

Morton Salt-Glendale Facility
Aquifer Protection Permit No. P-100176
Place ID 717, LTF No. 111354
Significant Amendment

I. Introduction:

The Arizona Department of Environmental Quality (ADEQ) proposes to issue an Aquifer Protection Permit (APP) for the subject facility that covers the life of the facility, including operational, closure, and post-closure periods unless suspended or revoked pursuant to Arizona Administrative Code (A.A.C.) R18-9-A213. The requirements contained in this permit will allow the permittee to comply with the two key requirements of the Aquifer Protection Program: 1) meet Aquifer Water Quality Standards (AWQS) at the Point of Compliance (POC); and 2) demonstrate Best Available Demonstrated Control Technology (BADCT). BADCT's purpose is to employ engineering controls, processes, operating methods or other alternatives, including site-specific characteristics (i.e., the local subsurface geology), to reduce discharge of pollutants to the greatest degree achievable before they reach the aquifer or to prevent pollutants from reaching the aquifer.

II. Permittee & Facility Location:

Morton Salt
13000 West Glendale Avenue
Glendale, Arizona 85307-2408

III. Facility Description:

Morton Salt, Inc. is authorized to operate the Morton Salt-Glendale Facility, with a maximum daily average flow of 650,000 gallons per day (gpd). The facility produces various crystallized salt products. The facility consists of three injection wells, regulated under separate UIC permits, a cavern at the base of each well, and 17 impoundments for solar evaporation, milling facilities, and an office/warehouse. The injection/recovery wells are used to extract brine from the Luke Salt Body. The extracted brine solution is discharged into the solar evaporation ponds. Naphthol Green dye (Acid Green1[AG1]) is added to the brine solution to increase the evaporation rates in the solar ponds. The depth to the salt body is approximately 1000 feet below ground. The extracted saturated brine delivered to the impoundments for settling of clays and silts and then for solar evaporation. Salt crystallizes as the brine evaporates. The salt is harvested for processing into salt products.

All injection/recovery wells at the Morton Salt-Glendale Facility are constructed to Underground Injection Control (UIC) Class III injection well standards. The injection/recovery wells are regulated under the UIC Program and are therefore exempt facilities under A.R.S. 49-250(B)(26). ADEQ issued three UIC Class III permits (P-515169 [Roach Baker #3], P-515170 [Roach Baker #4], and P-515171 [Roach Baker #5] for the monitoring and reporting of the integrity of the three brine injection/recovery wells.

IV. Amendment Description:

The purpose of this amendment is to:

- 1.) Authorize the construction and operation of two (2) new lined solar evaporation ponds, identified as Pond M and Pond N.
 - a. Increase design flow capacity from 424,000 gallons per day to 650,000 gallons per day.
 - b. Revise closure and post-closure costs in Section 2.1.2 from \$5,873,025 to \$6,531,407 and update the financial assurance value of the performance surety bond held by the facility.
 - c. Add conceptual POC well locations, POC-NW and POC-NE, downgradient of Pond M and Pond N. Update Table 2, Point(s) of Compliance with the new POC conceptual well locations.
 - d. Add Compliance Schedule Item #3.7, "The permittee shall submit a construction report along with as-built drawings and QA/QC documentation sealed by an Arizona registered professional engineer for the Brine Pond M (SE Corner) to confirm that the facility was constructed in accordance with the design report, engineering plans and specifications submitted in the application".
 - e. Add Compliance Schedule Item #3.8, "The permittee shall submit a construction report along with as-built drawings and QA/QC documentation sealed by an Arizona registered professional engineer for the Brine Pond N (SE Corner) to confirm that the facility was constructed in accordance with the design report, engineering plans and specifications submitted in the application".
- 2.) Rename existing facility impoundments for consistency and clarity. Refer to changes in Table 1, Discharging Facilities; Table 5, Permitted Facilities and BADCT; and Table 15, Freeboard, Facility Inspection (Operational Monitoring) – Log Book.
- 3.) Remove all the permitting requirements for the injection and recovery wells at the Morton Salt-Glendale Facility that are regulated under the UIC Program (P-515169 [Roach Baker #3], P-515170 [Roach Baker #4], and P-515171 [Roach Baker #5]) and are therefore exempt facilities under A.R.S. 49-250(B)(26).
 - a. Remove the injection and recovery wells (Roach Baker #3, Roach Baker #4, and Roach Baker #5) as Discharging Facilities in Section 2.1.
 - b. Remove Well Integrity Monitoring, Injection/Recovery Well Monitoring, Water Brine Interface Test Monitoring requirements in Section 2.5.2, and Cavern Stability Monitoring in Section 2.5.2.2.
 - c. Remove contingency plan requirements for Well Integrity Monitoring, Injection/Recovery Well Monitoring, and Water Brine Interface Test Monitoring, and Salt Cavern Stability Monitoring Alert Level Exceedances in Sections 2.6.2.3.1, 2.6.2.3.2, 2.6.2.3.3, and 2.6.2.3, respectively.
 - d. Remove contingency plan requirements in Section 2.6.3.4, Unexpected Loss of Fluid in the Injection/Recovery Wells and Storage Caverns.
 - e. Remove Compliance Schedule Item # 3.5, "The permittee shall provide the ADEQ Groundwater Protection & Reuse Section with one copy of any report submitted by

the permittee to EPA pursuant to the UIC permits. Submission to ADEQ shall follow the submission frequency specified in the UIC permits per Section 2.7.4.2”.

- f. Remove injection wells from Table 5, Permitted Facilities and BADCT.
- g. Remove Table 7, Cavern Stability Monitoring
- h. Remove Table 8, Well Integrity Monitoring.
- i. Remove Table 9, Injection/Recovery Well Monitoring.
- j. Remove Table 10, Water Brine Interface Test Monitoring.
- k. Remove Roach Baker injection/recovery wells from Table 17, Facility Inspection (Operational Monitoring).

These revisions relevant to the ISCR operations qualify as a Significant Amendment in accordance with Arizona Administrative Code (A.A.C.) R 18-9-A211 (B)(2)(a) because the adjustments of the permit were made to conform to statutory provisions.

V. Regulatory Status

The latest inspection dated July 1, 2025 indicates that the facility was found to be in compliance with the APP and Arizona rules and statutes.

VI. Best Available Demonstrated Control Technology (BADCT):

Facilities regulated by this permit shall be designed, constructed, operated, and maintained to meet requirements specified by A.R.S. §49-243(B) and A.A.C. R18-9-A202(A)(5).

VII. Compliance with Aquifer Water Quality Standards (AWQS):

To ensure that site operations do not result in violation of Aquifer Water Quality Standards at the point of compliance, groundwater monitoring is required under this permit per Section 4.2, Tables 7 through 10 for major cations, major ions, metals and radiochemicals.

Facility inspections and operational monitoring will be performed on a routine basis (see Section 4.2, Tables 11, 12 and 13, in the permit).