STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF WATERBRIDGE STATELINE LLC FOR APPROVAL OF A SALT WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

CASE NO. 24568
ORDER NO. R-23773

ORDER OF THE DIVISION

This case came in for hearing before the Oil Conservation Division ("OCD") at 8:30 a.m. on June 27, 2024, in Santa Fe, New Mexico.

The OCD Director, having considered the testimony, the record, the recommendations of Hearing Examiner, these findings of fact, and conclusions of law issues this Order.

FINDINGS OF FACT

1. Due public notice has been given, and the OCD has jurisdiction of this case and the subject matter.

2. WaterBridge Stateline, LLC ("Applicant" or "WaterBridge") proposes to drill the FPNM SWD No. 1 ("Well") at a surface location 2,532 feet from the North line and 1,545 feet from the East line, Unit G, Section 25, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico for the purpose of operating a commercial disposal well. WaterBridge seeks authority to inject UIC Class II fluid, produced water, into the Glorieta Sandstone at a depth of approximately 5,350 feet to 5,725 feet.

3. On May 14, 2024, the Applicant filed a Form C-108 application for a Division hearing for approval of the Well for disposal of produced water. Applicant did not previously submit this application for consideration through the administrative review process; however, on June 13, 2024, OCD created an administrative file (Administrative Application No. pMSG2505338546) and assigned UIC permit number SWD-2645 to this specific Form C-108 application.

4. On June 27, 2024, Case Nos. 24568, 24569, and 24570 were consolidated for hearing, but separate orders were issued for each case. There were no objections to WaterBridge presenting the case by affidavit.

5. WaterBridge, through counsel, provided geologic and engineering exhibits and testimony at the hearing in support of the approval of the injection authority for the Well.

a. Applicant proposed an injection interval within the Glorieta Sandstone in the Central Basin Platform area. The lower San Andres Formation which is approximately 60 feet of low porosity and low permeability carbonate rocks will serve as the upper confinement zone which will prevent the upward migration of fluid, while the lower Glorieta Sandstone, as indicated by open hole geophysical well logs, with 28 feet of low porosity (less than 2%) and low permeability of carbonate rocks will act as the lower confinement zone preventing the downward migration of fluid. The proposed location is an area with very limited oil and gas production. Most area wells have been plugged and abandoned, and none penetrate the proposed injection intervals in the Glorieta Sandstone.

b. The Subject Well will be constructed with the following three casing strings: 20-inch surface casing set at 1,155 feet; 13⅜-inch intermediate casing set at 2,580 feet; 9⅝-inch production casing set at 5,725 feet to a total depth of 5,725 feet.

c. All casing strings will have cement circulated to the surface.

d. The Well will inject through ceramic-coated tubing designed to reduce friction loss and enhance efficiency. The 5½-inch outer diameter ("OD") tubing is installed at a depth of 5,325 feet within 9 5/8-inch OD production casing, which is set at a depth of 5,725 feet. An ACT AS1-X packer is set at a depth of 5,325 feet.

e. The proposed injection interval was characterized as a 375-foot section of sandstone that occurs directly below the San Andres Formation and consists of multiple zones with high porosity and low resistivity.

f. Applicant identified no active wells and plugged wells that penetrated the proposed injection interval within the one-half mile Area of Review ("AOR") of the surface location of the Well.

g. Based on records from the New Mexico Office of the State Engineer, there are no freshwater wells within one mile of the Well's surface location. Therefore, no freshwater sample analysis was provided.

h. The primary source of the produced water will be from production wells completed in the Queen, Wolfcamp, and Devonian formations.

i. The analyses of produced water samples provided by Applicant showed the compatibility of the injection fluids with formation fluids in the proposed disposal interval.

j. There are no production or disposal wells that penetrate the injection interval within half-mile area of review ("AOR") of the surface location and the bottom-hole location for the subject Well.

k. There is no oil or gas production from the Glorieta Sandstone within a two-mile radius of the proposed Well location.

l. Applicant reviewed all wells in the OCD database within two-mile radius of the FPNM SWD No.1 and does not show any historic or current enhanced oil recovery operations utilizing the overlying San Andres formation, or the underlying Tubb formation

m. Applicant proposes a commercial operation with an average and maximum injection rate of 15,000 barrels of water per day ("BWPD") and 20,000 BWPD respectively using a maximum surface injection pressure of 1,070 pounds per square inch.

n. The Applicant identified that no faulting is present in the area that would provide a hydrologic connection between the injection interval and the overlaying underground source of drinking water ("USDW"). The applicant also confirmed that the casing program has been designed to ensure there will be no connection between the injection interval and the overlaying USDWs.

o. After evaluating and confirming the presence of numerous confining layers above and below the injection interval, as well as the significant vertical distance between the injection zone and the Precambrian basement rock where the nearest fault has been identified, and considering the vertical distance from, as well as the lack of historic seismicity on, identified shallow faults in the area of review, the Applicant stated that the potential for FPNM SWD No. 1 to cause injection-induced seismicity is expected to be minimal.

p. The Applicant provided evidence of notification regarding this application to all "affected persons" within a half-mile radius of the surface location of the Well and provided an affidavit of publication in a newspaper of general circulation in the county.

6. No other party appeared at the hearing or otherwise opposed the granting of this application.

7. Pursuant to the Examiner's instruction during the hearing on June 27, 2024, WaterBridge submitted a revised exhibit packet for Case No. 24568 on August 26, 2024.

<u>The OCD concludes as follows:</u>

1. Applicant provided the information required by 19.15.26 NMAC and the Form C-108 for an application to inject produced water into a Class II UIC well.

2. Applicant complied with the notice requirements of 19.15.4 NMAC.

3. Applicant affirmed in a sworn statement by a qualified person that it examined the available geologic and engineering data and found no evidence of open faults or other hydrologic connections between the approved injection interval and any underground sources of drinking water.

4. WaterBridge Stateline, LLC (OGRID No. 330129) is in compliance with 19.15.5.9 NMAC.

5. The proposed well construction provided in the application is protective of the USDW at the location of the Well.

6. There are no other wells that penetrate the proposed injection zone within a half mile of the Well.

7. Having considered the evidence, approval of disposal in the Well with specific conditions and restrictions will enable Applicant to support existing production and future exploration in this area, thereby preventing waste while not impairing correlative rights and protecting fresh water and USDW.

IT IS THEREFORE ORDERED THAT:

1. WaterBridge Stateline, LLC is hereby authorized by **UIC Permit SWD-2645** to utilize its FPNM SWD No. 1, with a surface location 2,532 feet from the North line and 1,545 feet from the East line, Unit G, Section 25, Township 26 South, Range 37 East, NMPM, Lea County, New Mexico, for the disposal of UIC Class II fluids into the Glorieta Sandstone.

2. Jurisdiction is retained by the OCD for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh or protectable waters or (2) consistent with the requirements in this order; whereupon the OCD may, after notice and hearing or prior to notice and hearing in event of an emergency, terminate the disposal authority granted herein.

Date: 4/30/2025

GERASIMOS RAZATOS
DIVISION DIRECTOR (ACTING)

GR/mg