3.0 FINANCIAL RESPONSIBILITY DEMONSTRATION
40 CFR 146.85

CAPIO MOUNTAINEER SEQUESTRATION PROJECT

Facility Information

Facility name: MOUNTAINEER GIGASYSTEM

Facility contact: Michael Neese
Vice President, Operations and Project Development
[redacted]

Well name: MCCLINTIC SEQUESTRATION 001

Well location: MASON COUNTY, WEST VIRGINIA
Latitude: [redacted]
Longitude:

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3.0 Demonstration of Financial Responsibility

Pursuant to 40 CFR 146.85(a), Fidelis, LLC ("Fidelis") will demonstrate and maintain financial responsibility as determined by the Underground Injection Control (UIC) Director using one of the qualifying instruments listed in 40 CFR 146.85(a)(1).

Pursuant to 40 CFR 146.85(a)(2)(3), the selected instrument(s) will be sufficient to protect underground sources of drinking water (USDWs) and cover corrective actions (per 40 CFR 146.84), injection well plugging (per 40 CFR 146.92), post-injection site care/site closure (per 40 CFR 146.93), and the emergency and remedial response plan (per 40 CFR 146.94).

3.1 Cost Estimate (40 CFR 146.85(c))

Cost estimates are for the Capio Mountaineer Sequestration project. **Table 3.1** provides the total cost estimates for each of the five areas of financial responsibility: corrective action, injection well plugging, post-injection site care, post-injection site closure, and emergency and remedial responses. A more detailed discussion follows to offer more clarity on the calculations behind the cost estimates.

Activity	Total Cost
Performing corrective action on wells in AoR	[redacted]
Plugging injection wells	[redacted]
Post injection site care	[redacted]
Post injection site closure	[redacted]
Emergency and remedial response	[redacted]0
TOTAL	[redacted]

Table 3.1: Estimated total costs for financial responsibility.

3.1.1 Corrective Action on Wells in AoR

Corrective action on wells in the area of review (AoR) includes modeling and establishing an AoR, performing surveys and database searches to compile wells within the AoR, and any necessary testing and/or remediation of wells within the AoR. No wells within the AoR penetrate the caprock, therefore no remediation is required. The cost for obtaining the data inputs for the model and incorporating the monitoring results into the computational AoR model is [redacted].

3.1.2 Plugging Injection Wells

The injection well will be plugged per the outline described in the Injection Well Plugging Plan (Permit Section 8.0). Cost estimates for the plugging work include flushing of the injection well, pressure testing, mechanical integrity tests (MITs), service rig costs, circulating fluid costs,

cement costs, and any associated labor. **Table 3.2** provides the activities and cost estimates for plugging the injection well.

Activity	Total Cost
Flushing injection wells	[redacted]
Measure bottomhole reservoir pressure	[redacted]
Perform MIT's	[redacted]
Plugging of injection well	[redacted]
TOTAL	[redacted]

Table 3.2: Estimated costs for plugging the injection well.

3.1.3 Post Injection Site Care (PISC)

PISC includes the post-injection monitoring that will be performed to verify that the carbon dioxide (CO_2) plume has stabilized and demonstrates non-endangerment of USDWs. Specific monitoring and testing to be performed as well as the alternative timeframe are provided in the PISC document (Permit Section 9.0). Cost estimates for this work include labor for gathering field data (e.g., fluid sampling, surface seismic acquisition, and wireline logging), data analysis, modeling, and reporting. **Table 3.3** provides the activities and cost estimates for 50 years of PISC. Geophysical surveys will be conducted every 5 years.

Activity	Total Cost
Geochemical sampling and pressure monitoring	[redacted]
Geophysical surveys	[redacted]
Model updates	[redacted]
TOTAL	[redacted]

Table 3.3: Estimated costs for post injection site care.

3.1.4 Post Injection Site Closure

Site closure refers to the plugging and abandonment of both shallow and deep monitoring wells. Per the PISC Plan, the monitoring wells will be plugged and abandoned when the UIC Director approves the closure of the site (Permit Section 9.0). Cost estimates for this work include preparation of a non-endangerment demonstration report, service rig costs, circulating fluid costs, cement costs, and any associated labor. **Table 3.4** provides the activities and cost estimates for site closure, including plugging of one deep monitoring well and one above confining zone (ACZ) well.

Activity	Total Cost
Preparation of non-endangerment demonstration report	[redacted]
Plugging monitoring wells	[redacted]
TOTAL	[redacted]

Table 3.4: Estimated costs for site closure.

3.1.5 Emergency and Remedial Response

In the Emergency and Remedial Response Plan, six scenarios are described that could present potential emergency responses. Since the scenarios are broad, a representative situation was assigned to each scenario to facilitate the cost estimate (**Table 3.5**).

- Injection or monitoring well integrity failure
- Injection well equipment failure (e.g., shut-off valve or pressure gauge, etc.)
- A natural disaster (e.g., earthquake, tornado, lightning strike)
- Fluid (e.g., brine) leakage to a USDW
- CO_2 leakage to USDW or land surface
- Induced seismic event

Scenario	Example Situation	Estimated Cost
Injection or monitoring well failure	Leak in casing requiring cement squeeze job	[redacted]
Injection well equipment failure	Surface equipment failure (e.g., wellhead pressure sensor)	[redacted]
Natural disaster	Tornado damages surface facilities (replace instruments)	[redacted]
Fluid leakage to USDW	Failure of mechanical integrity results in brine leaking into USDW (cement squeeze job, verification testing)	[redacted]
CO_2 leakage to USDW or land surface	Failure of mechanical integrity results in CO_2 leaking to surface	[redacted]
Induced seismic event	>M3 (i.e., felt at surface) seismic event is triggered and damages structures on surface	[redacted]
TOTAL		[redacted]

Table 3.5: Scenarios, the associated example situation, and estimated cost for well remediation and emergency response.

3.2 Financial Instrument (40 CFR 146.85(a)(4)(5)(6)(d)(e)(f))

Pursuant to 40 CFR 146.85(a)(2)(3), Fidelis will secure a qualified financial instrument prior to injection well construction to demonstrate financial responsibility to protect USDWs and cover corrective actions (per 40 CFR 146.84), injection well plugging (per 40 CFR 146.92), post-injection site care/PISC (per 40 CFR 146.93), and the emergency and remedial response plan (per 40 CFR 146.94). This will be in place prior to the commencement of injection well construction.