STATE OF LOUISIANA OFFICE OF CONSERVATION BATON ROUGE, LOUISIANA

Basis for Decision

for

DTM Louisiana Gathering, LLC (D1047) Alt No. 005 Well Application No. 44149

* * * * * * * * * *

On April 17, 2023, DTM Louisiana Gathering, LLC (DTM) 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 31° 27' 31.77" North and longitude of 93° 25' 46.61" West (North American Datum of 1927-Louisiana South) in Sabine Parish in order to collect geotechnical cores, fluid samples, static pressure measurements, and other applicable information.

After review of the complete application and due consideration of all comments received during the public comment period, 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 DTM 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 April 17, 2023, DTM submitted an application to the 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 well is completed, it may be utilized as a monitoring well in the future if a sequestration project is developed. Otherwise, the well would be plugged and abandoned and removed if the sequestration project does not move forward.

The acquisition of geotechnical data is proposed to occur in the drilling and completion of this well. The proposed well is not presently permitted for the disposal of waste via injection. The drilling mud will be water-based.

The proposed total depth of the well is approximately 9,000 feet below ground level (bgl). The base of the lowermost underground source of drinking water (USDW) is approximately 1,490 feet bgl. There are eleven (11) registered water wells located within a one-mile radius of the proposed well location. The principal regional aquifer in the area is the confined Sparta Aquifer below.

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 December 5, 2023, in *The Advocate* and the *Sabine Index;* and on November 30, 2023, by forwarding a copy of the public notice to the Sabine 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 December 5, 2023, and ended on January 4, 2024. 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?

Potential and real adverse environmental effects were considered both in regard to the construction of the well itself and with respect to construction activities to be completed in support of drilling-related activities.

DTM has completed or committed to completing the following activities in order to avoid potential and real adverse environmental impacts:

- A. Avoiding wetlands and standing water bodies, potential disturbances to residential areas and protected areas;
- B. Protecting the lowermost USDW by setting surface casing at least 100 feet below the USDW into a shale and cementing to surface
- C. Properly disposing of all waste including sanitary and drilling related wastes. Should surface discharge be the method chosen, proper authorization will be acquired through the responsible regulatory body;
- D. Drilling with a semi-closed fluid system to avoid any discharge of drilling fluid to the surface; and
- E. Using water-based drilling fluids to minimize the environmental impact in the case of any additional or unwanted discharges.

CONCLUSION: For the foregoing reasons, the OC finds that DTM 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?

The environmental impact costs associated with this permit application include the excavation and construction of the well pad, which will be minimized as much as possible to reduce the environmental impact and remediation.

The primary purpose of this well is to collect geologic data required to properly characterize and analyze the subsurface for feasibility of potential geologic carbon sequestration. The proposed well is not permitted for the disposal of waste via injection.

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 DTM states, "The primary purpose of this well is to collect geologic data required to properly characterize and analyze the subsurface in Sabine Parish for feasibility of potential geologic carbon sequestration. This stratigraphic test well, combined with newly acquired 3D seismic, will provide DTM and regulatory agencies with site-specific data needed to properly analyze this geologic carbon storage prospect."

Site-specific data, such as logs, cores, fluid samples, static pressure measurements, and other information, can only be collected via direct measurements and tests which require drilling of this new well.

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 projects 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 avoid wetlands, standing bodies of water, and potential disturbances to residential or protected areas. Alternative sights would not provide the site-specific data that is required for the targeted storage location.

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?

DTM has completed or committed to completing the following mitigating measures:

- A. Developing and implementing a well control and emergency response plan;
- B. Developing and implementing a spill prevention and control plan in the case of any unwanted discharges; and
- C. Implementing measures for erosion control.

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 DTM. 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 abovereferenced application to DTM for the drilling of a Class V stratigraphic test well.

Monegar AN C

MONIQUE M. EDWARDS COMMISSIONER OF CONSERVATION