

FILED

FEB 18 2020

**SECRETARY, BOARD OF
OIL, GAS & MINING**

**BEFORE THE BOARD OF OIL, GAS AND MINING
DEPARTMENT OF NATURAL RESOURCES
STATE OF UTAH**

IN THE MATTER OF THE REQUEST)
FOR AGENCY ACTION OF NGL SUPPLY)
TERMINAL SOLUTION MINING, LLC)
FORMERLY KNOWN AS MAGNUM)
NGLS SOLUTION MINING, LLC, FOR)
AN ORDER AUTHORIZING OPERATION)
OF UNDERGROUND NATURAL GAS)
LIQUIDS STORAGE CAVERNS)
UNDERLYING PORTIONS OF)
SECTIONS 22, 23, 26 AND 27 OF)
TOWNSHIP 15 SOUTH, RANGE 7 WEST,)
S.L.M., MILLARD COUNTY UTAH)

**CORRECTED AND FINAL FINDINGS
OF FACT, CONCLUSIONS OF LAW,
AND AMENDED ORDER**

Docket No. 2019-017

Cause No. 282-02

On September 25, 2019, the Board of Oil, Gas and Mining (“**Board**”) heard the Request for Agency Action of Petitioner NGL Supply Terminal Solution Mining, LLC, a wholly owned subsidiary of Sawtooth Caverns, LLC (“**Sawtooth**”), for an amendment to the Findings of Fact, Conclusions of Law, and Order, entered on March 31, 2014, in Docket No. 2014-014, Cause No. 282-01 (the “**Order**”), to allow Sawtooth to commercially store refined petroleum products, which were defined as diesel, gasoline, jet fuel, and any other refined products as approved by the Division of Oil, Gas and Mining (the “**Division**”), in addition to the previously allowed storage of Natural Gas Liquids (“**NGLs**”), in all existing and future storage caverns located at the Sawtooth Storage Facility (the “**Facility**”) that are subject to the Board’s jurisdiction (the

“Request”). The hearing took place in the Auditorium of the Utah Department of Natural Resources at 1594 West North Temple Street, in Salt Lake City, Utah.

The following Board members were present and participated in the hearing: Chairman Ruland Gill, Jr., Gordon L. Moon, Chris Hansen, and Stephen B. Church.

Kathryn J. Steffey of Smith Hartvigen, PLLC, represented Sawtooth, and David Robinson, Chief Operating Officer, and Samuel Quigley, Tiffany James, Thomas Eyermann, Mark Erskine, and Steven Schamel, Sawtooth consultants, testified as witnesses for Sawtooth, with Mr. Eyermann’s appearance via telephone as authorized by the Board’s Order Granting Motion for Telephonic/Electronic Hearing Attendance, issued September 24, 2019.

John Bloom, an individual, Michael Johnson, Chief Legal Counsel for the Utah School and Institutional Trust Lands Administration (“**SITLA**”), and John Andrews, Legal Counsel for Magnum Development, LLC (“**Magnum**”), were present and also participated in the hearing.

Assistant Attorney General Michael Begley represented the Board, and Assistant Attorney General Thomas Kessinger represented the Division. John Baza, Director for the Division, and Ammon McDonald, Environmental Scientist III, were present and testified as witnesses during the hearing.

NOW THEREFORE, the Board, having fully considered the testimony adduced and the exhibits received at the hearing, Exhibits 1 through 13, being fully advised, and good cause shown hereby, makes and enters the following Corrected and Final Findings of Fact, Conclusions of Law, and Amended Order.

FINDINGS OF FACT

1. Sawtooth is a Utah limited liability company, in good standing, with its principal place of business in Salt Lake County, Utah. Sawtooth is qualified to do, and is doing, business in Utah. Sawtooth is duly bonded with all state and federal agencies relevant to its Request.

2. The Facility is located at 9650 North 540 East, Delta, Utah 84624 (approximately eight miles north of Delta in Millard County) on lands leased from SITLA.

3. The Facility is centered on a salt dome that is approximately one mile thick, two miles in diameter and 3000 feet below ground surface.

4. At present, Sawtooth has constructed five storage caverns within the salt dome for the purpose of storing NGLs, such as butane and propane.

5. Cavern construction is regulated by the DWQ under Permit No. UTU-27-AP-9232389, as modified (the “**Class III UIC Permit**”).

6. Construction of the caverns was performed under the Department of Environmental Quality’s regulation of cavern construction under its Class III UIC authority because the caverns were constructed using solution mining technology.

7. Under Sawtooth’s Class III UIC Permit, Sawtooth may construct up to five additional caverns.

8. A cavern designed and constructed to store NGLs may safely be used to store Refined Products.

9. So long as cavern integrity is maintained, the storage of Refined Products will not endanger underground sources of drinking water.

10. Sawtooth's Request asks that Sawtooth be authorized to store, in both its existing and future caverns, diesel, gasoline, jet fuel, and any other refined products as approved by the Division (collectively "**Refined Products**") in addition to the NGLs, such that each storage cavern at the Facility may transition between storing NGLs and Refined Products based on commercial demands. However, Sawtooth would not commingle NGLs and Refined Products.

11. The Refined Products are liquid at Standard Temperature and Pressure ("**STP**") which is defined as 60° Fahrenheit and one atmosphere.

12. Copies of the Request for Agency Action were mailed to all persons having a direct interest pursuant to Utah Admin. Code R641-104-135 and listed on the certificate of service filed in this matter.

13. Additionally, notices of the time, place, and purpose of the September 25, 2019 hearing were mailed to the persons listed on the certificate of service, and were duly published in newspapers of general circulation as required by Utah Admin. Code R641-106-100.

14. One objection was raised by a member of the general public. Specifically, Mr. John Bloom filed a letter with the Board on July 9, 2019, raising certain questions regarding the potential effects of seismicity and the presence of an "anomalous zone" within the salt dome that may weaken the stability of the storage caverns.

15. At the hearing, Sawtooth presented testimony from Thomas Eyermann, an independent expert in the solution mining industry, Mark Erskine, of Erskine Cavern Consulting, and Steven Schamel, a licensed professional geologist and President of GeoX Consulting Inc., which established the questions of stability and the existence of the "anomalous zone" were

analyzed extensively by recognized industry experts in the field of salt cavern storage hired by Sawtooth and Sawtooth's predecessor in interest prior to, and during, the creation of the storage caverns at the Facility. Their analyses confirmed that NGLs and Refined Products may be safely stored in the existing and future caverns.

16. Each of the items raised in the Bloom letter were properly reviewed and addressed by industry experts, as well as by the Division and the Division of Water Quality (the "DWQ"), prior to, and during, the permitting, construction, and operation of the storage caverns.

17. Each of the items raised in the Bloom letter are not considered a risk to the safety, stability, and integrity of the caverns.

18. Specifically, the anomalous zone referred to by Mr. Bloom does not pose a concern regarding the safety, stability, and integrity of the caverns.

19. In Exhibit 11, Mr. Schamel identified the anomalous zone as "merely a thick interbed of insolubles that stands out in sonar surveys of the caverns as a constriction or slight narrowing of the cavern wall." (Exhibit 11 at ¶ 17.)

20. SITLA, the owner of the salt dome in which the caverns are constructed, provided a Statement in Support of Sawtooth's Request for Agency Action, stating that SITLA has confirmed that Sawtooth and its predecessor completed all necessary due diligence to ensure the safe operation of the Facility.

21. Additionally, SITLA's Chief Legal Counsel, Michael Johnson, appeared before the Board at the hearing and declared that SITLA's mission is to generate funds for its beneficiaries, protect its assets, and prevent degradation of its assets and stated that SITLA

supports Sawtooth's Request for Agency Action, declaring that it is in conformity with SITLA's mission in that it will generate royalties for its beneficiaries.

22. SITLA also submitted a comment in support of the Request for Agency Action, stating, "SITLA has confirmed that Sawtooth and its predecessor have completed necessary due diligence to ensure the safe operation of the Facility."

23. Magnum, an entity with a substantial interest in the salt dome and a directly adjacent neighbor to Sawtooth, both surface and subsurface, also appeared before the Board through its Legal Counsel, John Andrews. Mr. Andrews declared Magnum's support of the Request for Agency Action.

24. Many different federal, state, and county organizations regulate Sawtooth's project to ensure the safety of the truck and railroad facilities, the brine pond, the utility lines, the facility safety, subsidence concerns, water rights, and groundwater quality; a list of the agencies is included in the Storage Cavern Field Operating Plan ("**Operating Plan**"), submitted as Exhibit 12.

25. The Division regulates the operations and maintenance of the Storage Cavern Field¹, in accordance with the procedures and approved practices as set forth in the Operating Plan.

26. Sawtooth does not have current plans to market the salt, which is a byproduct of creating and maintaining the storage caverns, and the operations are approved based on the condition that salt or salt product are not to be sold or marketed.

¹ The Storage Cavern Field, defined in the Operating Plan, includes the storage caverns, the cavern wells, and a gas and liquid flaring system.

27. The standards to which the existing caverns have been constructed exceed the standards applicable to Class III wells.

28. These standards meet or exceed the best industry practices for construction of cavern wells storing Refined Products.

29. The future caverns will be constructed to the same standards as the existing caverns.

30. The Operating Plan sets forth the standards to which Sawtooth must comply, which ensures any Class II UIC regulations not yet satisfied by the Request, testimony adduced at the hearing, or exhibits submitted during the hearing, will be satisfied prior to Refined Product storage.

31. The Operating Plan includes a host of compliance measures including: (1) record-keeping and reporting requirements, (2) regular monitoring of the Storage Cavern Field, (3) post-operation plugging and abandonment requirements, and (4) the ability of the Division to conduct regular inspections.

32. Sawtooth's injection wells have been constructed and will be operated, and maintained in such a manner to prevent pollution and damage to any underground source of drinking water or other resources and will confine injected fluids to the interval approved.

33. Evidence and data presented at the hearing support a finding that the cavern wells will not initiate fractures through the overlying strata or a confining interval that could enable the injected fluid or formation fluid to enter any fresh water strata.

34. Regulations by other states of underground storage of liquid or liquefied hydrocarbons in salt formations do not differentiate between wells storing Refined Products and wells storing NGLs but instead regulate all wells storing “liquid or liquefied hydrocarbons,” which is defined to include both NGLs and refined products. *See, e.g.*, Texas Administrative Code Title 16, Part 1, Rule § 3.95(10).

35. When storing Refined Products, Sawtooth will operate the liquids storage service in accordance with the Operating Plan and pursuant to all applicable rules governing Class II Injection Wells.

36. Sawtooth acknowledges that it is prohibited from storing any Refined Products with additives that would negatively affect cavern integrity.

37. The following bonding amounts and terms are legally sufficient and appropriate for the Storage Cavern Field: Sawtooth shall post with the Division a total bond amount of \$1,012,450.00, which shall be a blanket bond that applies to all of the Storage Cavern Field. The bond shall be subject to review every five years, and additional bonding shall be provided prior to approval of an APD to construct a new cavern.

CONCLUSIONS OF LAW

1. Due and regular notice of the time, place, and purposes of the September 25, 2019 hearing was given to all interested parties in the form and manner and within the time required by law and the rules and regulations of the Board. Due and regular notice of the filing of the

Request for Agency Action was given to all interested parties in the form and manner and within the time required by law and the rules and regulations of the Board.

2. The Board has considered and decided this matter as a formal adjudication, pursuant to the Utah Administrative Procedures Act, Utah Code Ann. §§ 63G-4-204 to -208, and the Rules of Practice and Procedure before the Board of Oil, Gas and Mining, codified at Utah Admin. Code R641-100-100 *et seq.*

3. The Board has jurisdiction over the parties and subject matter of this Request for Agency Action pursuant to Utah Code Ann. § 40-6-5 and 40 C.F.R. § 147.2251 (Federal recognition of the Board's and the Division's primacy over Class II Injection Wells).

4. Sawtooth must comply with Utah Admin. Code R649-5-1 *et seq.* in order to store Refined Products which are liquid at STP. *See* Utah Admin. Code R649-1-1 (defining a Class II Injection Well to mean a "well that is used for... storage of hydrocarbons that are liquid at [STP].")

5. The Request, exhibits submitted during the hearing, testimony presented at the hearing, and the post-hearing briefing satisfies the requirement of Utah Admin. Code R649-5-1.

6. The Operating Plan requires Sawtooth to comply with all applicable rules and regulations governing Class II Injection Wells when storing hydrocarbons that are liquid at STP.

7. Pursuant to the Operating Plan, Sawtooth shall operate the Facility in a manner that protects underground sources of drinking water, and minimizes danger to human health and the environment and the waste of the stored resources and the salt dome.

8. Compliance with the Operating Plan will safeguard the public health, safety, welfare and the environment, and ensures that Underground Sources of Drinking Water are protected.

9. Requiring Sawtooth to operate in accordance with the Operating Plan, and Utah Admin. Code R649-5-1 *et seq.*, meets or exceeds the minimal requirements for state primacy set forth in 42 U.S.C. § 300h(b)(1)(A–D).

AMENDED ORDER

IT IS THEREFORE ORDERED that:

1. The Order issued on March 31, 2014, in Docket No. 2014-014, Cause No. 282-01, is modified as follows:

2. Sawtooth shall be allowed to commercially store Refined Products that are free from any additives that might negatively affect cavern integrity in any of the cavern wells at the Facility, including existing Cavern Wells CW-5, API Well No. 43-027-50002-00-00; CW-6, API Well No. 43-027-50003-00-00; CW-7, API Well No. 43-027-50004-00-00; CW-8, API Well No. 43-027-50005-00-00; and CW-9, API Well No. 43-027-50006-00-00 (the “**Existing Cavern Wells**”), and the authorized additional five planned storage caverns to be constructed in the future in accordance with the Division’s APD permit program and the DWQ UIC Permit UTU-27-AP-9232389, as modified (the “**UIC Permit**”) (CW-10, CW-11, CW-12, CW-13, and CW-14, collectively the “**Future Cavern Wells**”), once the Future Caverns have been released from

the DWQ's UIC Permit for operation under the jurisdiction of the Division upon the successful completion of the required MIT.

3. Sawtooth shall obtain a core sample of the anomalous zone, as that phrase was defined by the testimony and exhibits before the Board, from any newly drilled cavern well in the event the proposed well will intersect the zone.

4. The storage of NGLs and Refined Products will be subject to each storage cavern as being used for either a Refined Product or NGL storage well based on the advanced notice provided to the Division identifying the type of product to be stored in each respective storage cavern.

5. Each new Future Cavern Well that is constructed, once released from the Class III UIC Permit, will be permitted by the Division to store either Refined Products or NGLs upon satisfaction of the criteria set forth in the Operating Plan.

6. Sawtooth's operation of the Cavern Wells is subject to, and must comply with, all applicable statutory requirements found in chapter 6 of title 40 of the Utah Code and all applicable rules promulgated under that chapter, including Rules R641 and R649 of the Utah Administrative Code (the "**Applicable Statutory and Regulatory Provisions**").

7. Sawtooth must comply with the revised Operating Plan, which the Division has approved, to the extent that the Operating Plan's provisions are not contrary to the Applicable Statutory and Regulatory Provisions. To the extent a conflict exists between any provision in the Operating Plan and the Applicable Statutory and Regulatory Provisions, the Applicable Statutory and Regulatory Provisions shall govern Sawtooth's operation of the Cavern Wells. The Division

has the authority to assess administrative penalties, in accordance with Utah Code Ann. § 40-6-11, for violations of the Operating Plan.

8. Amendments to the Operating Plan must be approved by the Division. If the Division does not approve an amendment, Sawtooth may appeal that decision to the Board.

9. In addition to the authority stated in paragraph 7 of this Order, the Division has the authority to issue violations and orders to cease operations when it is necessary to protect public health, safety, welfare, and the environment in accordance with Utah Code Ann. § 40-6-11.

10. If Sawtooth ever intends to market its salt byproduct, it is subject to and must comply with all statutory requirements found in chapter 8 of title 40 of the Utah Code and all rules promulgated under that chapter, including Rules R647 of the Utah Administrative Code.

11. The Division may inspect the Facility at its discretion but in no event less than twice per year.

12. Sawtooth shall post with the Division a total bond amount of \$1,012,450.00, which shall be a blanket bond that applies to all of the Storage Cavern Field. The bond shall be subject to review every five years, and additional bonding is required upon Sawtooth's filing of an APD to construct a new cavern.

13. This Corrected and Final Findings of Fact, Conclusions of Law, and Amended Order ("**Amended Order**") is based exclusively upon evidence of record in this proceeding or on facts officially noted, as weighed and analyzed by the Board in the application of its expertise as set forth in Utah Code section 40-6-4(2)(a) through (e). This Amended Order constitutes the

signed written order stating the Board's decision and the reasons for the decision, as required by the Utah Administrative Procedures Act, Utah Code Ann. § 63G-4-208, and the Rules of Practice and Procedure before the Board of Oil, Gas and Mining, Utah Admin. Code R. R641-109; and constitutes a final agency action as defined in the Utah Administrative Procedures Act and Board rules.

14. **Notice of Right of Judicial Review by the Supreme Court of the State of Utah.** As required by Utah Code section 63G-4-208(e) through (g), the Board hereby notifies all parties to this proceeding that they have the right to seek judicial review of this Order by filing an appeal with the Supreme Court of the State of Utah within thirty days after the date this Order is entered. Utah Code Ann. §§ 63G-4-401(3)(a), -403.

15. **Notice of Right to Petition for Reconsideration.** As an alternative, but not as a prerequisite to judicial review, the Board hereby notifies all parties to this proceeding that they may apply for reconsideration of this Order. Section 630-4-302 of the Utah Code, entitled "Agency Review – Reconsideration," states:

(1)(a) Within 20 days after the date that an order is issued for which review by the agency or by a superior agency under Section 63-46b-12 is unavailable, and if the order would otherwise constitute final agency action, any party may file a written request for reconsideration with the agency, stating the specific grounds upon which relief is requested.

(b) Unless otherwise provided by statute, the filing of the request is not a prerequisite for seeking judicial review of the order.

(2) The request for reconsideration shall be filed with the agency and one copy shall be sent by mail to each party by the person making the request.

(3)(a) The agency head, or a person designated for that purpose, shall issue a written order granting the request or denying the request.

(b) If the agency head or the person designated for that purpose does not issue an order within 20 days after the filing of the request, the request for

reconsideration shall be considered to be denied.

16. The Rules of Practice and Procedure before the Board of Oil, Gas and Mining entitled “Rehearing and Modification of Existing Orders” state:

Any person affected by a final order or decision of the Board may file a petition for rehearing. Unless otherwise provided, a petition for rehearing must be filed no later than the 10th day of the month following the date of signing of the final order or decision for which the rehearing is sought. A copy of such petition will be served on each other party to the proceeding no later than the 15th day of that month.

Utah Admin. Code R. R641-110-100.

16. Utah Administrative Code Rule R641-110-200 specifies the required contents of a petition for rehearing. The Board hereby rules that should there be any conflict between the deadlines provided in the Utah Administrative Procedures Act and the Rules of Practice and Procedure before the Board of Oil, Gas and Mining, the later of the two deadlines shall be available to any party moving to rehear this matter. If the Board later denies a timely petition for rehearing, the aggrieved party may seek judicial review of the order by perfecting an appeal with the Utah Supreme Court within thirty days thereafter.

17. The Board retains exclusive and continuing jurisdiction of all matters covered by this Amended Order and of all parties affected thereby; specifically, the Board retains and reserves exclusive and continuing jurisdiction to make further orders as appropriate and authorized by statute and applicable regulations.

18. The Chairman's signature on a facsimile copy of this Amended Order shall be deemed the equivalent of a signed original for all purposes.

19. A "[Proposed] Findings of Fact, Conclusions of Law and Amended Order" was issued in error by the Board on February 18, 2020, at 2:17 p.m. This Corrected and Final Findings of Fact, Conclusions of Law, and Amended Order is intended to be the Board's Final Order with respect to this matter.

ENTERED this 18 day of February, 2020.

**STATE OF UTAH
BOARD OF OIL, GAS AND MINING**



Ruland J. Gill, Jr., Chairman

CERTIFICATE OF SERVICE

I certify that I caused to be served the above **Findings of Fact, Conclusions of Law and Order, Docket No. 2019-017; Cause No. 282-02** to the following parties on the 16th day of February ~~2019~~: 2020

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