

**Underground Injection Control – Class VI Permit  
Application for**

**High West CCS Project  
Spoonbill No. 001 to 005**

**St. Charles and Jefferson Parishes, Louisiana**

**SECTION 8 – EMERGENCY AND REMEDIAL RESPONSE  
PLAN**

Prepared for High West Sequestration LLC  
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## SECTION 8 – EMERGENCY AND REMEDIAL RESPONSE PLAN

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## **8.1 Emergency and Remedial Response Plan Overview**

This Emergency and Remedial Response Plan (ERRP) for the High West CCS Project was prepared to meet the requirements of SWO 29-N-6, **§3623.A** [Title 40, US Code of Federal Regulations (40 CFR) **§146.94**]. This section is organized into six distinct parts. These parts identify and discuss issues surrounding (1) potentially affected infrastructure and parties, (2) definitions of degrees of severity, (3) specific events and their response plans, (4) training, (5) communications plans and notification procedures, and (6) emergency response plan review and updates. These sections aim to ensure that a rapid and appropriate response is taken to protect any Underground Sources of Drinking Water (USDW). The strategies consider the protection of the environment, surrounding community, and company property.

This plan will remain in place during the construction, operation, closure, and post-closure periods for the proposed High West Sequestration LLC (High West) injection wells, Spoonbill No. 001 to 005. Copies of the EERP will be maintained and made available at the High West Sequestration Site facilities and at the company headquarters.

## **8.2 Resources/Infrastructure in the Area of Review**

The area of review (AOR) for the High West CCS Project site is in St. Charles and Jefferson Parishes, Louisiana. The facility is located about 10 miles (mi) southwest of New Orleans in the Salvador Wildlife Management Area. Local resources in the vicinity of the storage facility that may be impacted by an emergency event are the lake and surrounding marsh within the property area. Infrastructure with potential for impact has been identified and is included in *Appendix G-3*.

The infrastructure in the AOR includes Linaux Canal, Bayou Verret, Lake Cataouatche, Lac des Allemands, electric power transmission lines, and pipelines (i.e., crude oil, natural gas, and highly volatile liquid). The nearest largely populated location is New Orleans, with a population of 380,408 residents<sup>1</sup>, located outside the AOR. Local resources may be used if required to minimize the impact of an event. Those resources are listed in Table 8-1.

Table 8-1 – List of Local Emergency Resources

Type	Resource	Phone Number
Fire	Luling Volunteer Fire Department	911 or (985) 785-6194
Police	St. Charles Parish Sheriff	911 or (985) 783-6237
Medical	St. Charles Parish Hospital	(985) 785-6242

The nearest fire department is located at 67 St Anthony St., Luling, Louisiana, 70070. The nearest police station is the St. Charles Parish Sheriff's Department, located at 260 Judge

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<sup>1</sup> Point2Homes. New Orleans, LA Demographics. <https://www.point2homes.com/US/Neighborhood/LA/New-Orleans-Demographics.html> (accessed February 2025).

Edward Dufresne Pkwy, Luling, Louisiana, 70070. The nearest hospital is the St. Charles Parish Hospital, located at 1057 Paul Maillard Rd, Luling, Louisiana, 70070.

### **8.3 Degree of Risk for Emergency Events**

To identify events that may occur during the operations of the High West CCS Project, High West has developed a matrix of risks—grouped into six major categories, as summarized in Table 8-2. This matrix combines the severity of the consequences of a given adverse event and the likelihood that the event will occur. The severity score is weighted 40% for safety, 40% environmental, and 20% financial. The risk and severity scores are weighted into total scores for the final risk assessment and then graded as shown in that table. These total scores represent a risk severity as described in Table 8-3. The risk matrix provides a framework for mitigation efforts during emergency response planning and as an input for the financial assurance determination. The full risk matrix is provided in *Appendix G-1*.

Table 8-2 – Risk Activity Summary

<b><u>Risk Activity Table</u></b>								
Section	Risk (Feature, Event, or Process)	1-Remote, 5-Eminent	Assigned	<u>Severity</u>			Estimated Costs	Total Score
				<u>Likelihood</u>	Safety	Environmental		
					40%	40%		
1	Water Quality Contamination	1.50	2.00	3.00	3.00			
2	CO2 Release to or at the Surface	2.10	2.50	2.30	2.60			
3	Storage Rights Infringement - Form of Mineral Rights Infringement	2.00	1.00	1.00	3.00			
4	Mineral Rights Infringement (Trespass)	2.00	1.00	1.00	1.50			
5	Entrained Contaminant (Non-CO2) Releases	2.00	2.33	1.00	1.67			
6	Accidents/Unplanned Events (Typical Insurable Events)	3.00	2.50	1.50	3.50			
	<b>Total</b>							

Table 8-3 – Degree of Severity

Risk Assessment Score	Description
>15	Avoid to the degree possible. Mitigate through an immediate responsive action plan to reduce likelihood to an acceptable level.
10–14.9	Preventative and mitigative measures are required.
3.5–9.9	Preventative and mitigative measures are optional. Monitoring is required.
0–3.4	No preventative or mitigative measures are required. Monitor the situation.

#### 8.4 Infrastructure/Resource-Specific Events and Response Plans

[REDACTED].

#### 8.4.1 General Risk Scenarios

##### 8.4.1.1 Mineral Rights Infringement

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

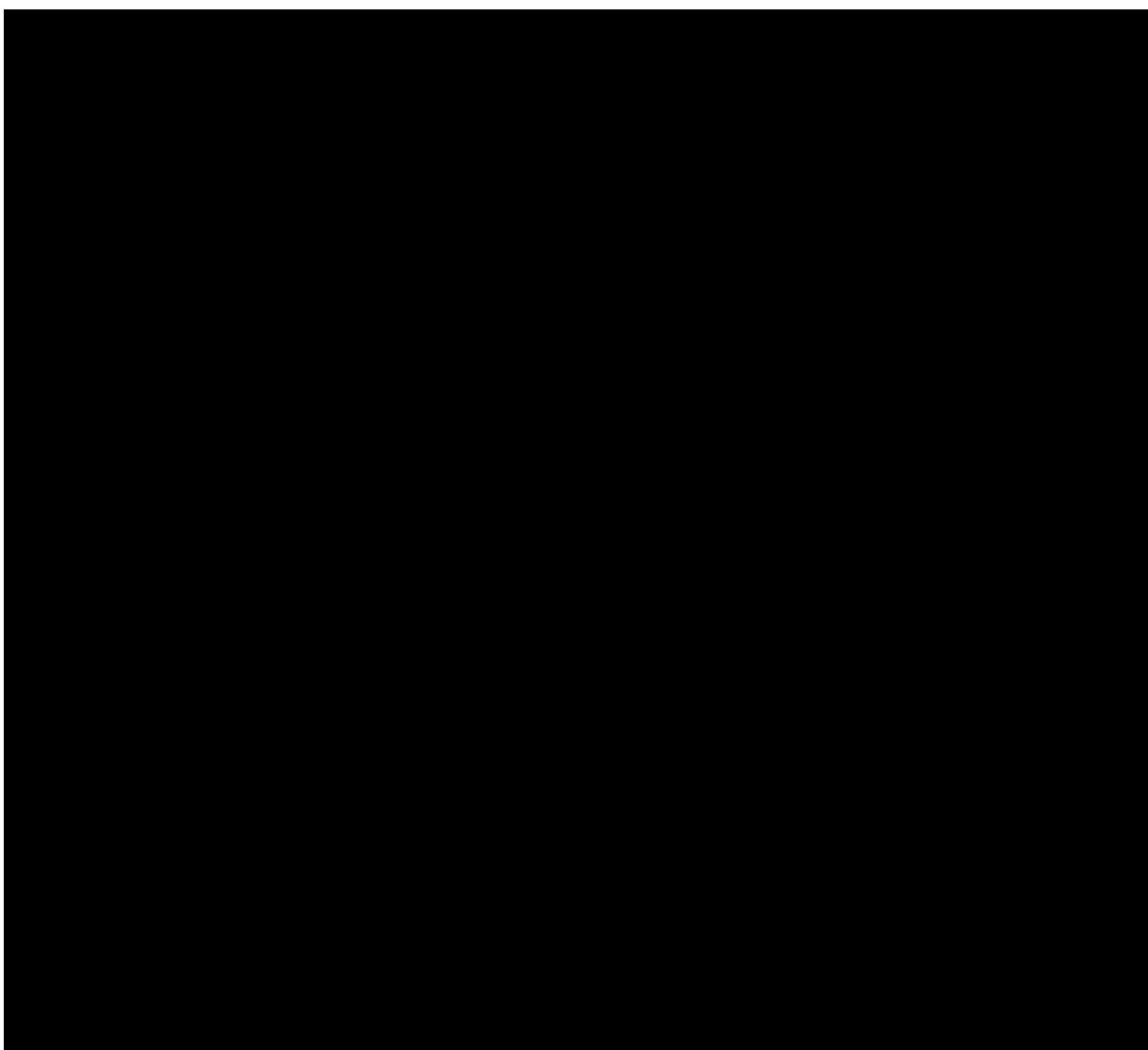
[REDACTED]

[REDACTED]

##### 8.4.1.2 Water Quality Contamination

[REDACTED]

[REDACTED]



#### 8.4.1.3 Single Large-Volume CO<sub>2</sub> Release to the Surface



#### 8.4.1.4 Entrained Contaminant (Non-CO<sub>2</sub>) Releases

#### 8.4.1.5 Well Blowout

[REDACTED]

[REDACTED]

⋮ [REDACTED]

[REDACTED]

⋮ [REDACTED]

[REDACTED]

[REDACTED]

#### 8.4.1.6 Spill

[REDACTED]

[REDACTED]

⋮ [REDACTED]

[REDACTED]

⋮ [REDACTED]

[REDACTED]

#### 8.4.1.7 Loss of Mechanical Integrity

100% of the time, the system is able to correctly identify the target class.

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12. **What is the primary purpose of the *Journal of Clinical Endocrinology and Metabolism*?**

100%  100%

Figure 1 is a 2D grayscale heatmap representing a spatial distribution over time. The horizontal axis (x-axis) and vertical axis (y-axis) both range from 0 to 1000, with major ticks every 200 units. The distribution is characterized by a central, very bright white rectangular region centered at approximately (500, 500). This central region is surrounded by a darker gray band. Outside this band, the distribution is significantly darker, with two smaller, distinct bright white rectangular regions located at approximately (150, 150) and (850, 850). The overall pattern suggests a localized event or signal that appears at three specific locations over time.

#### 8.4.1.8 Accidents/Unplanned Events (Typical Insurable Events)

THE JOURNAL OF CLIMATE

16. **What is the primary purpose of the *Journal of Clinical Endocrinology and Metabolism*?**

## **8.5 Training**

Personnel responsible for implementing this plan will be trained in their duties and responsibilities related to these facilities during annual on-site or tabletop training exercises. All sequestration site personnel, visitors, and contractors must attend an overview orientation before obtaining permission to enter any of the facilities. A refresher course on this training is required annually.

All High West personnel will be considered the primary first responders to any event within the facility boundary. Personnel will have access to and be alerted by the Supervisory Control and Data Acquisition (SCADA) system, which is the first alert for abnormal conditions. After an initial triage, additional response personnel will be contacted, as determined by the significance of the event. These additional responders could include public (Parish and state resources) or private contract responders. High West will have a contractual relationship with such private response contractors in case the need arises.

High West personnel will attend, as a minimum, annual training associated with Health, Safety, and Environment (HSE). This training will include all the required Occupational Safety and Health Administration (OSHA) training (e.g., Hazardous Waste Operations and Emergency Response (HAZWOPER), etc.). Moreover, the staff will be trained regarding the ICS to ensure efficient response to incidents. High West personnel will also be provided with technical training regarding the specific properties associated with CO<sub>2</sub> and the standard operating procedures related to CO<sub>2</sub> storage.

Training will be required annually and reinforced by emergency drills that create scenarios to highlight specific incident responses. For these drills, local county first responders will be invited. High West will also provide a copy of the EERP to local first responders and discuss potential response scenarios.

## **8.6 Communications Plan and Emergency Notification Procedures**

High West intends to implement the ICS to respond to emergencies. The system is widely used by emergency response professionals and provides a common language and hierarchy to emergency response. The system provides for unified command so that multiple agencies can effectively work together.

A high-level structure of the ICS is displayed in Figure 8-1.

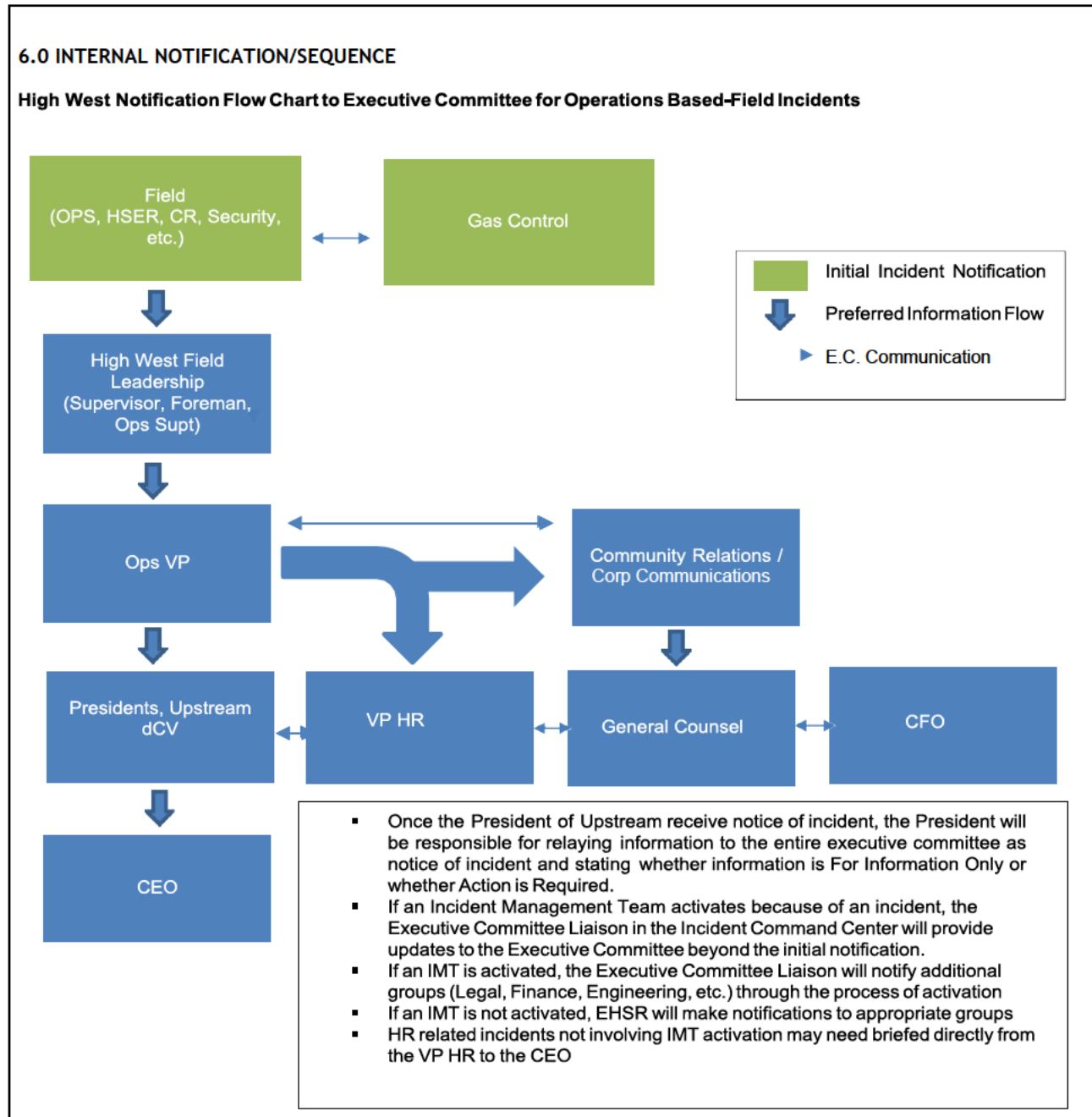


Figure 8-1 – Incident Command System

The full chain of command has not been identified at this stage of the project. The individuals will be recognized after the operating company has been formed and commercial agreements have been arranged. This section will then be updated to reflect the nomination of chain-of-command members.

Local emergency response contacts are provided in Table 8-4, contacts for government agencies in Table 8-5, and an internal call list in Table 8-6.

Table 8-4 – Emergency Services – CALL 911

Agency	Phone Number
Luling Volunteer Fire Department	911 or (985) 785-6194
St. Charles Parish Sheriff	911 or (985) 783-6237
St. Charles Parish Hospital	(985) 785-6242
St. Charles Office of Emergency Preparedness	(985) 783-5050
Louisiana Emergency Preparedness Office	(225) 763-3535
Louisiana State Police	(504) 310-7000
Louisiana State Police – Hazardous Material Hotline	(877) 925-6595

Table 8-5 – Government Agency Notification

Agency	Phone Number
LDENR – Commissioner	(225) 342-5540
LDENR	(225) 342-5515
Injection Well Incidents	(225) 342-5515
Local Emergency Planning Committee (LEPC)	(985) 783-5050
Louisiana Emergency Preparedness Office	(225) 763-3535
National Response Center (NRC)	(800) 424-8802
Louisiana State Police – Hazardous Material Hotline	(877) 925-6595

Table 8-6 – Internal Call List

Name	Title	Telephone Number
	24-hr Emergency Number	TBD
TBD	VP Operations	TBD
TBD	Director, EHSR	TBD
TBD	Director, Corporate	TBD
TBD	Community Relations	TBD
TBD	Senior Legal Counsel	TBD

High West will have a dedicated emergency phone number staffed 24 hours per day. As appropriate, High West will communicate with the public regarding events that require an emergency response, including the impact of the event on drinking water, the severity of the event, actions taken or planned, etc.

## **8.7 Flood Risk**

The High West CCS Project site is in a wetlands area in St. Charles and Jefferson Parishes, Louisiana. Due to its location, a large part of the High West CCS Project site has no data available on the FEMA Flood Map Service Center Site. Of the part of the property that does have data, the High West CCS Project site is designated as FEMA flood hazard zone VE, which corresponds to a regulatory coastal area with greater than 1% annual chance flood event—with additional hazards due to storm-induced velocity wave action<sup>2</sup>. Floodplain management standards apply. *Appendix G-2* provides a map detailing the FEMA flood zone hazard detail.

## **8.8 Site Security**

The High West CCS Project site will be secured to protect against unauthorized activity. High West will install security fences with gates around the injection and monitoring well sites. Additionally, 360° signage will be placed at each well. Well operations will be monitored through automatic data systems and will include remote control access to shut down the injection well, if needed.

## **8.9 Emergency and Remedial Response Plan Review and Updates**

This EERP will be reviewed and updated at least once every five years following SWO 29-N-6, **§3623.A.4** [40 CFR **§146.94(d)**]. Any amendments to the plan must be approved by the Commissioner and will be incorporated into the permit. This plan will also be reviewed and submitted to the Commissioner within 1 year of an AOR evaluation following any significant changes to the facility, such as the addition of injection or monitoring wells, change in personnel, or when required by the Commissioner.

The following attachments are included in *Appendix G – Emergency Response Plan*:

- Appendix G-1 Risk Matrix
- Appendix G-2 FEMA Flood Zone Hazards Map
- Appendix G-3 Area of Review Map with Resources and Infrastructure

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<sup>2</sup> <https://msc.fema.gov/portal/home> (accessed February 2025).