

Revision: 1
Date: May 2025

**FINANCIAL ASSURANCE DEMONSTRATION
40 CFR 146.85**

Project Name: Buckeye III CCS

Facility Information

Facility contact: Buckeye III CCS, LLC
14302 FNB Parkway
Omaha, Nebraska 68154
402-691-9500

Well locations: Coshocton County, Ohio

Well Name	Latitude	Longitude
Bellflower 1	40.215516	-81.864158

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List of Acronyms

AoR	Area of Review
CCS	Carbon capture and storage
CO ₂	Carbon dioxide
TBD	To Be Decided
UIC	Underground Injection Control
U.S. EPA	U.S. Environmental Protection Agency

1. Introduction

Buckeye III CCS, LLC will provide financial responsibility pursuant to 40 CFR 146.85. Buckeye III CCS, LLC is planning to use one of the qualifying instruments listed at 40 CFR 146.85(a)(1) to cover the costs of corrective action, plugging injection wells, post-injection site care, site closure, and emergency and remedial response associated with Buckeye III CCS in Coshocton County, Ohio (the “project”). Per 40 CFR 146.84(c)(1), Buckeye III CCS, LLC contracted with Projeo Corporation (Projeo) to provide an estimate of the costs to the regulatory agency of hiring a third party to perform the project activities described above. To determine the costs for the coverage amounts underpinning this Financial Responsibility Demonstration, Projeo used currently available price quotes (in Year 2024 dollars) and assumed the hiring of independent, third-party contractors for each Financial Responsibility activity. The estimated costs of each of these activities are presented in Table 1 below, and detail for these costs is provided in Appendix A.

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

Activity	Cost (\$)	Timeline of Coverage
Corrective Action	\$206,175	2027-2057
Plugging Injection Wells	\$184,925	2062
Post-Injection Site Care	\$5,175,300	2058-2107
Site Closure	\$378,251	2107
Emergency and Remedial Response	\$24,614,325	2027-2107
TOTAL	\$30,558,976	

Consistent with U.S. EPA’s July 2011 guidance, Buckeye III CCS, LLC provides this demonstration of Financial Responsibility with the understanding that the financial instruments referenced herein will be updated and verified over time. As each activity is initiated, Buckeye III CCS, LLC will ensure that the coverage limits provided by the respective Financial Responsibility mechanisms are sufficient to cover the corresponding project costs prior to initiating the next project phase. All adjustments will be submitted for approval by the UIC Program Director and prior to any adjustment to the coverage amounts of the financial responsibility instruments.

2. Discussion of Financial Responsibility Activities and Cost Estimates

The costs estimated in Table 1 are based on quotes and technical data available during the permit application development process and are projected to cover the cost of employing an independent third-party subcontractor to perform the services or procurement of requisite goods. These estimates are based upon historic price data from other projects managed by Buckeye III CCS, LLC and its project partners, cost quotes from third-party companies, regulatory guidance documents, and a best judgment about the level of effort required to complete an activity.

2.1. Corrective Action

As discussed in the Area of Review and Corrective Action Plan, Buckeye III CCS, LLC has determined that there is one legacy oil well in the proposed Area of Review (AoR) that may need corrective action. Modeling indicates that the critical pressure front will never reach the identified well, but the CO₂ plume is expected to contact the well between 40 and 50 years from the start of injection. Thus, corrective action of this well is planned no later than the 20th year of injection, subject to change based on updated data and modeling.

The estimated cost for plugging one well is \$206,175. This is based on a compilation of experience with plugging wells associated with storage projects. The plugging cost estimate includes locating the well, assessing its status, and plugging to current standards. A generalized procedure for conducting corrective action is described in the Area of Review and Corrective Action Plan.

2.2. Plugging Injection Wells

In estimating Financial Responsibility coverage values for injection well plugging, it was assumed that the Bellflower 1 injection well would first be converted to an in-zone observation well after cessation of CO₂ injection, monitor pressure for 5 years post-injection, and be plugged in Year 2062. Injection well plugging is detailed in the Plugging Plan and assumed filling the entire wellbore with cement to surface. Costs for plugging and abandoning wells are based on current estimated costs associated with the plugging of oil, gas, and disposal wells in the project region. The injection well plugging and abandonment costs are estimated to be approximately \$184,925 (in Year 2024 dollars). Note that the cost for plugging the injection well is less than that associated with plugging the legacy well, as the injection well would have already been completed to Class VI standards.

2.3. Post-Injection Site Care

Buckeye III CCS, LLC's activities during the Post-Injection Site Care (PISC) period are discussed in the Post-Injection Site Care and Site Closure Plan. The activities include monitoring for a period of 50 years once injection ceases, on-going well maintenance, periodic reevaluation of the AoR, maintenance of associated facilities, and field personnel costs. Buckeye III CCS, LLC anticipates that the PISC activity will begin in Year 2058, after injection ceases, and continue through Year 2107. The total Financial Responsibility cost estimate for PISC is \$5,175,300 (in Year 2024 dollars), based on industry estimates and independent, third-party engineering data, some of which is based on regional experience with oil, gas, and disposal well site care.

2.4. Site Closure

The Financial Responsibility rules state that the well sites must be returned to original conditions, and the observation wells must be securely plugged and abandoned (P&A). Buckeye III CCS, LLC's activities for site closure, including the plugging and abandonment of project wells and site remediation, are detailed in the Post-Injection Site Care and Site Closure Plan. The total Financial Responsibility cost estimate for site closure is \$378,251 (in Year 2024 dollars), based on industry estimates and independent, third-party engineering data, some of which is based on regional experience with oil, gas, and disposal well site closure.

2.5. Emergency and Remedial Response

A leakage scenario could result from a loss of mechanical integrity in the wellbore or a loss of geologic containment in the confining interval. The Financial Responsibility estimate assumed a CO₂ leak from the injection interval due to the loss of mechanical integrity in the injection well. The cost estimate assumed a rapid remedial response and included the cost of the following:

- Isolating the leak – \$10,190,060
- Controlling / plugging the leaky project well - \$211,400
- Safely disposing of any produced fluids - \$69,860
- Drilling a relief well - \$6,011,942
- Drilling an additional above-zone monitoring well - \$8,131,063

The total estimated cost for this emergency and remedial response scenario is \$24,614,325.

3. Plan for Financial Mechanisms

Buckeye III CCS, LLC intends to demonstrate Financial Responsibility for the project by executing a combination of qualifying instruments. At this time, Buckeye III CCS, LLC plans to use a surety bond for financial assurance of the following activities: corrective action, plugging injection wells, post-injection site care, and site closure. Buckeye III CCS, LLC plans to use either a surety bond or third-party insurance for financial assurance of emergency and remedial response. Buckeye III CCS, LLC will ensure that each instrument comprises the protective conditions of coverage in 40 CFR 146.85(a)(4).

Buckeye III CCS, LLC will ensure that any third parties used will have a credit rating in the top four categories from either Standard & Poor's or Moody's, or a comparable rating from another credible credit rating agency. The designated surety bond representative of Buckeye III CCS, LLC, Aon Risk Services Southwest, Inc., identified the following proposed issuer (see Appendix B):

- Hartford Fire Insurance Company: Rated in financial strength as A+ Stable by A.M. Best, A1 Positive by Moody's, and A+ Positive by Standard & Poor's.

The financial mechanisms described above will provide appropriate assurances to the UIC Program Director of Buckeye III CCS, LLC's ability to fulfill its financial responsibilities for the project. Buckeye III CCS, LLC will provide the UIC Program Director with any changes to this plan prior to execution of the financial mechanisms and issuance of the Class VI UIC permit to construct.

Appendix A

Table 1A. P&A Legacy Well

Item	Cost	Comment
Site Preparation & Maintenance	\$7,000	Permitting and local road repair
Engineering & Supervision	12,300	Six days supervision
Cementing Services	\$85,525	CO2 cement inside production casing to TOC and uphole plugs to intermediate seat
Workover / Completion Fluids & Services	\$1,000	Freshwater based mud for loading hole
Equipment Rentals	\$15,500	Workover BOP rental with mob/demob and pad support rentals
Environmental	\$4,000	Trucking to dispose of 1000 bbl wastewater
Misc	\$1,500	Tophole antiskid fill from surface casing
Specialty Tools & Services	\$7,100	BOP rental and pressure pumping to kill well
Safety	\$500	Safety inspection
Trucking & Transportation	\$1,500	Trucking rental equip on/off pad
Welding	\$1,500	Wellhead work
Production Services	\$67,950	Workover rig; pumps; run CBL; water handling
Contract Labor	\$800	Misc pad support
Total Intangible Cost	\$206,175	

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Table 2A. Plugging injection well.

Item	Cost	Comment
Site Preparation & Maintenance	\$7,000	Permitting and local road repair
Engineering & Supervision	10,500	Six days supervision
Cementing Services	\$85,525	CO2 cement inside production casing to TOC and uphole plugs to intermediate seat
Workover / Completion Fluids & Services	\$1,000	Freshwater based mud for loading hole
Equipment Rentals	\$14,000	Workover BOP rental with mob/demob and pad support rentals
Environmental	\$4,000	Trucking to dispose of 1000 bbl wastewater
Misc	\$1,500	Tophole antiskid fill from surface casing
Specialty Tools & Services	\$7,100	BOP rental and pressure pumping to kill well
Safety	\$500	Safety inspection
Trucking & Transportation	\$1,500	Trucking rental equip on/off pad
Welding	\$1,500	Wellhead work
Production Services	\$50,000	Workover rig; pumps; run CBL; water handling
Contract Labor	\$800	Misc pad support
Total Intangible Cost	\$184,925	

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Table 3A. PISC Testing

Item	Cost
Groundwater Sampling	\$260,100
Storage Complex Fluid Sampling	\$222,700
Storage Complex Sensors	\$400,000
Storage Complex Pulsed Neutron	\$600,000
ACZ Sampling	\$382,500
UOB Sampling	\$510,000
ACZ Sensors	\$1,200,000
UOB Sensors	\$1,600,000
Total	\$5,175,300

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Table 4A. Site Closure

P&A Observation Well		
Site Preparation & Maintenance	\$7,000	Permitting and local road repair
Engineering & Supervision	10,500	Six days supervision
Well Evaluation	\$0	
Casing Services	\$0	
Cementing Services	\$85,525	CO2 cement inside production casing to TOC and uphole plugs to intermediate seat
Workover / Completion Fluids & Services	\$1,000	Freshwater based mud for loading hole
Equipment Rentals	\$14,000	Workover BOP rental with mob/demob and pad support rentals
Environmental	\$4,000	Trucking to dispose of 1000 bbl wastewater
Misc	\$1,500	Tophole antiskid fill from surface casing
Specialty Tools & Services	\$7,100	BOP rental and pressure pumping to kill well
Safety	\$500	Safety inspection
Trucking & Transportation	\$1,500	Trucking rental equip on/off pad
Welding	\$1,500	Wellhead work
Production Services	\$50,000	Workover rig; pumps; run CBL; water handling
Contract Labor	\$800	Misc pad support
Sub-Total Intangible Cost	\$184,925	
Well Pad Removal		
Compost Filter Sock	\$3,060	
Slope Matting	\$22,500	Hydroseed
Excavation	\$25,750	Bulk Cut & Fill
Ditches	\$10,072	Diversion & fabric
Sub-Total	\$64,442	
Total	\$378,251	

Table 5A. Emergency & Remedial Response.

Item	Cost	Comment
Blow out – Injection / observation / legacy well	\$6,011,942	Drill one relief well to kill an uncontrolled blowout within or around AoR
CO2 Migration into USDW	\$10,190,060	CO2 migration into USDW requiring the establishment of a groundwater management zone
Brine / Fluid Spill	\$69,860	Clean up and remediation of a brine or fluid spill
Repair Leaking Injection Well	\$211,400	
Drill additional above-zone monitor well	\$8,131,063	
Total Cost	\$24,614,325	

Revision: 1
Date: May 2025

Appendix B – Letter from Designated Surety Bond Representative



May 23, 2025

To:
Stephen Jann
Manager, Permits Branch
Water Division
U.S. Environmental Protection Agency Region 5
77 W. Jackson Blvd
Chicago, IL 60604

RE: Financial Assurance on behalf of Buckeye III CCS, LLC - Bellflower I Well

To Whom It May Concern:

Aon Risk Services Southwest, Inc., offices at 1300 Post Oak Blvd, Houston, TX 77056, is the designated surety bond representative of Buckeye III CCS, LLC. On or about May 30, 2025, Buckeye III CCS, LLC submitted to the EPA its Financial Assurance Demonstration outlining Buckeye III CCS, LLC will provide financial responsibility pursuant to 40 CFR 146.85. In an effort to provide further clarification around the company's intent to meet the financial assurance requirements of the EPA, we Aon, represent that Buckeye intends to utilize the following instruments:

Activity	Cost (\$)	Financial Assurance	Issuer
Corrective Action	\$206,175	Surety Bond	Hartford Fire Insurance Company, or other
Plugging Injection Wells	\$184,925	Surety Bond	Hartford Fire Insurance Company, or other
Post Injection Site Care	\$5,175,300	Surety Bond	Hartford Fire Insurance Company, or other
Site Closure	\$378,251	Surety Bond	Hartford Fire Insurance Company, or other
Emergency and Remedial Response	\$24,614,325	Surety Bond and/or Environmental Insurance	Hartford Fire Insurance Company, or other



Buckeye III CCS, LLC's decision to issue specific financial assurance instruments is conditioned upon the surety and insurance underwriters' acceptable review of permits, bond forms, financing, and other underwriting criteria and any arrangement for any bonds and/or is a matter between Buckeye III CCS, LLC and the carriers, and Aon assumes no liability to third parties or you if, for any reason, we do not issue requested bonds.

A handwritten signature in blue ink, appearing to read 'WRASKA', is written over a horizontal line.

By: Wes Raska

Company: Aon Risk Services Southwest, Inc.