugging cost based on rig mobilization and daily rates experienced during drilling of the [REDACTED]. Plugging activities include [REDACTED].
(2) Contingency cost is [REDACTED] of combined activities cost.

3.1 Post-Injection Site Care and Site Closure

Attachment I: Post-Injection Site Care and Site Closure Plan outlines the post-injection site care (PISC) phase monitoring activities for the plume and pressure front, including [REDACTED]. It also details the procedure for decommissioning monitoring wells and closing the site. The duration of the PISC period is [REDACTED]. Estimated costs for PISC are itemized in Table K-3. Site closure expenses are detailed in Table K-4. The aggregate projected expenses for both PISC and site closure activities amount to [REDACTED].

Table K-3. Post-Injection Site Care Cost Estimate

Activity	Unit	Events, 50 years	Unit Cost	Estimated Cost
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
			[REDACTED]	[REDACTED]

Notes: (1) [REDACTED]
(3) Contingency cost is [REDACTED] of combined activities cost

Table K-4. Site Closure Cost Estimate

[illegible]

Notes: (1) Monitoring well plugging activities include mechanical integrity testing (MIT) prior to well plugging (2) [REDACTED] will be acquired at the time of site closure (3) Pad site remediation is assumed for [REDACTED] (4) Contingency cost is [REDACTED] of combined activities cost.

3.2 Emergency and Remedial Response

Attachment J: Emergency and Remedial Response details the actions that [REDACTED] will take to address potential contamination of an underground source of drinking water (USDW) at its project site. The response to a potential CO₂ leak includes the plugging of the leak where possible and the identification and remediation of any affected USDWs. These costs reflect an assumed maximum affected area of [REDACTED]

Table K-5 provides the cost estimate to [REDACTED]
This table was developed by [REDACTED] and is based on their previous experience.

Table K-5. Emergency and Remedial Response Costs –

[illegible]

Notes: (1) Contingency cost is 10% of combined activities cost.

Table K-6 provides the cost estimate to [REDACTED]. This table is based on the groundwater sampling and monitoring costs provided by [REDACTED]. These costs were extrapolated to incorporate [REDACTED] (Table K-6).

Table K-6. Emergency and Remedial Response Costs – [REDACTED]

Activity	Unit	Unit Cost	Estimated Cost
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Notes: (1) Contingency cost is [REDACTED] of combined activities cost

The aggregate projected expense for remediation of both the [REDACTED], as presented in Tables K-5 and K-6, amounts to [REDACTED].

3.3 Updates to Financial Assurance [40 CFR 146.85(C)(2)(3)(4)]

[REDACTED] will provide the U.S. Environmental Protection Agency (EPA) with annual updates regarding the financial responsibility amount including any proposed changes. During the active life of the project, [REDACTED] will adjust the cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s) used to comply with 40 CFR 146.85(a), and will provide this adjustment to EPA. EPA will also be provided written updates of adjustments to the cost estimate within 60 days of any amendments to the area of review and corrective action plan (§ 146.84), the injection well plugging plan (§ 146.92), the post-injection site care and site closure plan (§ 146.93), and the emergency and remedial response plan (§ 146.94). If the projected expenses surpass the nominal value of the financial instrument(s) in use, [REDACTED] will either increase the face value of the current instrument(s) or procure additional financial instruments within a 60-day time frame and provide evidence to EPA.