POST-INJECTION SITE CARE AND SITE CLOSURE PLAN
LAC 43:XVII.3633(A)(1)

Magnolia Sequestration Project

1.0 Facility Information

Facility name: Magnolia Sequestration Project (Magnolia Hub)
Magnolia CCS 1, Magnolia CCS 2, Magnolia CCS 3, and Magnolia CCS 4 Wells

Facility contact: Kelly Watson, Project Manager
5 Greenway Plaza Houston, TX 77046
713-552-8613 kelly_watson@oxy.com

Well location: Allen Parish, Louisiana
Magnolia CCS 1
30° 40' 56.2474" N, 092° 50' 1.2244" W (NAD 27)
30° 40' 56.9387" N, 092° 50' 1.7707" W (NAD 83)
Magnolia CCS 2
30° 41' 40.1623" N, 092° 50' 23.1767" W (NAD 27)
30° 41' 40.8527" N, 092° 50' 23.7241" W (NAD 83)
Magnolia CCS 3
30° 41' 6.1794" N, 092° 50' 24.1145" W (NAD 27)
30° 41' 6.8705" N, 092° 50' 24.6617" W (NAD 83)
Magnolia CCS 4
30° 41' 38.4597" N, 092° 50' 23.1814" W (NAD 27)
30° 40' 39.1501" N, 092° 50' 23.7288" W (NAD 83)

This Post-Injection Site Care and Site Closure (PISC) plan describes the activities that Magnolia Sequestration Hub, LLC, will perform during the Post Injection Site Care and Site Closure of Magnolia Sequestration Project (the Project) to meet the requirements of LAC 43:XVII.3633(A) Magnolia Sequestration Hub, LLC, will monitor ground water quality, soil gas and track the position of the carbon dioxide plume and pressure front for 50 years. Magnolia Sequestration Hub, LLC, may not cease post-injection monitoring until a demonstration of non-endangerment of the Underground Sources of Drinking Water (USDW) has been approved by the Louisiana Department of Energy Conservation and Energy (C&E) Office of Conservation pursuant to LAC 43:XVII.3633(A)(2)(c). Following approval for site closure, Magnolia Sequestration Hub, LLC, will plug all monitoring wells, restore the site to its original condition, and submit a site closure report and associated documentation.

2.0 Pre- and Post-Injection Pressure Differential [LAC 43:XVII.3633(A)(1)(b)(i)]

Table PIS-1 contains the pressure differentials between pre- and post-injection conditions at the injection wells: Magnolia CCS 1, Magnolia CCS 2, Magnolia CCS 3, and Magnolia CCS 4. Based on the modeling of the pressure front as part of the Area of review (AOR) delineation, the maximum pressure differential from initial pressure is 245 psi at the top of the perforations for the Magnolia CCS 3 well.

The Table PIS-2 shows the pressure differential vs. time at the gauge depth for the monitoring well locations in the AOR. The highest pressures are in the immediate vicinity of each injector well. Once injection ceases, the pressure re-distributes, and the magnitude and area of elevated pressure

gradually decreases over time. The pressure is expected to be below the critical pressure of 96.2 psi in all areas of the site by the end of the PISC timeframe.

Table PIS-1—Pressure Differential to Pre-Injection Conditions at CO_2 Injection Well Locations

Years	Max of Magnolia CCS 1 Delta Pressure (psi)	Max of Magnolia CCS 2 Delta Pressure (psi)	Max of Magnolia CCS 3 Delta Pressure (psi)	Max of Magnolia CCS 4 Delta Pressure (psi)
Injection Y1	34	43	17	16
Injection Y2	38	50	24	22
Injection Y3	42	55	27	24
Injection Y4	49	59	29	26
Injection Y5	58	63	31	28
Injection Y6	63	66	228	106
Injection Y7	67	68	241	128
Injection Y8	109	106	245	124
Injection Y9	110	108	117	136
Injection Y10	110	110	122	139
Injection Y11	111	137	123	139
Injection Y12	109	130	124	140
Injection Y13	108	127	125	141
Injection Y14	108	126	126	142
Injection Y15	109	126	128	143
Post Injection Y1	34	34	31	37
Post Injection Y5	25	27	13	21
Post Injection Y10	24	27	11	16
Post Injection Y15	26	26	16	13
Post Injection Y50	24	24	22	22

Figure PIS-1 shows the simulated pressure vs. time for the Magnolia CCS 1, Magnolia CCS 2, Magnolia CCS 3, Magnolia CCS 4 and the monitoring well locations at the gauge depth. The step change in differential pressures at the injection wells is due to the change in the injection and completion strategy and not due to a sudden change in the formation pressure.

Additional information on the projected post-injection pressure declines and differentials is presented in the Narrative (NAR) and the Area of Review and Corrective Action Plan (AOR_CA) documents.

Table PIS-2—Pressure Differential to Pre-Injection Conditions at the Gauge Depth in Monitoring Well Locations

Item	Well Information			
Well Name	Magnolia MLR 1	Magnolia MLR 2	Magnolia MLR 3	YAMS MLR 004
Gauge Depth (TVDSS)	4,620	4,497	4,297	4,893
Year	**Pressure Differential (psi)**			
Injection Y1	59	54	31	48
Injection Y2	65	62	36	51
Injection Y3	68	69	40	53
Injection Y4	70	78	43	54
Injection Y5	73	83	46	56
Injection Y6	112	114	62	134
Injection Y7	133	135	81	155
Injection Y8	140	143	87	158
Injection Y9	78	77	54	81
Injection Y10	80	83	56	81
Injection Y11	82	76	51	72
Injection Y12	83	79	53	71
Injection Y13	85	83	56	72
Injection Y14	87	89	58	72
Injection Y15	90	92	61	74
Post Injection Y1	39	49	38	33
Post Injection Y5	32	43	33	31
Post Injection Y10	31	37	32	31
Post Injection Y15	30	34	30	30
Post Injection Y50	25	25	25	25

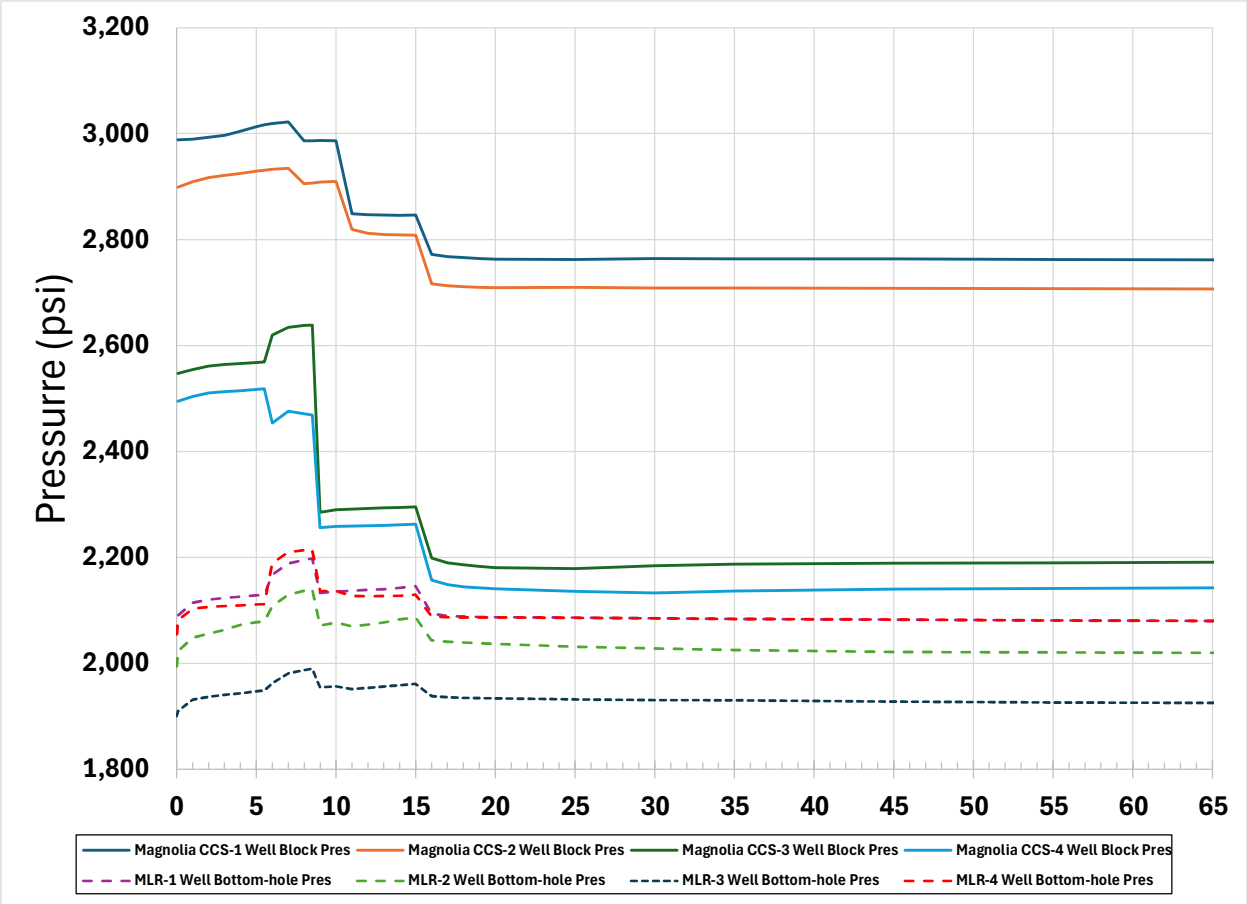

Figure PIS-1—Simulated pressure vs. time for the Magnolia CCS 1, Magnolia CCS 2, Magnolia CCS 3, Magnolia CCS 4 and the for monitoring well locations at the gauge depth

Figure PIS-2 and Figure PIS-3 show the simulated maximum pressure differential in the reservoir (from initial reservoir pressure) at 15 years after the start of injection and 50 years of post-injection period, respectively. The pressure has dissipated below the critical pressure in all areas of the site by year 50 of the post injection period.

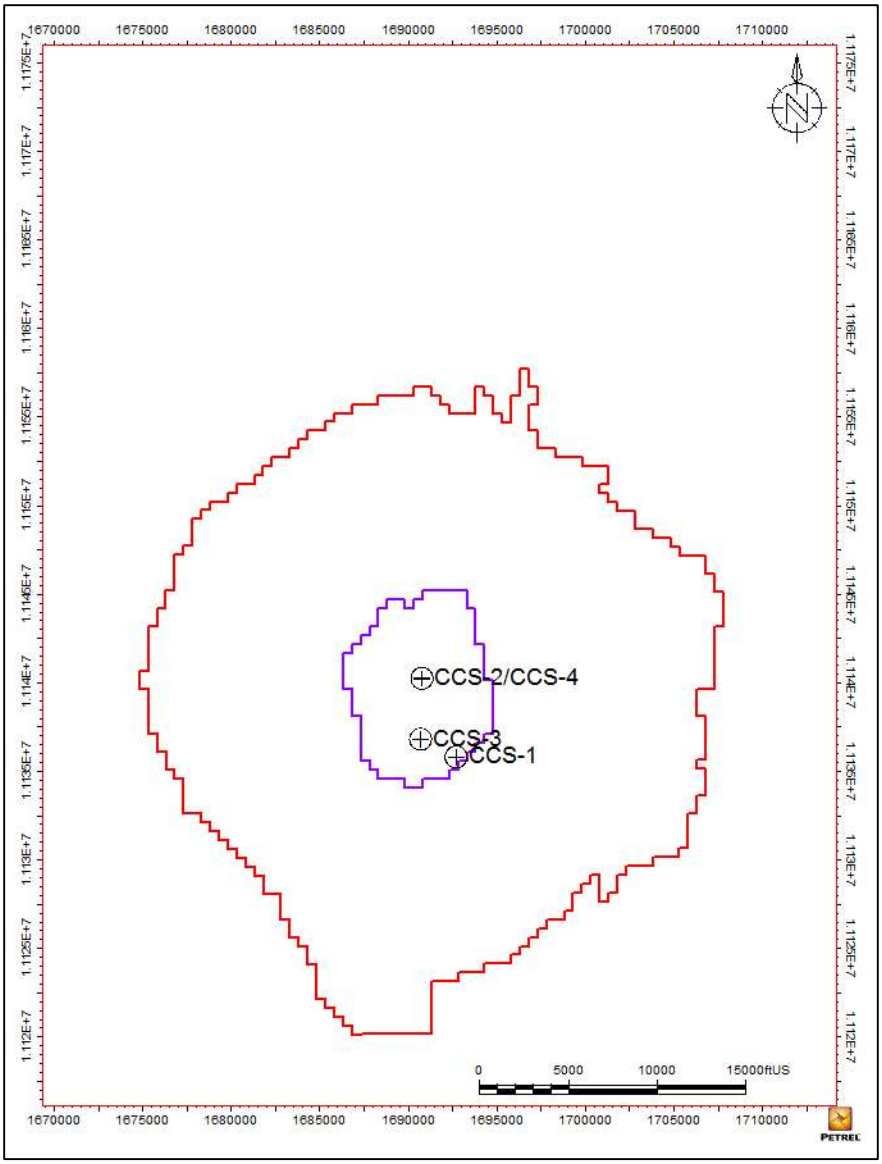

Figure PIS-2—Maximum aqueous pressure differential from the baseline condition at 15 years (end of injection). The critical pressure of 96.2 psi is indicated by the red line.

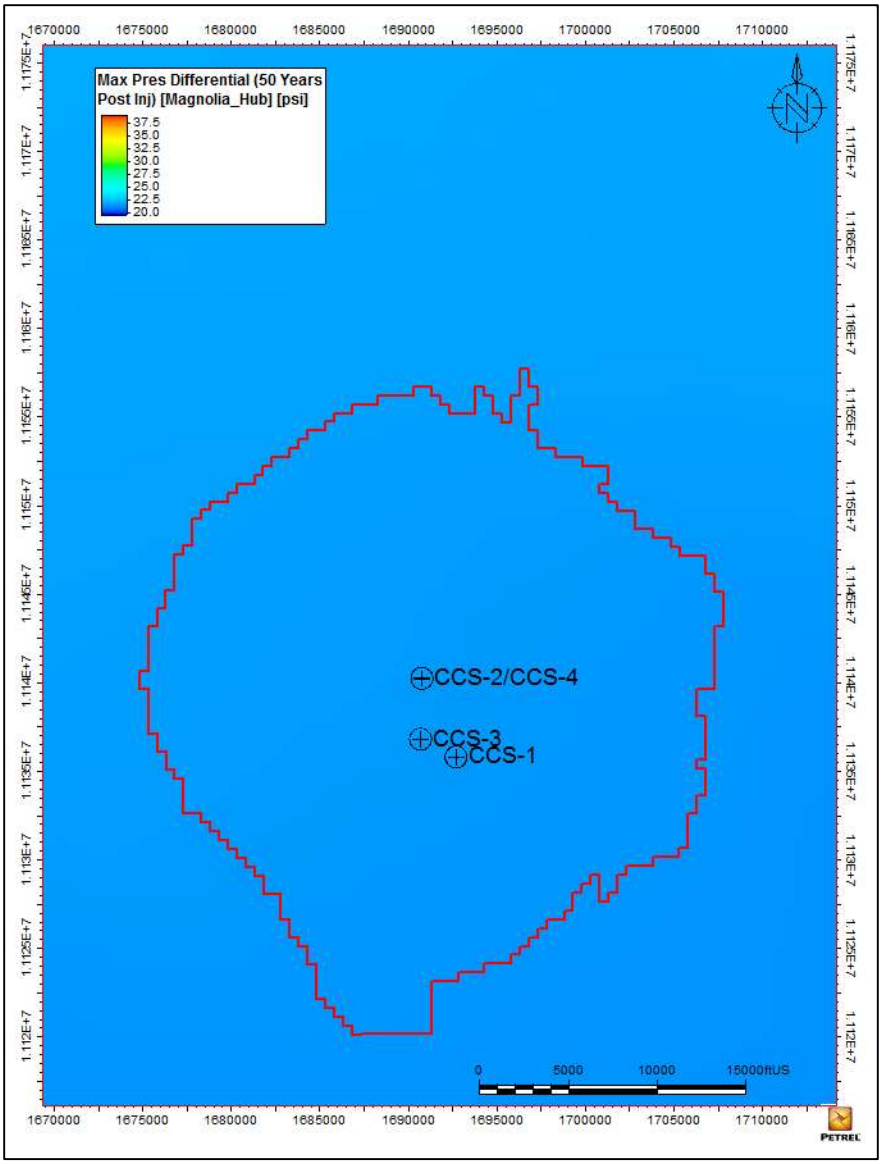

Figure PIS-3—Maximum aqueous pressure differentials from the baseline condition at 50 years post injection. The red outline is the maximum extent of the critical pressure.

3.0 Predicted Position of the CO_2 Plume and Associated Pressure Front at Site Closure [LAC 43:XVII.3633(A)(1)(b)(ii)].

The reservoir simulation indicates that after injection ceases, the CO_2 plume remains within the Frio_Lower, but continues to expand northward in the updip direction of the reservoir with time. To be conservative, the AOR is defined by the plume shape and size in year 115 (100 years after injection ceases). The colored area in Figure PIS-4 shows the CO_2 plume extent in year 65 (i.e., 50 years post-injection) as defined by the vertically integrated mass per unit area (VIMPA) containing 99% of the total mass injected. The simulated plume at 100 years post-injection is represented by the red outline. In addition, a N–S cross-section through well Magnolia CCS 1 at both times is shown in Figure PIS-5. The differences between the areal and vertical extents of the 65- and 115-year plumes are almost negligible and account for <1% of the total mass of gas

injection. In addition, as previously shown in Figure PIS-2 and Figure PIS-3, all pressures have been reduced to levels below the level of endangerment to USDWs. Therefore, year 65 (50 years post-injection) is considered as the site closure date.

The maps are based on the final AOR delineation modeling results submitted pursuant to LAC 43:XVII.3615(B) and (C).

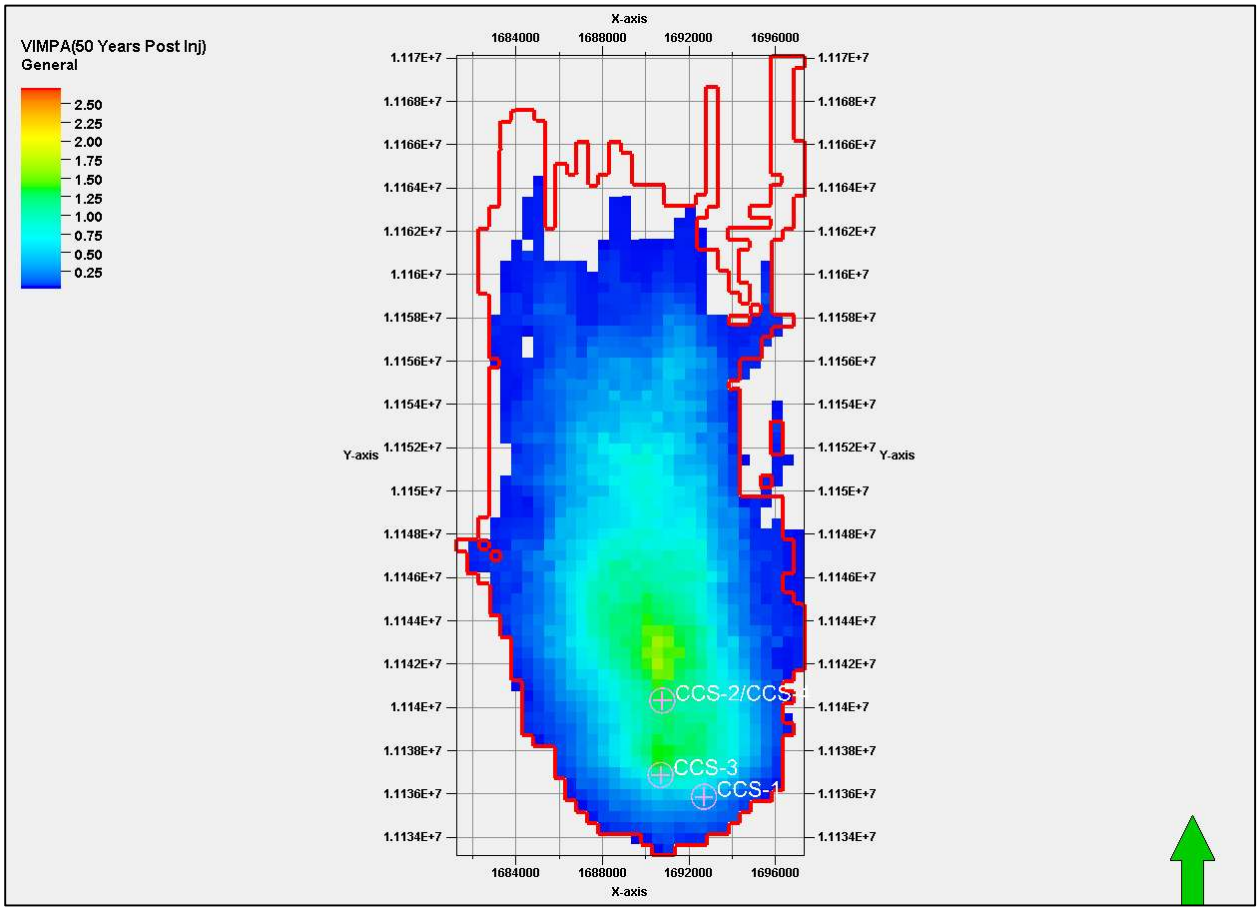

Figure PIS-4—Areal extent of the CO_2 plume at site closure in year 65 (50 years post-injection) defined by the vertical integration of mass per unit area accounting for 99% mass of CO_2 injected. The magenta outline represents the simulated CO_2 plume 100 years post-injection.

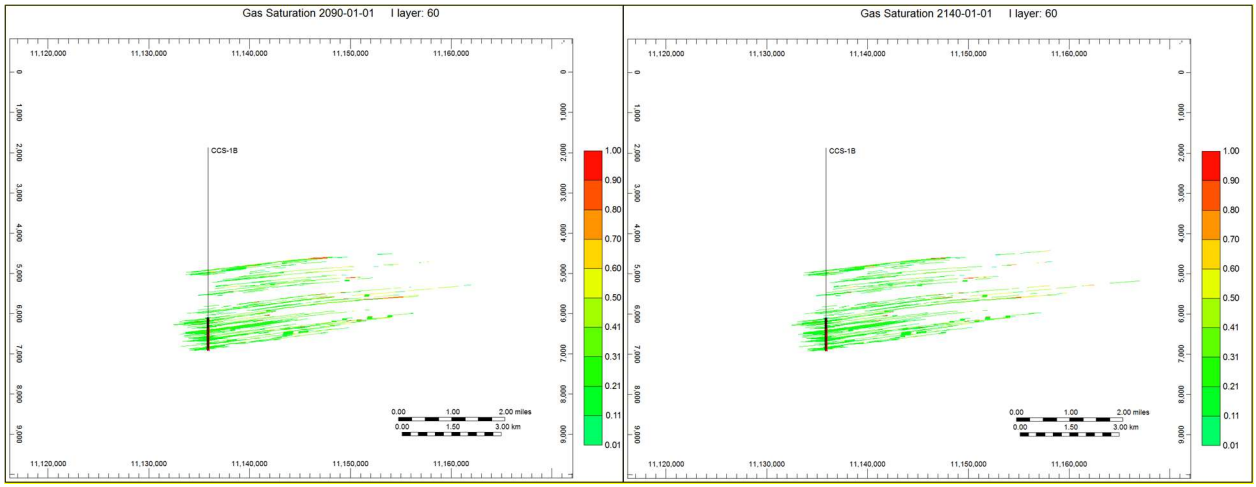

Figure PIS-5—North–South cross-section through well Magnolia CCS 1 showing simulated gas saturation in year 65 (50 years post-injection) and in year 115 (100 years post-injection).

Figure PIS-6 shows the CO_2 plume size as a function of time, with year 0 being the initiation of injection. The simulation model predicts that the CO_2 plume (defined as the area containing 99% of the total mass of injected CO_2) increases rapidly during injection and continues to increase after the cessation of injection in year 15. This continued migration of the plume is due to buoyancy of the mobile supercritical phase CO_2, which moves along the strata in the updip direction. The increase in plume size diminishes at year 65, which is the proposed site closure time. Over a 50-year period, from year 65 to year 115, the plume increases in size by 16.67% compared to a 100% increase from end of injection to year 65%.

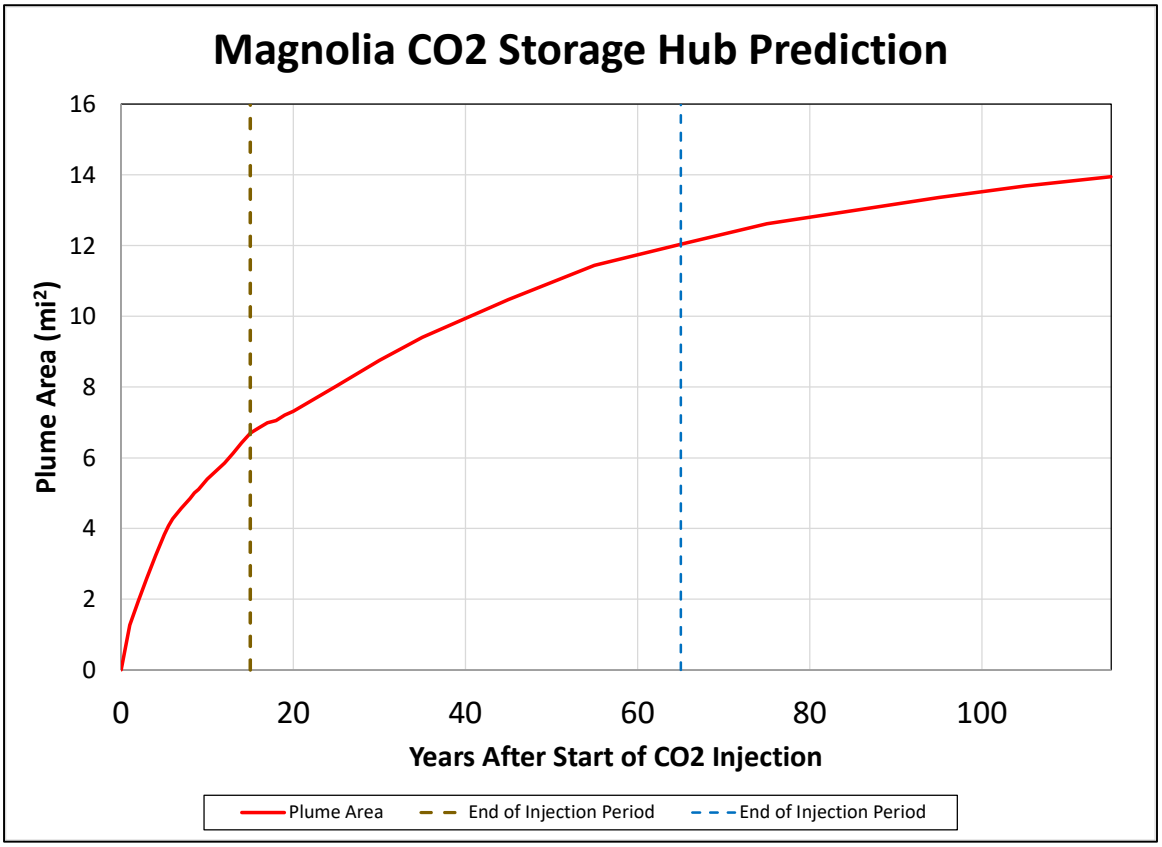

Figure PIS-6—Simulated CO_2 plume area containing 99% of the total mass of CO_2 over time. The blue dashed line denotes the time of site closure.

4.0 Post-Injection Monitoring Plan [LAC 43:XVII.3633(A)(2)(a)]

Performing groundwater quality monitoring, soil gas and plume and pressure front tracking as described in the following sections during the post-injection phase will meet the requirements of LAC 43:XVII.3633(A)(2). The results of all post-injection phase testing and monitoring will be submitted annually.

A quality assurance and surveillance plan (QASP) for all testing and monitoring activities during the injection and post injection phases is provided as a separate document.

After the injection ceases, the project will plug and abandon the injector wells according to the plugging procedure proposed in the Plugging Plan (PLG).

With the CO_2 injection in Magnolia CCS 1, Magnolia CCS 2, Magnolia CCS 3, and Magnolia CCS 4 wells, the maximum critical pressure front was observed 8½ years after the start of injection. The model predicts that during the post-injection period, the pressure front will reduce below the critical pressure across the AOR within the first year after cessation of injection and will not represent a risk on endangerment for the USDW water or the environment. Stabilized variation from one year to the next one will be less than 4% as shown in Table PIS-3.

Table PIS-3—Modeled Bottomhole Pressure Reduction in Time at the In-Zone Monitoring Well Locations. Values are % of reduction in pressure/year from the pressure value at the end of injection.

Year	Magnolia MLR 1	Magnolia MLR 2	Magnolia MLR 3	YAMS MLR 4
End of Injection	-	-	-	-
1 year post injection	57.3%	46.7%	37.9%	55.1%
5 years post injection	1.4%	2.8%	1.5%	0.1%
10 years post injection	3.1%	12.6%	5.4%	2.2%
15 years post injection	4.0%	9.5%	4.4%	3.5%
50 years post injection	3.7%	3.6%	3.9%	3.8%

Figure PIS-7 and Figure PIS-8 show the movement of the CO_2 plume with time, at the end of injection and 10, 15 and 50-years post-injection. The simulation model predicts that the CO_2 plume increases rapidly during injection and continues to increase after the cessation of injection in year 15. This continued migration of the plume is due to buoyancy of the mobile supercritical phase CO_2, which moves along the strata in the updip direction. However, the plume growth diminishes with time, as witnessed from comparison of the CO_2 plume from 10 and 15 years post injection. It can also be observed that the plume growth stabilizes in the south and continues to move to the north as dictated by the rock and fluid properties.

For the first 15 years of the post-injection period, the monitoring program will focus on tracking the projected CO_2 plume migration and changes in the pressure front with a combination of direct and indirect measurements in the monitoring wells, as well as the execution of time lapsed 2D surface seismic and soil gas analysis in the delineated AOR. During this post-injection period, the Project will confirm that the CO_2 Plume is behaving as predicted, is not a risk to the USDW, and that the pressure in the elevated pressure zone decreases as projected.

As described in the Testing and Monitoring Plan (TM), the monitoring well distribution was defined based on the evaluation of the AOR as well as a risk assessment prepared by the Project. The location of Magnolia MLR 1 and YAMS MLR 004 (SN 975950) will allow the project to have measurement of the CO_2 plume in early injection period (between 10 and 15 years of injection), but also allow the project to monitor the behavior of the pressure front and CO_2 plume during the post injection period to the west and the south of the AOR.

The location of Magnolia MLR 2 will allow the Project to detect any deviation from the projected CO_2 Plume migration pattern during injection and post injection migration that could indicate the need to reassess the AOR and potentially remediate the wells located to the northwest of Magnolia MLR 2.

The location of Magnolia MLR 3 will allow the Project to match the rate of migration during the first 15 years of the Post Injection period, with the use of pulse neutron logs as well as direct measurement of pressure and temperature in the reservoir. Since Magnolia MLR 3 serves the project during post injection, the well is scheduled to be drilled in the post injection phase (see TM document).

Magnolia ACZ 1, Magnolia ACZ 2, Magnolia USWD 1 and Magnolia USDW 2 locations were selected to cover most of the AOR projected by the model, to monitor the quality of the water above the Lower Miocene upper confining zone.

After 15 years of post-injection period monitoring, the Project will validate that the CO_2 plume is behaving as modeled before beginning to plug wells. Magnolia Sequestration Hub, LLC proposes to plug Magnolia CCS1, Magnolia CCS 2, Magnolia CCS 3, YAMS CCS 004 (SN 975950), Magnolia ACZ 1, Magnolia ACZ 2 and Magnolia USDW 1 and continue monitoring USDW ground water with Magnolia USDW 2, in combination with time lapsed 2D seismic surveys and soil gas monitoring, until the closure of the site.

A 2D seismic survey will be acquired as a baseline after injection ceases, as method of tracking CO_2 plume migration. 2D time-lapse surface seismic surveys will be acquired at year 5 and at year 10 of the post injection period, and after that every 10 years until the closure of the site at 50 years post injection.

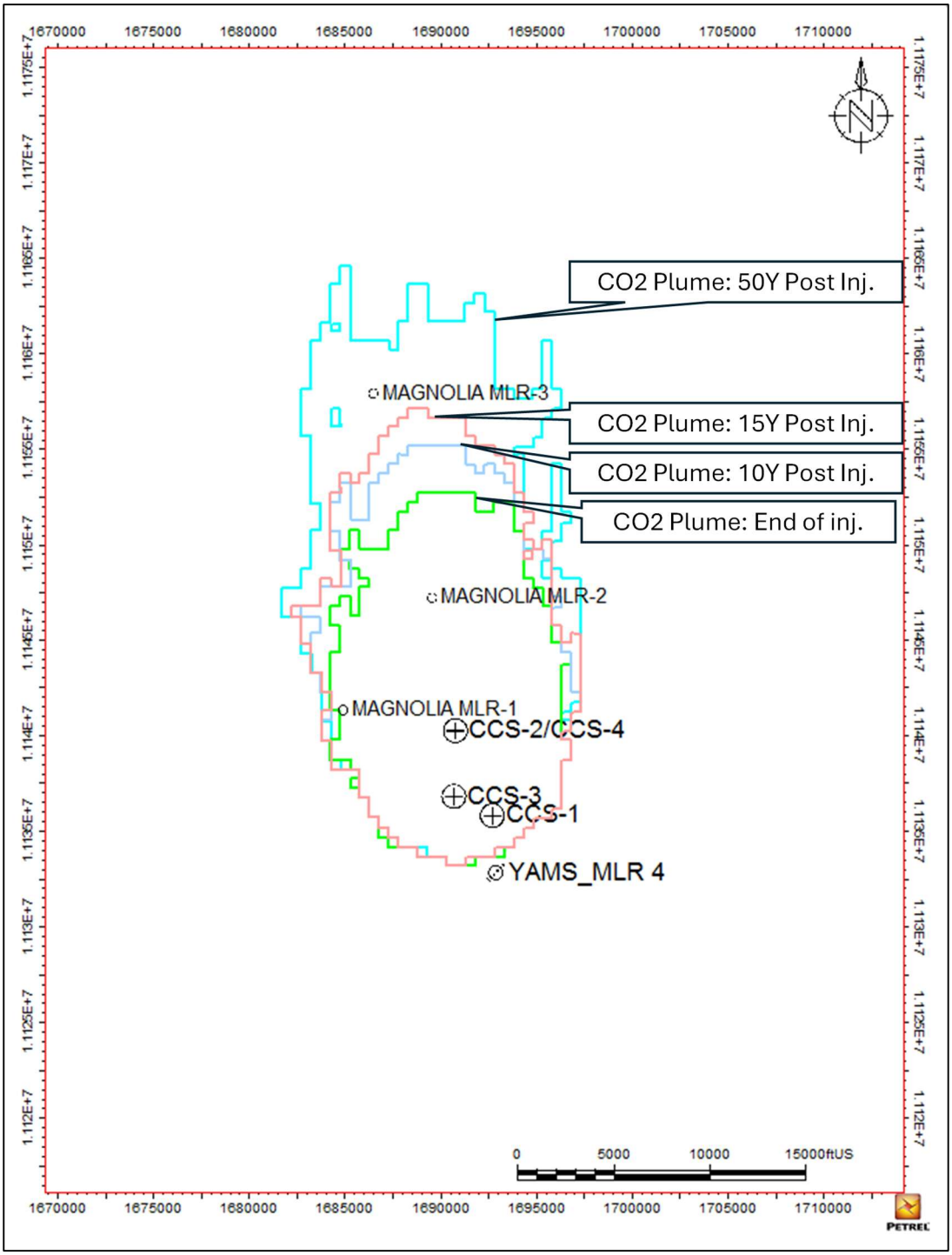

Figure PIS-7—Simulated areal extent of the CO_2 plume at 15 years of injection, 10 years post injection, 15 years post injection and 50 years post injection in relationship with the In Zone monitoring wells.

The Magnolia ACZ 1, Magnolia ACZ 2, Magnolia USDW 1, and Magnolia USDW 2 wells will be utilized to measure changes in ground water composition above the confining zone to validate the sealing capacity of the Lower Miocene upper confining zone. (See Figure PIS-9)

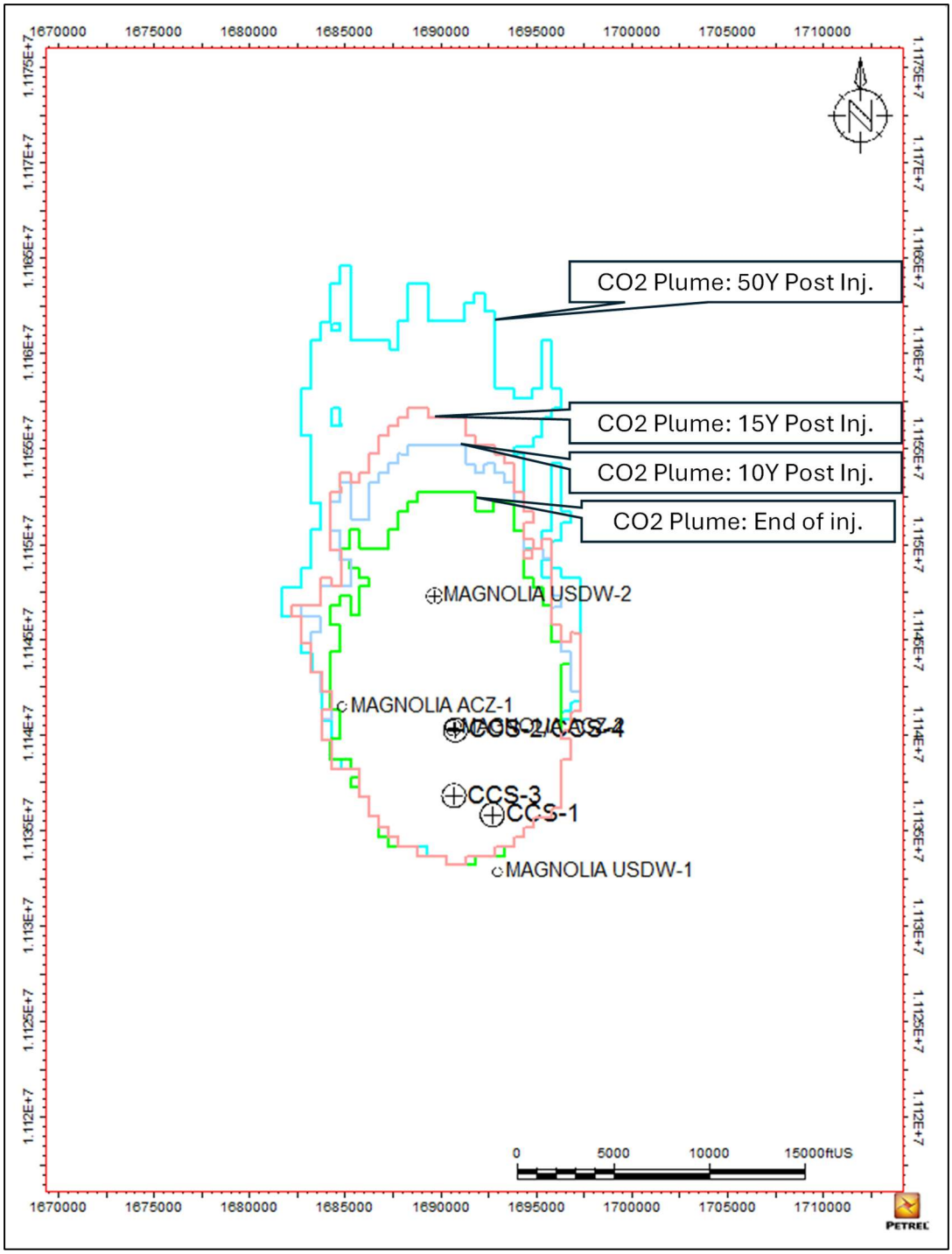

Figure PIS-8—Simulated areal extent of the CO_2 plume at 15 years of injection, 10 years post injection, 15 years post injection and 50 years post injection in relationship with the ACZ and USDW monitoring wells.

A description of the methods, techniques, and frequency of tests to be used while monitoring the site during the post injection period is shown in Table PIS-4.

Table PIS-4—Monitoring Plan for Post-Injection Site Care

Description	Method	Location	Post Injection period
Operations	Surface pressure and temperature measurements in tubing- Pressure Transducers	Magnolia MLR 1 Magnolia MLR 2 Magnolia MLR 3 YAMS MLR 4 Magnolia ACZ 1 Magnolia ACZ 2	Continuously until the wells are plugged.
	Visual inspections and handheld monitors (LEL, H_2S, CO_2)	General facilities	Quarterly until facilities are closed.
Mechanical Integrity	Pulse neutron, Temperature log, or Electromagnetic Log	Magnolia MLR 1 Magnolia MLR 2 Magnolia MLR 3 YAMS MLR 4	Every 5 years until the wells are plugged.
	Annular pressure test	Magnolia MLR 1 Magnolia MLR 2 Magnolia MLR 3 YAMS MLR 4 Magnolia ACZ 1 Magnolia ACZ 2	Every 5 years until the wells are plugged.
Ground Water Quality and Geochemical Monitoring	Water sampling and testing of ACZ and USDW wells	Magnolia ACZ 1 Magnolia ACZ 2 Magnolia USDW 1 Magnolia USDW 2	Annually first 15 years of post-injection period. Every 5 years from year 15 of post injection to closure in Magnolia USDW 2.
Carbon Dioxide Plume and Pressure Front Tracking	Pulse Neutron Log for CO_2 plume tracking	Magnolia MLR 2 Magnolia MLR 3	Annually the first 10 years of the post injection period. Biannually from year 10 to year 15 post injection.
	Pulse Neutron Log for CO_2 plume tracking	Magnolia MLR 1 YAMS MLR 4	Annually the first 5 years of the post injection period. Every 5 years after that.
	In reservoir pressure and temperature measurement - Downhole gauges	Magnolia MLR 1 Magnolia MLR 2 Magnolia MLR 3 YAMS MLR 4	Continuously first 5 years of post-injection. Semi-annually from year 5 to year 15 post injection.
	2D time lapsed surface seismic	AOR	At year 5, 10, and 15 of the post injection period and after that every 10 years until closure.
Near Surface Monitoring	Process-based soil gas approach	AOR	Annually until site closure.

Specifics of the methods, techniques, and analytics to be tested as part of the proposed monitoring plan are described in detail in the Testing and Monitoring Plan (TM) and the QASP document.

5.0 Schedule for Submitting Post-Injection Monitoring Results [LAC 43:XVII.3633(A)(1)(b)(iv)]

During the PISC period, the monitoring reports will be prepared annually and submitted to the C&E. These reports will summarize methods and results of the monitoring techniques including

ground water quality monitoring, soil gas analysis, CO_2 storage zone pressure tracking, and indirect geophysical monitoring for CO_2 plume tracking.

The PISC and Site Closure Plan will be reviewed every 5 years during the PISC period. Results of the plan review will be included in the PISC monitoring reports. The operational and monitoring results will be reviewed for adequacy in relation to the objectives of the PISC. The monitoring locations, methods, and schedule will be analyzed in relation to the size of the CO_2 storage zone, pressure front, and protection of USDWs. In case of changes to the PISC plan, a modified plan will be submitted to the C&E and required to be approved by the Commissioner 30 days prior to the change implementation.

6.0 Non-Endangerment Demonstration Criteria

Prior to approval of the end of the post-injection phase, Magnolia Sequestration Hub LLC, will submit a demonstration of non-endangerment of USDWs to the C&E, per LAC 43:XVII.3633(A)(2)(b) and (c).

Magnolia Sequestration Hub LLC will issue a report to the C&E which will make a demonstration of USDW non-endangerment based on the evaluation of the site monitoring data used in conjunction with the project's computational model. The report will detail how the non-endangerment demonstration evaluation uses site-specific conditions to confirm and demonstrate non-endangerment. The report will include all relevant monitoring data and interpretations upon which the non-endangerment demonstration is based, model documentation and all supporting data, and any other information necessary for the C&E to review the analysis. The report will include the following sections:

6.1 Introduction and Overview

A summary of relevant background information will be provided, including the operational history of the injection project, the date of the non-endangerment demonstration relative to the post-injection period outlined in this PISC and Site Closure Plan, and a general overview of how monitoring and modeling results will be used together to support a demonstration of USDW non-endangerment.

6.2 Summary of Existing Monitoring Data

A summary of all previous monitoring data collected at the site, pursuant to the Testing and Monitoring Plan document and this PISC and Site Closure Plan, including data collected during the injection and post-injection phases of the project, will be submitted to help demonstrate non-endangerment. Data submittals will be in a format acceptable to the C&E and will include a narrative explanation of monitoring activities, including the dates of all monitoring events, changes to the monitoring program over time, and an explanation of all monitoring infrastructure that has existed at the site. Data will be compared with baseline data collected during site characterization (LAC 43:XVII.3607(C)(2)(e) and LAC 43:XVII.3617(B)(4)(c)).

6.3 Summary of Computational Modeling History

The computational modeling results used for the AOR delineation will be compared to monitoring data collected during the operational and PISC periods (LAC 43:XVII.3607(C)(2)(e) and LAC 43:XVII.3617(B)(4)(c)). The data will be used to update the computational model and monitor the site, and will include both direct (e.g., measurements of pressure, temperature, groundwater quality, and injection zone fluid composition) and indirect (e.g., passive seismic and integrated deformation monitoring, PNC logging) geophysical methods.

Data generated during the PISC period will be used to show that the computational model accurately represents the storage site and can be used as a proxy to determine the plume's properties and size. Magnolia Sequestration Hub, LLC. will demonstrate this degree of accuracy by comparing the monitoring data obtained during the PISC period with the model's predicted properties (i.e., plume location, rate of movement, and pressure decay). Statistical methods will be employed to correlate the data and confirm the model's ability to represent the storage site accurately. The validation of the computational model with the large quantity of measured data will be a significant element to support the non-endangerment demonstration. Further, the validation of the complete model over the entire area, and at the points where direct data collection has taken place, will ensure confidence in the model for those areas with no direct observation wells where the surface infrastructure precludes geophysical data collection.

6.4 Evaluation of Reservoir Pressure

Magnolia Sequestration Hub, LLC, will demonstrate non-endangerment to USDWs by showing that during the PISC period, the pressure within the Frio reservoir will rapidly decrease to levels near its pre-injection static reservoir pressure. Because increased pressure is the primary driving force for fluid movement, the decay in the pressure differential provides strong justification that the injectant will no longer pose a risk to any USDWs.

Magnolia Sequestration Hub, LLC, will monitor the downhole reservoir pressure at various locations using a combination of surface and downhole pressure gauges. The measured pressure will be compared with the pressure predicted by the computational model, which was previously shown in Figure PIS-1, Figure PIS-2 and Figure PIS-3. Agreement between the actual and predicted values will validate the accuracy of the model and further demonstrate non-endangerment.

6.5 Evaluation of Carbon Dioxide Plume

Magnolia Sequestration Hub, LLC, will use a combination of monitoring data, logs, geophysical surveys, and seismic methods to locate and track the movement of the CO_2 plume. The data produced by these activities will be compared with the modeled predictions (previously shown in Figure PIS-7) using statistical methods to validate the model's ability to represent the storage site accurately. Regarding the separate-phase carbon dioxide plume, the PISC monitoring data will show the stabilization of the CO_2 plume as the reservoir pressure returns to its near pre-injection state. The risk to USDWs will decrease when the extent of pure-phase CO_2 ceases to grow significantly either laterally or vertically. The stabilization of the CO_2 plume combined with the lack of local penetrations in the confining formation will be significant factors in Magnolia Sequestration Hub, LLC's, demonstration of non-endangerment.

Project monitoring wells located above the confining layer may be used to determine aqueous-phase CO_2 concentrations and mobilized constituents to assess USDW endangerment. If a demonstration can be made, in conjunction with monitoring data, that a vast majority of the CO_2 has been immobilized via trapping mechanisms, then there is strong evidence that the risk to USDWs posed by the CO_2 plume has decreased. Modeling results, including sensitivity analyses, may also be used to demonstrate that plume migration rates are negligible based on available site characterization, monitoring, and operational data.

6.6 Evaluation of Emergencies or Other Events

In addition to the CO_2 plume, mobilized fluids may also pose an ongoing risk to USDWs, as the reservoir fluids include brines high in total dissolved solids (TDS) and other drinking water contaminants. The geochemical data collected from monitoring wells will be used to demonstrate that no mobilized fluids have moved above the confining formation and therefore would not pose a risk to USDWs after the PISC period. Of particular importance are any monitoring wells above the primary confining zone, within any USDWs, and in the vicinity of any known leakage pathways. Monitoring data indicating steady or decreasing trends of potential drinking water contaminants below actionable levels (e.g., secondary and maximum contaminant levels) will be used for this demonstration.

To demonstrate non-endangerment, Magnolia Sequestration Hub, LLC, will analyze the operational and PISC period samples of the lowermost USDW to demonstrate that no mobilized formation fluids have moved through the confining formation. In addition, this validation of confining zone integrity will demonstrate that the injectant and/or mobilized fluids will not represent an endangerment to any USDWs.

Other than the project and monitoring wells, other potential conduits for fluid movement or leakage pathways within the AOR will be adequately plugged and abandoned. Based on this information, the potential for fluid movement through artificial penetrations of the confining formation does not present a risk of endangerment to any USDWs.

7.0 Site Closure Plan

Magnolia Sequestration Hub, LLC, will conduct site closure activities to meet the requirements of (LAC 43:XVII.3607(C)(2)(e) and LAC 43:XVII.3617(B)(4)(c)). as described below. Magnolia Sequestration Hub, LLC, will submit a final Site Closure Plan and notify the permitting agency at least 120 days in writing prior to the intent to close the site LAC 43:XVII.3633(A). Once the Commissioner has approved closure of the site, Magnolia Sequestration Hub, LLC, will plug the monitoring wells remaining in the AOR and submit a site closure report to the C&E. The activities, as described below, represent the planned activities based on information provided to the C&E. The actual site closure plan may employ different methods and procedures. A final Site Closure Plan will be submitted to the C&E for approval with the notification of the intent to close the site.

The Louisiana Department of Wildlife and Fisheries, the City of Oberlin, and Allen Parish agencies will be notified prior to the scheduled site closure. Currently, there are no federally

recognized Native American Tribes located within the AOR; however, if a federally recognized Native American Tribe becomes known within the AOR at the time of site closure, that tribe(s) will be notified of the site closure.

7.1 Plugging Monitoring Wells

Upon conclusion of the 50-year post-injection site care period, any remaining monitoring well will be plugged and capped below grade in accordance with the approved plugging and abandonment plans (Injection Well Plugging Plan, PLG).

After the completion of the plugging activities, a plugging report will be submitted to the C&E describing the methods used and tests performed on the well during plugging. This report will be submitted to the C&E within 60 days of completing the plugging activities.

7.2 Planned Remedial and Site Restoration Activities

At the end of the PISC phase, Magnolia Sequestration Hub, LLC, will ensure the site is reclaimed and returned to predevelopment condition to meet the requirements of LAC 43:XVII.3633(A)(5).

Surface equipment decommissioning will occur in two phases: the first phase will occur after the active injection phase, and the second phase will occur at the end of the PISC phase.

At the end of the active injection period, plume monitoring will continue, but there will be no further need for flow control and monitoring equipment. The process control building at the surface facility will remain. This building serves as a hub for control and monitoring of the well network, so it will remain operational until all monitoring wells are abandoned. The control equipment and above-ground pipe, valves, and fittings at the surface facility will be demolished.

The injection wells will be plugged and capped below grade as per the Injection Well Plugging Plan document of this permit. The process control building at the facility site will act as the collection node for data from the plume monitoring equipment. This building will contain the equipment required to receive real-time data from the monitoring wells and other monitoring stations and send the data via an internet connection to be analyzed offsite during the 50-year post-injection monitoring period.

All surface facilities will be removed at the end of the PISC phase. That includes the process control building at the surface pumping facility site. The site will be reclaimed and returned to predevelopment condition.

The soil will be backfilled around the monitoring and geophysical wells to bring the area around the wells back to the pre-installation grade. Any remaining surface facilities associated with the monitoring wells will be reclaimed, and the area will be returned to the predevelopment condition. All gravel pads and surface facilities will be removed, and the land will be reclaimed for preconstruction uses.

7.3 Site Closure Report

A site closure report will be prepared and submitted to C&E within 90 days following site closure, documenting the following:

- Plugging of all injection and monitoring wells,
- Details of site restoration activities,
- Location of the sealed injection well on a plat survey submitted to the local zoning authority,
- Notifications to state and local authorities,
- Records regarding the nature, composition, and volume of CO_2 injected,
- Pre-injection, injection, and post-injection monitoring records, and
- Certifications that all injection and storage activities have been completed.

Magnolia Sequestration Hub, LLC, will record a notation to the property's deed on which the injection well was located that will indicate the following:

- That the property was used for carbon dioxide sequestration,
- The name of the local agency to which a plat of survey with injection well location was submitted,
- The volume of fluid injected,
- The formation into which the fluid was injected, and
- The period over which the injection occurred.

The site closure report will be submitted to the permitting agency and maintained by the owner or operator for a period of 10 years following site closure per LAC 43:XVII.3633(A)(6). Additionally, the owner or operator will maintain the records collected during the post-injection period for a period of 10 years after which these records will be delivered to the C&E.