QUALITY ASSURANCE AND SURVEILLANCE PLAN

Pelican Sequestration Project

1.0 Facility Information

Facility name: Pelican Sequestration Project
Pelican CCS 1 Well

Facility contact: [redacted], Project Manager
5 Greenway Plaza Houston, TX 77046
[redacted]

Well location: Holden, Livingston Parish, Louisiana
[redacted] (NAD 1927, BLM Zone 15N)

2.0 Project Management and Surveillance Process

The Pelican Sequestration Project includes participation of multidisciplinary teams from Oxy Low Carbon Ventures, LLC, consultants, subcontractors, and government entities. Each team will provide technical expertise and economic input to the project to ensure a safe, successful, and efficient operation.

Characterization of the reservoirs, seals, and subsurface features has been done by experienced geoscience professionals using industry-recognized simulation software and techniques. Further characterization of the features will be done by applying the latest logging and testing technologies during the drilling of the well.

Pipeline, surface equipment, and well designs comply with industry standards for CO_2 material selection and operating conditions to promote mechanical integrity of the system during the life of the project.

Monitoring programs for leak detection, corrosion, and surveillance have been tailored for the site to ensure protection of the USDW and environment, maintain mechanical integrity of the installation during operations, and maximize the storage life of the asset. These plans incorporate best practices and recommendations for carbon capture and storage projects worldwide as well as Occidental's decades of experience in the development of CO_2 EOR fields.

As part of the quality control process during testing and surveillance, most of the samples collected and the data gathered will be analyzed, processed, validated, or witnessed by third parties independent of the operations staff. For specialized data such as seismicity and distributed temperature sensing (DTS), the project will have additional support from the providers of the selected technologies in quality control, verification of the data, and system calibration.

Sensors, transducers, and controllers will be connected to a central platform to allow for monitoring of operating conditions, system upset alarming, and safety protocol initiation. System data interfaces will be created and integrated into a unique surveillance platform. The operating

parameters, monitoring values, laboratory results, and surveillance documents for the project will be stored in a central database to provide support for AoR reviews, quality assurance programs, and reporting.

The project will establish key staffing positions that will ensure a reliable operation with the highest standard of quality, surveillance procedures, storage evaluation, and reporting. Some of the staff will be dedicated full time to the operation, while others will be assigned as required during AoR reviews, maintenance activities, and other project activities.

Once the project is in operation, Pelican Sequestration Hub, LLC will provide an updated contact list with the names of the individuals in each position. The list will then be updated as needed.

2.1. Project/Task Organization

2.1.1 Key Individuals and Responsibilities

A brief description of the project organization is below:

Vice President, Low Carbon Ventures Services: The Pelican Sequestration Project is led by the Vice President (VP) of Oxy Low Carbon Ventures Services (LCVS), who is responsible for the overall execution of the project. Reporting to the VP are the Director Subsurface Evaluation, the Director Commercial Services, the Director Ops and Tech Support, the Manager of Commercial Development and Director.

Director Subsurface Evaluation LCVS: This Director plays a critical role in the subsurface activities regarding the CO_2 sequestration site, including geological and reservoir modeling, petrophysics, and geophysics. This person is responsible for analyzing the site and ensuring subsurface safety, based on various modeling assumptions regarding Carbon Capture and Storage (CCS).

Director Ops and Tech Support: This Director plays a central role in the implementation of all data gathering and analysis for the CO_2 Pipeline and Storage Project. This Director provides overall coordination and responsibility for organizational and administrative aspects of the project and is also responsible for the planning, funding, schedules, and controls needed to implement project plans and ensure that project participants adhere to the plan.

VP Commercial Services: This person and their staff play an important role in enlisting emitters to provide sources of CO_2 and landowners to deliver the pore space for the sequestration site. These individuals negotiate the contracts with the various parties and identify the financial terms that OLCV is willing to accept. In addition, Commercial Services is responsible for providing financial assurance for the expenses required during post-injection site care and site closure.

Project Manager: The Project Manager is responsible for project implementation after pore space characterization and project commercial contracting is complete. This role is responsible for coordinating the Class VI permitting process, other environmental and project permit approvals, drilling of the wells, facility installation, and project commissioning and startup.

Facilities Engineer: The role of the Facilities Engineer (FE) is to identify quality-affecting processes and monitor compliance with project requirements. The FE is responsible for establishing and maintaining the project quality assurance plans, monitoring project staff compliance with them, and ensuring that this Quality Assurance and Surveillance Plan (QASP) meets the project's quality assurance requirements.

Drilling/Production Engineer: The role of the Drilling/Production Engineer is to design and implement the drilling of the injection and various monitoring wells, including obtaining budget pricing information, design of the wellbores, and developing the monitoring programs for the wells involved. One additional responsibility is to review the wellbores within the proposed CO_2 plume and pressure front and provide a plan for remediation, as needed.

Reservoir Engineer: The role of the Reservoir Engineer is to gather subsurface data and run the simulation model to predict the pressure front and CO_2 plume movement. This person must work closely with the other subsurface staff to ensure accurate results with the limited data available.

Geologist: The role of the Geologist is to define the subsurface storage area, to create a geologic model, and incorporate the seismic and petrophysical data into the model.

Petrophysicist: The role of the Petrophysicist is to analyze the available logs and generate porosity and permeability models to be used in the subsurface model of the area.

Geophysicist: The role of the Geophysicist is to help define the subsurface storage area by analyzing the available 2D and 3D seismic images of the area and interpret faults or other areas that could potentially be leakage pathways.

Subject Matter Experts/Task Leads: Well testing and monitoring Subject Matter Experts (SMEs) and Task Leads comprise both internal (Oxy) and external (subcontractors) geologists, hydrologists, chemists, atmospheric scientists, ecologists, etc. These SMEs help to develop testing and monitoring plans, collect environmental data specified in those plans using best practices, and maintain and update those plans as needed.

Table Q-1—Contact List

Name	Organization	Project Role(s)	Contact Information (Telephone / Email)
[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]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
Various	Occidental Oil & Gas Corporation	Subject Matter Experts and Task Leads	Various

2.1.2 Independence from Project QA Manager and Data Gathering

The majority of the physical samples collected, and data gathered as part of the monitoring program is analyzed, processed, or witnessed by third parties independent and outside of the project management structure.

2.1.3 QA Project Plan Responsibility

Pelican Sequestration Hub, LLCs will be responsible for maintaining and distributing official, approved QA project plans.

2.2. Data Verification and Validation

The project will establish a standardized program for data acquisition and validation methods. The program will verify that collected data is reasonable, processed and analyzed correctly, and free of errors. Peer reviews or third-party consultants will serve as a quality control mechanism. Issues identified during a peer review will be addressed and corrected by the data owner. Errors identified in the data via validation will be corrected and affected users will be notified. Corrective actions will be coordinated to ensure the impact of the error is fully addressed.

2.3 Management of Change

The project will implement a Management of Change procedure to communicate and document any deviation from policies, operational parameters, and standard operating procedures. The MOC procedure aims to mitigate deviations in cost and project scope.

2.4 Contractor Requirements

Each contractor will follow a qualification process before being authorized to execute work on site or in their shop. Each contractor providing service to the Pelican CO_2 Sequestration Project must provide a copy of their Quality Assurance / Quality Control (QA/QC) and safety management program to qualify for performing the work. The contractors may be audited by Pelican Sequestration Hub, LLC, SMEs, and safety representatives. All contractors are required to comply with the Worker Safety Program and Operations policies at the work site. Pelican Sequestratino Hub, LLCs reserves the right to inspect and audit the contractor's operation and quality program to guarantee the safety and quality programs are being followed.

2.5 Special Training and Certificates

Wireline logging, indirect geophysical methods, and non-routine sampling will be performed by trained, qualified, and certified personnel, according to the service company's requirements.

Routine injectant and groundwater sampling will be performed by trained personnel, but no specialized certifications are required. Some special training will be needed for project

personnel, particularly in the areas of PNC logging interpretation, certain geophysical methods, certain data acquisition and transmission systems, and certain sampling technologies.

Training of project staff will be conducted by project personnel knowledgeable in project-specific sampling procedures. Training documentation will be maintained as project QA records.

2.6 Documentation, Records, and Reporting

All data and project records will be stored electronically on secure servers and will have routine backups. Reporting will comply with Class VI UIC requirements.

The remaining sections are under development at the time of initial submission.

3.0 Testing and Monitoring Techniques

4.0 Analytical Methods

5.0 Water Sampling

6.0 Continuous Recording of Injection Parameters

7.0 Injection Well Fall-off Test

8.0 DTS Fiber Optic Array Downhole

9.0 Geophone Array for Seismicity

10.0 CO_2 Mass Calculations

11.0 References

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