

SECTION 9 – FINANCIAL ASSURANCE

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9.1 Facility Information

Facility Name: ExxonMobil Low Carbon Solutions Onshore Storage LLC
(ExxonMobil) – Pecan Island

Facility Contact: Okwudiri Onyedum, Treasurer
ExxonMobil Low Carbon Solutions Onshore Storage LLC

Project Site Name: Pecan Island
Project Location: Vermilion Parish, Louisiana

Pecan Island Injection Well No. 001
[REDACTED]

Pecan Island Injection Well No. 002
[REDACTED]

9.2 Introduction

Under Statewide Order (SWO) 29-N-6 **§3609.C** [Title 40, U.S. Code of Federal Regulations (40 CFR) **§146.85**], owners or operators of geologic sequestration (GS)¹ wells are required to demonstrate financial responsibility for GS activities. ExxonMobil plans to construct two Class VI injection wells for the purpose of sequestering up to 3.2 MMTA of CO₂ at ExxonMobil's Pecan Island property. Consistent with these regulatory requirements, ExxonMobil has prepared this document to demonstrate financial responsibility for the injection wells that comprise the Pecan Island storage site (Pecan Island Site).

The sections that follow summarize the Pecan Island Site's GS activities, as well as the qualifying financial instrument that ExxonMobil proposes to use, to demonstrate financial responsibility for the following GS project phases: (1) Corrective Action; (2) Injection Well Plugging; (3) Post-Injection Site Care and Site Closure; and (4) Emergency and Remedial Response.

9.3 Financial Assurance Demonstration

Per 40 CFR **§146.85(a)(1)(vii)**, ExxonMobil requests approval from the Underground Injection Control Program Director (UIC Director), or their [REDACTED] [REDACTED] for purposes of demonstrating financial responsibility for Corrective Action, Injection Well Plugging, Post-Injection Site Care (PISC) and Site Closure, as well as Emergency and Remedial Response (ERR). [REDACTED]

¹ "Geologic sequestration" (GS) is "carbon capture and storage" (CCS) by another name, the former predominant in LA and EPA regulations, hence the use here.

[REDACTED]

In support of the financial assurance demonstration, [REDACTED]

[REDACTED] satisfies both Part 1 and Part 2 of the corporate financial test criteria in **§146.85(a)(6)(v)**.

Table 9-1 – [REDACTED]

[REDACTED]

² U.S. EPA. *Geologic Sequestration of Carbon Dioxide: Underground Injection Control (UIC) Program Class VI Financial Responsibility Guidance* (July 2011). PA 816-R-11-005. B-22 Appendix B: Recommended Financial Responsibility Instrument Language (Forms/Templates). https://www.epa.gov/system/files/documents/2022-11/uicfinancialresponsibilityguidancefinal072011v_0.pdf

[REDACTED]

Appendix J-3 is a completed letter from [REDACTED] that demonstrates the company's ability to meet the requisite financial coverage and threshold criteria. Appendix J-3 is consistent in form to the "Letter from Chief Financial Officer" included in Appendix B of EPA's July 2011 guidance document.⁴

Consistent with the EPA's July 2011 guidance, ExxonMobil provides this demonstration of financial responsibility with the understanding that the financial instruments referenced herein will be updated and verified no less than annually. As each GS activity phase is initiated for the Pecan Island Site, ExxonMobil will ensure that the coverage limits provided by the respective financial responsibility instruments are sufficient to cover the corresponding project costs prior to initiating the GS project phase.

Estimated Coverage Amounts

The total current cost estimate for all GS activities necessitating financial assurance at the Pecan Island Site is [REDACTED] in 2023 dollars. This total cost estimate assumes the hiring of independent, third-party contractors for each GS activity, and it can be separated into the following GS project phases⁵:

1. Corrective Action: (completed prior to initial injection);
2. Well Plugging⁶: [REDACTED];
3. Post-Injection Site Care: [REDACTED]; Site Closure: [REDACTED] and
4. Emergency and Remedial Response: [REDACTED]

Table 9-2 summarizes the total estimated project costs by GS activity, along with the timeline for which financial assurance coverage is expected to be needed. The values included in this demonstration of financial responsibility are based on cost estimates developed as part of the permit application process and assume the hiring of third-party contractors to perform the services or to procure the goods associated with the performance of each GS activity. These values are subject to change during the project to account for inflation of costs and changes to the project that may affect the cost of covered activities. Per SWO 29-N-6 **§3609.C.4(h)** [40 CFR **§146.85(c)**], ExxonMobil will adjust the value of its financial assurance instruments in response to any changes in cost estimates and will resubmit its demonstration of financial responsibility to the UIC Director or their designee for review and approval. ExxonMobil will not adjust the established coverage values of any financial assurance instrument without prior approval from the UIC Director, or their designee.

⁴ *Ibid.* See B-19 Appendix B: Recommended Financial Responsibility Instrument Language (Forms/Templates).

⁵ Assumes receipt of permit in 2025, start of injection in 2025, 18 years of injection for Well No. 001, and 15 years of injection for Well No. 002.

⁶ Financial responsibility coverages for well plugging reflect the current estimated cost for plugging all injection and monitoring wells related to the Pecan Island site.

Table 9-2 – Summary of GS Activity Project Costs

Activity	Cost
Corrective Action	
Well Plugging	
Post-Injection Site Care and Site Closure	
Emergency and Remedial Response	
TOTAL	

9.4 Corrective Action

The Corrective Action Plan is discussed in detail in *Section 3 – Area of Review and Corrective Action Plan*. The plan specifically outlines both a plugging plan for the wells found within the critical pressure front and CO₂ pore-occupancy plume and the recompletion schedule whereby the wellbore modifications will have been completed.

For the planned GS activities at the Pecan Island Site, workovers on all wells requiring plugging modifications will have been completed prior to injection. As such, there is no financial risk for these recompleted wells.

The area of review (AOR) will be reevaluated every 5 years to determine if any additional penetrations will be impacted.

9.5 Well Plugging

9.5.1 Injection Well Plugging

Plug and abandonment (P&A) of the injection wells at the Pecan Island Site will meet the requirements of SWO 29-N-6 §3631 [40 CFR §146.92]. The P&A of the injection wells will be designed as such that no movement of fluids will occur from the injection interval. A more detailed P&A plan is discussed in *Section 6 – Plugging Plan*. These funds include costs for logs/wireline to be run in the wellbore before cementing occurs. CO₂ compatible cement will be used in the initial plug for the well, to ensure the cement does not react with the injected fluid—resulting in a potentially higher cement expense than usual. All expenses relating to personnel and equipment have been accounted for in Table 9-3. Pressure test costs are also included to account for proving the integrity of the well.

9.5.2 Monitoring Well Plugging

P&A of the monitoring wells associated with the Pecan Island Site will also meet the requirements of SWO 29-N-6 §3631 [40 CFR §146.92]. The P&A of these shallow monitor wells will be designed

as such that no movement of fluids will occur from the injection interval, nor will fresh and treatable water found within the USDW be threatened. A more detailed P&A plan is discussed in *Section 6 – Plugging Plan*. Because these wells will be completed above the uppermost confining geologic interval, conventional plugging procedures will be utilized. These funds include costs for logs and wireline to be run in the wellbore before cementing occurs. All expenses relating to personnel and equipment have been accounted for in Table 9-3. Pressure test costs are also included to account for proving the integrity of the well.

Table 9-3 – Summary of Well Plugging Costs Associated with Financial Security

Activity	Cost	Total
<i>Injection Well Plugging (two wells)</i>		
Workover Rig		
Kill/Buffer Fluid		
Personnel		
Wireline		
Downhole Tools		
Other Services		
Cement & Pumping Services		
Equipment Rentals		
<i>Deep, Above-Zone Monitoring Well Plugging (two wells)</i>		
Workover Rig/Barge		
Kill/Buffer Fluid		
Personnel		
Wireline		
Downhole Tools		
Other Services		
Cement & Pumping Services		
Equipment Rentals		
<i>USDW Monitoring Well Plugging (five wells)</i>		
Workover Rig/Barge		
Cement Services		
TOTAL		

9.6 Post-Injection Site Care and Site Closure

The PISC and Site Closure Plan will be designed to meet the requirements of SWO 29-N-6 §3633 [40 CFR §146.93]. The costs associated with the plan are highlighted in Table 9-4, while the plan itself is discussed in *Section 7 – Post-Injection Site Care and Site Closure Plan*.

9.6.1 Post-Injection Monitoring

As discussed in *Section 5 – Testing and Monitoring Plan*, vertical seismic profile (VSP) monitoring will be conducted after the end of injection to ensure the integrity of the well and to track the migration of the plume.

9.6.2 Site Closure

Site closure will occur when the UIC Director has released the owner from all PISC duties. The costs estimated in Table 9-4 reflect the expected amount to decommission and close the site.

Table 9-4 – Summary of PISC/Site Closure Costs Associated with Financial Security

Activity	Cost	Total
<i>Post-Injection Monitoring</i>		
Indirect Plume Monitoring (VSP) x 2		
Other Monitoring (e.g., fluid sampling and analysis, pressure/temperature monitoring)		
<i>Site Closure</i>		
TOTAL		

9.7 Emergency and Remedial Response

The Emergency and Remedial Response Plan (ERRP) is discussed in *Section 8 – Emergency and Remedial Response Plan* and designed to be in compliance with SWO 29-N-6 §3623.A.1 [40 CFR §146.94].

The resultant cost for the ERRP is [REDACTED] in 2023 dollars. This cost assumes coverage for the Pecan Island Site, including the following risks: water quality impact, CO₂ migration, entrained contaminant (non-CO₂) in injection stream, and accidents/unplanned events (typical insurable events). Details regarding these cost estimates are explained in *Section 8*.

9.8 Conclusion

Appendix J contains the following documents:

- Appendix J-1:
- Appendix J-2:
- Appendix J-3:

