

Permit Application to
**CREATE, OPERATE, AND MAINTAIN A
 BRINE MINING FACILITY**

H-2

12/98

READ INSTRUCTIONS ON BACK

IDENTIFICATION

1. Operator Name, exactly as on P-5 Organization Report		2. RRC Brine Permit No., if assigned		3. RRC District No.		4. Permit Type <input type="checkbox"/> new	
5. Operator Address, including city, state, and zip		6. Field Name (proration schedule name of field geographically nearest facility site)				<input type="checkbox"/> amended	
		7. Lease Name, as on proration schedule, if assigned				<input type="checkbox"/> renewal	
8. Operator P-5 No.	9. County of facility location		10. Date Well Drilled	11. API No. 42-		12. Lease No.	
13. Is above operator also facility owner? <input type="checkbox"/> Yes <input type="checkbox"/> No		14. What type entity is the operator? <input type="checkbox"/> federal <input type="checkbox"/> state <input type="checkbox"/> public <input type="checkbox"/> private <input type="checkbox"/> other				15. Well No.	
16. Facility Address				17. Facility Name			
18. Facility is to be located _____ miles _____ direction from _____ (nearest post office or town) _____ section _____ block _____ survey _____ abstract no.							

CASING AND TUBING DATA. For additional casing strings, attach continuation sheet in same format.

Casing	Size	Setting Depth	Grade	Weight lb/ft	Hole Size	Cement			
						Type	# of Sacks	Top	Top Determined by
19. Surface									
20. Intermediate									
21. Long									
22. Tubing (hanging string)		string 1 size & depth				string 2 size & depth			

INJECTION AND OTHER DATA

23. Name of injection formation or dome		Type <input type="checkbox"/> domal <input type="checkbox"/> bedded	24. Depth of well (TD)
25. Injection is through <input type="checkbox"/> tubing <input type="checkbox"/> casing-tubing annulus		26. Injection interval from _____ to _____	
27. Depth of field's shallowest zone productive of oil/gas		28. Source of mining water <input type="checkbox"/> groundwater <input type="checkbox"/> surface water	
29. Multi-well system? (separate injection and production wells) <input type="checkbox"/> Yes <input type="checkbox"/> No		30. Depth to base of deepest usable-quality groundwater	
31. Number of brine mining pits		Have H-11 forms been submitted for pits? <input type="checkbox"/> Yes <input type="checkbox"/> No	
32. Anticipated injection rates (bbl/day) average _____ maximum _____		33. Use of produced brine	
34. Anticipated injection pressures (psi) average _____ maximum _____			

CERTIFICATION : I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or who are directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information.

signature

name (type or print)

title

phone no. w/ area code

date

RRC use only

INSTRUCTIONS: Form H-2

Application for Permit to Create, Operate, and Maintain A Brine Mining Injection Facility

REFERENCE: Statewide Rule 81, *Brine Mining Injection Wells*

A permit is required to construct and operate a brine mining injection facility. File the Form H-2 permit application for a new facility at least 180 days before beginning injection. An H-2 application is required for each brine mining injection well associated with the facility. File a Form H-11, *Application for Permit to Maintain and Use a Pit*, for brine mining pits. A valid and current Form P-5, *Organization Report*, and financial assurance must be on file with the Commission.

Where to file. File the original application, including all attachments, with the Director of Underground Hydrocarbon Storage and Brine Mining, Oil and Gas Division, Railroad Commission of Texas, PO Box 12967, Austin TX 78711-2967. At the same time, file a copy of the application and attachments with the appropriate Commission district office.

Attachments. Include the following attachments with both the original application being filed with the Commission in Austin and with the copy filed with the district office.

1. A **plat** showing surface ownership of the tract on which the facility is located and the adjacent tracts. On the plat or on a separate sheet attached to the plat, list the names and addresses of the surface owners and identify the source of that list.
2. A **plat** showing the oil and gas operators of the tract on which the facility is located and the adjacent tracts, and on the plat or on a separate sheet attached to the plat, list the names and addresses of the oil and gas operators.
3. A **map** with surveys marked showing the type, location, and depth of all wells of public record (or otherwise known to the applicant) within ¼ mile radius of the brine mining injection well that penetrate the salt formation. Include a **tabulation** of the wells showing the dates the wells were drilled and the present status of the wells, and **W-3 plugging records** for abandoned wells and **W-2/G-1 completion records** for other wells.
4. A **schematic** of the proposed facility layout showing tanks, loading ramps, spill containment (ditches, dikes, sumps), pits, and other structures related to the facility. Identify all related structures and activities that require a permit under a state or federal RCRA, UIC, NPDES, or PSD program
5. A USGS 7.5 minute series **topographic map** extending one mile beyond the property boundaries of the facility depicting the facility, surface water bodies, springs, drinking water wells and water supply wells within ¼ mile of the facility property boundary.
6. A **data sheet** indicating the depth, thickness, hydraulic gradient and baseline analysis of all freshwater aquifers within ¼ mile radius of the injection well in order to determine the existence of an underground source of drinking water (USDW).
7. Texas Natural Resource Conservation Commission **Form-0051** (PO Box 13087, Austin TX 78711-3087) stating the depth to which underground sources of drinking water must be protected.
8. A proposed groundwater monitoring **plan** or alternate plan with a map showing location of monitoring wells.
9. A copy of the **W-2/G-1** completion package if the brine mining well is completed or a copy of the **W-1** drilling permit application if it is not yet completed. Include a copy of the **W-3** plugging report if the well was previously plugged. Include all attachments such as plats.
10. A **schematic** of the current or proposed well completion; include a **list** of well logs to be run.
11. A complete **electric log** of the subject well or a nearby well indicating the depth of all geologic formations between the land surface and the top of the salt formation.
12. A **map** identifying the source of injection water. If the source is groundwater, also include:
 - a) a groundwater data sheet giving the formation name and depth
 - b) an analysis consisting of Total Dissolved Solids and major anions (Ca, Mg, Na) and cations (NO₃, SO₄, Cl)
 - c) a water well report if the well has been completed.
13. A **description** of the proposed injection procedure and of the methods used to monitor and control cavern size and shape.
14. A **description** of the proposed mechanical integrity testing procedure.