

STATE OF LOUISIANA
OFFICE OF CONSERVATION
BATON ROUGE, LOUISIANA

Basis for Decision

for

River Parish Sequestration, LLC (R1017)
Evan Belle ASMP RPN-S #1 No. 1
Application No. 43668

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On October 27, 2022, River Parish Sequestration, LLC (RPS) submitted an application to the Injection and Mining Division (IMD) of the Louisiana Department of Natural Resources' (LDNR) Office of Conservation (OC) for a permit to drill a Class V stratigraphic test well at an approximate location of latitude of 30° 02' 30.56 North and longitude of 91° 02' 36.30" West (North American Datum of 1927-Louisiana South) in Assumption Parish in order to collect geotechnical cores, fluid samples, static pressure measurements, and other applicable information.

The OC conducted a review of the above-referenced permit application and prepared a proposed permit decision. While the OC does not believe that a review of this application under the analysis articulated by *Save Ourselves, Inc. v. La. Env't Control Cmm'n*, 452 So. 2d 1152 (La. 1984) ("IT Analysis") is legally necessary as part of the final permit decision for a Class V stratigraphic test well, such a review has been completed for this Basis of Decision out of an abundance of caution.

After review of the complete application the OC finds that, as part of its IT Analysis, any adverse environmental impacts have been minimized or avoided to the maximum extent possible. To make this determination, the OC finds that the above-referenced permit application complies with all applicable statutes and regulations and has otherwise minimized or avoided to the maximum extent possible any adverse environmental impacts. Additionally, the OC finds that RPS has met the alternative projects, alternative sites, and mitigation measures requirements of an IT Analysis for the above-referenced application.

After the OC determined that any adverse environmental impacts had been minimized or avoided to the maximum extent possible, it balanced social and economic factors with environmental impacts. Notably, the Louisiana Constitution does not establish environmental protection as an exclusive goal, but instead requires a balancing process in which environmental costs and benefits must be given full and careful consideration along with economic, social, and other factors. Accordingly, the OC finds that the social and economic benefits of the proposed project will outweigh its adverse environmental impacts.

The details of the OC's reasoning are set forth below.

FINDINGS OF FACT

I. PROJECT SUMMARY

On October 27, 2022, RPS submitted an application to the Injection and Mining Division (IMD) for a permit to drill a Class V stratigraphic test well in order to collect geotechnical cores, fluid samples, static pressure measurements, and other information. The purpose of the stratigraphic test well is to collect subsurface information in order to evaluate the feasibility of developing a carbon capture and sequestration program in the area. After the proposed drilling is completed, the test well will be plugged and abandoned.

The proposed total depth of the well is approximately 11,100 feet below ground level (bgl). The base of the lowermost underground source of drinking water (USDW) is approximately 570 feet bgl. There are twelve (12) registered water wells located within a one-mile radius of the proposed well location. The principal regional aquifers in the area are comprised of the confined Mississippi River Alluvial Aquifer below. Deeper aquifers underlying the parish, including the Norco aquifer, contain only saltwater.

The location of this proposed test well is on privately-owned land that is currently used for agriculture (soybeans). The landowner has entered into an agreement with RPS to allow the test well to be drilled on the property.

After conducting a review of the permit application, the OC prepared a draft permit decision. The draft permit conditions were based on applicable regulations as set forth in Statewide Order No. 29-N-1 (LAC 43:XVII, Subpart 1), as amended. Such regulations provide for the protection and non-endangerment of USDW and the permitting, drilling, completing, operating, and maintaining of Class I (nonhazardous waste), Class III, Class IV, and Class V injection wells in the State of Louisiana.

II. PUBLIC COMMENT

Public notice of Class V Stratigraphic Test Well Application No. 44149 was given on October 10, 2023 in *The Advocate* and *The Bayou Pioneer*; and on October 9, 2023, by forwarding a copy of the public notice to the Assumption Parish Police Jury President. A copy of the list of interested parties may be requested by emailing info@la.gov.

The public comment period began on October 10, 2023 and ended on November 9, 2023. No public comments were received by the OC during the comment period, and no public hearing was requested during the comment period.

III. AVOIDANCE OF ADVERSE ENVIRONMENTAL IMPACTS: Have the potential and real adverse environmental impacts been avoided to the maximum extent possible?

RPS has located and designed the test well to avoid and minimize the potential and real adverse environmental effects to the maximum extent possible. The following information

presented below is regarding the potential and real adverse environmental effects of the proposed test well:

- A. There are no surface water bodies or wetlands present at the proposed well site. The well pad will be constructed with a borrow ditch and ring levee to prevent any operational discharge from flowing off-site. Prior to construction, RPS will prepare a Storm Water Pollution Prevention Plan (SWPPP) and will seek coverage under a general storm water permit from the Louisiana Department of Environmental Quality (LDEQ);
- B. The site vegetation (soybeans) would be removed during construction of the well pad, but RPS will restore the site to pre-existing agricultural conditions. There are no federal or state-listed threatened or endangered species identified in Assumption Parish, and there is no critical habitat for listed species;
- C. RPS will ensure that the USDW is protected by setting surface casing below the lowermost USDW and cementing the casing to surface in accordance with IMD standards;
- D. Air emissions from truck traffic and the drilling rig are expected to be minor and only last for a period of a few months; and
- E. Temporary noise impacts from the project are expected to be minor, and no noise mitigation is expected to be necessary.

CONCLUSION: For the foregoing reasons, the OC finds that RPS has avoided, to the maximum extent possible, the potential and real adverse environmental impacts associated with this permit application.

IV. COST-BENEFIT ANALYSIS (BALANCING): Does a cost-benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the later outweighs the former?

As referenced in the previous responses, the environmental impacts of the project will be minimal. After drilling the test well, RPS will restore the site to pre-existing conditions and the landowner will be able to resume agricultural use at the site. The test well will have temporary positive socioeconomic impacts in the local communities by requiring short-term housing in the area for workers, who will also spend money in the local area.

The primary purpose of this test well is to collect geologic data that is needed to fully evaluate the feasibility of geologic sequestration in the area. The collection of site-specific data, such as core samples, fluid samples, static pressure measurements, and other information, is necessary for a full subsurface assessment and cannot be acquired through other means except direct testing of subsurface formations via drilling.

CONCLUSION: For the foregoing reasons, the OC finds that the social and economic benefits of the collection of this data via the drilling of the proposed well outweigh its environmental impact costs.

V. ALTERNATIVE PROJECTS: Are there alternative projects which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?

As RPS states, "The proposed test well is designed to evaluate the feasibility of developing a carbon capture and storage (CCS) project on the west side of the Mississippi River near Donaldsonville, LA. RPS has used existing well logs and seismic data from the area to develop preliminary geologic assessments, but site-specific geologic data is not available for this site."

The collection of site-specific data, such as core samples, fluid samples, static pressure measurements, and other information, provide for a more comprehensive characterization of the geologic sequestration potential of the RPS Project and cannot be acquired through other means except by drilling directly into the subsurface formations.

CONCLUSION: For the foregoing reasons, the OC finds that there are no alternative projects which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits.

VI. ALTERNATIVE SITES: Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits?

This proposed site location was selected to minimize environmental impacts while providing the necessary subsurface information needed to evaluate the feasibility of developing a CCS project. The test well project will not affect unique or unusual landforms, federal/state/local parks, state forests or monuments. Additionally, the site is not used for recreation, and no impacts to recreation are expected.

Regarding potentially impact to cultural resources, RPS hired a cultural resources consultant and found no known archaeological or historical resources at the test site. A cultural resources pedestrian survey was conducted in November 2022 and no cultural resources were identified. Also, there are no tribal lands in the area of the proposed test well.

The test well location is within the Louisiana Coastal Zone, so RPS sent a Request for Determination to the LDNR Office of Coastal Management (OCM). On November 9, 2022, the OCM provided RPS with a letter stating: "In accordance with the State and Local Coastal Resources Management Act of 1978, as amended (La. R.S. 49:214.34.a), the proposed activity is exempt and a Coastal Use Permit is not required."

Additionally, several non-environmental considerations were taken into account as part of site selection. This includes siting the well in a location where the private landowner is agreeable to the drilling and where the proposed location would be outside of the projected area of review for any future CCS projects but still in close enough proximity to potential Class VI injection wells so that the subsurface data would be relevant to the assessment of those potential CCS projects.

CONCLUSION: For the foregoing reasons, the OC finds that there are no alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing non-environmental benefits.

VII. MITIGATING MEASURES: Are there mitigating measures which offer more protection to the environment, than the facility as proposed, without unduly curtailing non-environmental benefits?

In addition to the environmental protection features associated with siting of the test well, RPS has committed to the following mitigating measures:

- A. The site vegetation (soybeans) would be removed during construction of the well pad, but RPS will restore the site to pre-existing agricultural conditions;
- B. The soil type, Cancienne silt loam, will be tilled and restored following construction so it can revert to agricultural use;
- C. Protection of the USDW by proposing to set surface casing below the lowermost USDW and cementing that casing to surface in accordance with IMD standards;
- D. Ensuring that all sanitary waste generated during construction activities is properly disposed of and not discharged without authorization from the Louisiana Department of Health and/or LDEQ, as necessary;
- E. Preparing a Spill Prevention Control and Countermeasure (SPCC) Plan insuring that spills or leaks at the construction site do not leave the well pad area;
- F. Preparing a SWPPP and seeking coverage under a general storm water permit from the LDEQ.

CONCLUSION: For the foregoing reasons, the OC finds that there are no mitigating measures which offer more protection to the environment, than the facility as proposed, without unduly curtailing non-environmental benefits.

VIII. CONCLUSION

The OC has conducted a review of the entire administrative record, including the permit application and other information submitted by RPS. Based on its review of the entire record as a whole and for all of the foregoing reasons, the OC concludes that the application satisfies the requirements of the public trust doctrine of the State of Louisiana as articulated by *Save Ourselves, Inc. v. La. Env 't Control Cmm 'n*, 452 So. 2d 1152 (La. 1984) as well as applicable statutes and regulations. Accordingly, the OC shall issue the permit for the above-referenced application to RPS for the drilling of a Class V stratigraphic test well.



MONIQUE M. EDWARDS

COMMISSIONER OF CONSERVATION