



Annular Saltwater Disposal Well Permit Application
Office of Conservation
Injection & Mining Division
P.O. Box 94275
Baton Rouge, LA 70804-9275

UIC-9

TYPE ONLY

1. Application to: " Initial Permit " Repermit							
2. Operator's Name and Address:					3. Operator Code:		
					4. Phone ())		
WELL INFORMATION							
5. Well Name and Number:					6. Serial No.		
7. Field:		8. Parish:		9. Sec.	Twp.	Rng.	
10. Location Description:							
11. Latitude: _____ Longitude: _____				Louisiana Lambert Coordinates (NAD 27) (Check One Coordinate Zone) " North Zone " South Zone X: _____ Y: _____			
12. WELL DATA							
Casing Size	Hole Size	Casing Weight	Depth Set		Sacks Cement	Type Cement	Top of Cement
			Top	Bottom			
13. Method of Production " Flowing " Beam Pump " Submersible Pump " Other _____							
WELL ECONOMICS							
14. Hydrocarbon Production Per Day _____ bbls oil or condensate/day _____ Mcf gas/day				15. Saltwater Production Per Day: _____ bbls saltwater/day			
16. Are there potentially productive zones in this well that have not been tested or produced? If "yes", identify: _____							" Yes " No

17. Is the well located within the coastal zone? If "yes", Permit # _____ Expiration Date _____		" Yes " No
18. Do you operate any other producing wells in this field? If "yes", list wells on a separate attached sheet.		" Yes " No
19. Is development drilling planned by your company in this field during the next year?		" Yes " No
20. Is the well located over water?		" Yes " No
21. Is the well located in the Atchafalaya Basin or in a wildlife refuge? If "yes", where is well located? _____		" Yes " No
ALTERNATIVE METHODS		
22. Are there any wells on the lease that could be converted for saltwater disposal? If "yes", at what cost? _____ <small>(Attach AFE to substantiate cost)</small>		" Yes " No
23. Cost of drilling on-site saltwater disposal well _____ <small>(Attach AFE to substantiate cost)</small>		
24. Could a Corps of Engineers dredging permit be required to drill or convert a well for saltwater disposal?		" Yes " No
25. Are there adjacent saltwater disposal well operators who would be willing to consider community saltwater disposal?		" Yes " No
26. Cost of Off-Site Disposal: A. Trucking/Shipping Cost _____ Per month B. Disposal Cost _____ Per month		
27. Agent or contact authorized to act for the operator during processing of this Application Name: _____ Address: _____ Phone (____) _____ The signature below authorizes this agent or contact to submit additional information as requested and to give oral statements in support of this application.		
CERTIFICATION BY OPERATOR		
<i>I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my personal knowledge or inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.</i>		
28. Name	29. Title	
30. Signature	31. Date	

**ANNULAR SALTWATER DISPOSAL WELL PERMIT
APPLICATION PROCEDURES FOR
FORM UIC-9**

- These procedures are intended to provide applicants a checklist to be sure all information is provided.

Supporting documentation will be required in the form of attachments. Label each of the attachments by number in the lower right-hand corner; example: "Attachment 2A"

- After the Application is reviewed and found to be complete by the Office of Conservation (OC), Injection & Mining (IMD), the applicant will then be notified of the calculated Maximum Authorized Surface Injection Pressure (MASIP) for the well and notified to run the required Radioactive Tracer Survey (RTS). Notification will include OC's Guidelines and Procedure to be used in running the RTS.

The applicant will submit the results of the RTS to OC/IMD for review. If found to be acceptable, a permit to inject fluids will be issued. The permit will also include the "Reporting Requirements" which will tell you what you need to file with the OC/IMD during the operation of the well.

PUBLIC NOTICE: AT LEAST FIFTEEN DAYS PRIOR TO FILING AN APPLICATION, notice of the Application shall be published one time by the applicant in the official state journal, The Advocate (in Baton Rouge). Acceptable wording for such notice is included in this application package as an attachment. Prior to the approval of the permit, the applicant shall submit proof of publication of such notice (Attachment 8) with the OC/IMD.

SUBMIT THE FOLLOWING IN ORDER:

- **Filing Fee**

- Check made payable to "Office of Conservation",
 - a. Initial Permit \$252
 - b. Repermit \$252

- **APPLICATION -- Annular Saltwater Disposal Well Permit Application**

- Form UIC-9 with original signature of operator. All items must be answered or noted "N/A"--not applicable. **Include pages 1 to 11 as part of the Application.**
- For Repermit wells, file pg. 1 & 2 of the Form UIC-9 along with current AFE.

ATTACHMENT 1 -- Location Plat

- Include the drilling location plat, labeled "Attachment 1." It may be a photocopy. This plat may be combined with Attachment 2.

ATTACHMENT 2 -- Area of Review

- A. An Area of Review (AOR) map, labeled "Attachment 2A" of a scale no smaller than 1"=1000'. The AOR map must identify, within a one-quarter-mile (1320-ft.) radius of the proposed disposal well, the locations for the following:
 - The proposed disposal well

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- All producing wells
 - All disposal/injection wells
 - All shut-in wells
 - All plugged and abandoned wells
 - All dry holes
 - All source water wells (for enhanced recovery)
 - All freshwater wells
 - Include a legend to identify each well and to otherwise clarify the AOR map. Except for freshwater wells, only information on file with the Office of Conservation and pertinent information known to the applicant is required to be included on this map.
- B. An "Area of Review Well List" (Attachment 2B) that identifies all wells in the AOR **except freshwater wells**. Use the enclosed Attachment 2B or you may make up your own list, as long as all the information is included; label the list, "Attachment 2B". If no wells are found within the AOR indicate with "no wells found" on "Attachment 2B".
 - C. A "Freshwater Well List" (Attachment 2C) identifying the freshwater wells within the AOR. Each freshwater well shall be identified by owner, type of well, and status of well. If unclear on the AOR map (Attachment 2A), also describe how each freshwater well can be located in the field. Use the enclosed Attachment 2C or you may make up your own list, as long as all the information is included; label the list, "Attachment 2C". If no fresh water wells are found within the AOR, indicate with "No wells found" on "Attachment 2C".

A DILIGENT SEARCH MUST BE ATTEMPTED TO LOCATE ALL FRESHWATER WELLS WITHIN THE AOR.

- D. Include a laboratory analysis of a water sample from **EACH** freshwater well, if obtainable, labeled "Attachment 2D", "Attachment 2E", "Attachment 2F", etc. for each freshwater well. **The analysis sheet(s) must identify the freshwater well sampled, and, at a minimum, include measurement of:**
 - Chloride (mg/1)
 - Total Dissolved Solids (mg/1)

Provide an explanation if samples are not obtainable.

ATTACHMENT 3 -- Facility Diagram

- A surface facility diagram that shows the following, where applicable:
 - Proposed well
 - Tanks
 - Pits
 - Containment levees
 - Flow lines entering and leaving the facility
 - Rig supply well
 - Pertinent buildings
 - Landmarks and other significant structures or features

The diagram should be to scale or reasonably close, preferably on 8 ½" x 11" paper, and labeled, "Attachment 3".

ATTACHMENT 4 -- Well Schematic Diagram

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- Attach a schematic diagram of the well, labeled "Attachment 4A".

The schematic diagram(s) should show the following:

A. Surface equipment:

- Well head
- Pressure gauges
- Flow line diameters at wellhead
- Monitoring equipment, if used

B. Subsurface equipment:

1. All casing strings:
 - Diameter
 - Weight (per foot)
 - Depth set (top and bottom) Surface casing must extend at least 100 feet below the USDW.
2. Hole (drill bit) diameters
3. Cement specifications:
 - Type of class
 - Number of sacks
 - Tops of cement (indicate whether calculated/logged, or to be logged)
4. Cement squeeze(s), if any:
 - Type or class
 - Number of sacks
 - Calculated top of cement (to be logged)
5. Depths (where applicable):
 - Total Depth
 - Drilled-out depth
 - Plugged-back depth

ATTACHMENT 5 -- Sources of Produced Water

- A list of all sources of produced water that is to be disposed in the proposed well. Use the enclosed Attachment 5 or you may make up your own list, as long as all the information on the enclosed list is included on it and is labeled, "Attachment 5".

ATTACHMENT 6 -- Disposal Fluid Analysis

- A laboratory analysis of a representative sample of the fluid to be injected in the proposed well, labeled "Attachment 6". The analysis sheet must indicate the source of the sample and, at a minimum, include measurement of :

- Chloride (mg/l)
- Total Dissolved Solids (mg/l)
- Specific gravity or density (g/cc or ppg)

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- Temperature of sample when specific gravity was measured

ATTACHMENT 7 -- Electric Logs

- A copy or continuous folded photocopy of an electrical log. The log must be complete from the log heading to depth logged: the 5-inch/100-ft-scale portion is not necessary.
- The Serial Number of the well must be written on the log.
- Attach one copy of the electrical log of the subject well and one copy of an electrical log of a nearby well which shows the base of the deepest USDW. The log should **be shallow enough** to show the base of the USDW and **deep enough** to show the proposed disposal zone. Logs of more than one well may be included, if necessary, to show both the lowermost USDW and proposed disposal zone. A diligent search must be made to locate at least one log within two miles of the proposed well. If a log is not available, use a sheet of paper labeled, "Attachment 7" which states, "No well logs are available within a two-mile radius of the proposed well".

Indicate the following **on each** log:

- A. The base of the lowermost Underground Source of Drinking Water (USDW).

The USDW can be determined by the deep induction curve, generally the dotted curve, on the electric log. Since resistivity changes with temperature and, therefore, depth, **an approximate rule** that can be followed to determine the lowermost USDW is:

3 ohms from surface to 1000 feet;
2 ½ ohms from 1000 feet to 2000 feet;
2 ohms below 2000 feet.

That is, all sands that indicate higher resistivities than these are considered to be USDW's. Clay or shale intervals with resistivities higher than these are not considered USDW's.

- C. The proposed initial perforated interval.

ATTACHMENT 8 -- Public Notice

- An **original** copy of proof of publication of the legal notice.

You will be billed by the Morning Advocate for the ad.

Complete the legal notice attachment and send the notice to:

**The Advocate
Legal Ad Department
P.O. Box 588
Baton Rouge, LA 70821
(225) 388-0128**

The Advocate will send you a notarized "Proof of Publication", which is to be labeled, "Attachment 8", and included as part of the Application. If the Proof of Publication is not received when the Application is sent to the OC/IMD, it may be sent later provided you also write the Application No. on Attachment I. The "Application No." can be found on your receipt letter, which you should receive with in two weeks after your Application reaches the

OC/IMD.

ATTACHMENT 9 -- Well History and Work Resume Report

- Include a photocopy of each Well History and Work Resume Report (Form WH-1) that have previously been filed with the Office of Conservation.

AREA OF REVIEW WELL LIST

Operator _____ Well Status*: _____

Well Name: _____ Serial No.: _____

Total Depth: _____ feet, Perforated Interval: _____ to _____

Operator _____ Well Status*: _____

Well Name: _____ Serial No.: _____

Total Depth: _____ feet, Perforated Interval: _____ to _____

Operator _____ Well Status*: _____

Well Name: _____ Serial No.: _____

Total Depth: _____ feet, Perforated Interval: _____ to _____

Operator _____ Well Status*: _____

Well Name: _____ Serial No.: _____

Total Depth: _____ feet, Perforated Interval: _____ to _____

Operator _____ Well Status*: _____

Well Name: _____ Serial No.: _____

Total Depth: _____ feet, Perforated Interval: _____ to _____

Operator _____ Well Status*: _____

Well Name: _____ Serial No.: _____

Total Depth: _____ feet, Perforated Interval: _____ to _____

*Well Status: Producing, SWD, EOR Injection, Shut-in (future utility) P&A's, etc.

FRESHWATER WELL LIST

A diligent search was made to all freshwater wells within a 1/4 mile of the proposed well and no wells were located.

A diligent search was made to all freshwater wells within a 1/4 mile of the proposed well and the following wells were located.

Owner: _____

Type:* _____ Status:** _____ Depth: _____

Location: _____

Owner: _____

Type:* _____ Status:** _____ Depth: _____

Location: _____

Owner: _____

Type:* _____ Status:** _____ Depth: _____

Location: _____

Owner: _____

Type:* _____ Status:** _____ Depth: _____

Location: _____

*Type of Well: PUBLIC SUPPLY, DOMESTIC (supplies one or a few homes), INDUSTRIAL (including commercial), LIVESTOCK, IRRIGATION (including catfish & crawfish farming), MONITORING, RIG SUPPLY, HEAT PUMP SUPPLY, OBSERVATION (by a qualified agency or company), AQUIFER DEWATERING, RECOVERY (of contaminants), other (describe).

**Status of Well: ACTIVE (used at least once a month), STANDBY, INACTIVE (but useable with minor work or effort, ABANDONED (but not plugged).

INJECTION FLUID SOURCE WELL LIST

Operator _____ Operator Code: _____

Well Name: _____ Serial No.: _____

Field: _____ Formation: _____

Perforated Interval: _____ to _____

Operator _____ Operator Code: _____

Well Name: _____ Serial No.: _____

Field: _____ Formation: _____

Perforated Interval: _____ to _____

Operator _____ Operator Code: _____

Well Name: _____ Serial No.: _____

Field: _____ Formation: _____

Operator _____ Operator Code: _____

Well Name: _____ Serial No.: _____

Field: _____ Formation: _____

Perforated Interval: _____ to _____

Operator _____ Operator Code: _____

Well Name: _____ Serial No.: _____

Field: _____ Formation: _____

Perforated Interval: _____ to _____

PUBLIC NOTICE

In accordance with the laws of the State of Louisiana and the particular reference to the provisions of LA R. S. 30:4, and the provisions of Statewide Order No. 29-B as amended and adopted by the Office of Conservation of the State of Louisiana

(Company Name and Address)

is applying to the Injection and Mining Division of the Office of Conservation for a permit to dispose of saltwater generated from oil and gas production by means of annular injection into

_____, Serial No. _____, with subsurface injection at
minimum depth (surface casing depth) of _____ feet.

Subject well is located in Section _____, Township _____, Range _____,
_____ Field, _____ Parish, Louisiana.

All interested parties are hereby given an opportunity to submit written comments no later than fifteen (15) days from the date of this publication. Comments should be directed to:

Office of Conservation
Injection & Mining Division
P.O. Box 94275
Baton Rouge, LA 70804-9275
Re: Annular Disposal Permit Application