

CLASS VI WELL PERMIT APPLICATION

OFFICE OF CONSERVATION INJECTION & MINING DIVISION 617 N. Third St., 9th FLOOR BATON ROUGE, LA 70802

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UIC-60 C	CS				ТҮРЕ	ONLY					(F		PLICATION NO. FICE USE ONLY)
🗖 DRILL A	ION TYPE: (I ND COMPLE RT AN EXISTI	TE NEW CLAS				2. PF	OJECT NAM	E			,		<u> </u>
3. OWNER/(OPERATOR N	AME									4. OPER/	ATOR	CODE
5. OWNER/	OPERATOR N	MAILING ADD	DRESS			6. FAC	CILITY ADDRI	ESS					
7. TELEPHOI	NE NO				8. E-M	AIL ADI	DRESS						
9. WELL NAI	ME				10. WE	ELL NO	11. WELL S	ERIAL NO (V	Vell (Conversi	ons Only	')	
				WELL LC			MATION						
12. FIELD NA	ME					-				13. FIEL	D CODE		
14. PARISH	NAME						15. SECTION	N	16. 1	OWNSH	HIP 1	7. RA	NGE
18. LOCATIC	N COORDIN	ATES (GCS, N	AD 27)			19. ST	I ATE PLANE C	OORDINAT	ES (L	AMBERT	r, NAD 27	7)	
LATITUDE		-	-	SEC									
LONGITUDE		1411		SEC		X:			Y:				
	DCATION DES			ION PLAT):									
			2	1			NFORMATIO	1	_		T	_	
CASING SIZE (IN)	HOLE DIAMETER (IN)	CASING WEIGHT (LB/FT)	CASING GRADE	CASING SE		TOM	TOTAL SACKS	SACKS CEMENT (Lead/Tail)	(L	TYPE ead/Tail)	YIELI (CU FT/S) (Lead/1	SACK)	CEMENT TOP

22. BASE OF USDW (FT):		23. ELEVATION OF DAT	UM FOR PROPOSED WELL (F	-т) :					
REFERENCE E-LOG (SERIAL NUM	BER):	□KB □GL							
24. PLUGGED BACK DEPTH (FT):		25. TOTAL DEPTH (FT):							
26. TUBING		27. PACKER							
SIZE:	DEPTH:	SIZE:	DEPTH:						
		N INTERVAL INFORMATION							
28. WELL COMPLETION	OPEN HOLE	PERFORATIONS	SCREEN						
29. PROPOSED INJECTION FORMATI	ON NAME(S):								
30. PROPOSED INJECTION ZONES:									
31. PROPOSED PERFORATION INTEF	VALS:								
	PROPOSED INJECTIO	N STREAM INFORMATION							
32. PROJECTED TOTAL MASS (MM-1	·):	33. PROJECTED INJECTI	ON PERIOD (YR):						
34. INJECTION STREAM COMPOSITI	ON (RELATIVE PERCENTAGE):								
	35. Sľ	TE PERMITS							
PERMITTING AUTHORITY	PERMIT/APP	LICATION NUMBER	CURRENT STA	ATUS					
36. LIST ANY RELEVANT OFFICE OF C	ONSERVATION ORDERS (e.g., 2	9-E exemptions and field o	rders related to offset produ	uction):					
37. IS THE WELL LOCATED WITHIN T	HE LOUISIANA COASTAL ZONE?			T YES	□ NO				

OTHER INFOR	MATION								
38. IS THE WELL OR PROPOSED AOR BOUNDARY LOCATED ON INDIAN L THE JURISDICTION OR PROTECTION OF THE FEDERAL GOVERNMENT?	ANDS OR OTHER LANDS OWNED BY OR UNDER	T YES	□ NO						
39. IS THE WELL OR PROPOSED PLUME LOCATED ON STATE WATER BOTT THE JURISDICTION OR PROTECTION OF THE STATE OF LOUISIANA?	OMS OR OTHER LANDS OWNED BY OR UNDER	TYES	□NO						
40. IS THE WELL OR PROPOSED AOR BOUNDARY LOCATED ON LANDS OV PROTECTION OF THE STATE OF ARKANSAS, THE STATE OF MISSISSIPPI, OR		TYES	□ NO						
41. AGENT OR CONTACT AUTHORIZED TO ACT ON BEHALF OF THE APPLICANT DURING THE PROCESSING OF THIS APPLICATION									
NAME:									
COMPANY:									
MAILING ADDRESS:									
PHONE:									
EMAIL:									
42. CERTIFICATION BY WELL OWNER/OPERATOR (LAC 43:XVII.3605.E)									
I certify that as the owner/operator of the injection well, the person identified in Item No. 46 above is authorized to act on my behalf during the processing of this application, to submit additional information as requested, and to give oral statements in support of this application. I will grant an authorized agent of the Office of Conservation entry onto the property to inspect the injection well and related appurtenances as per LSA-R.S. 30:4. I agree to operate the well in accordance with Office of Conservation guidelines. I further certify under penalty of law that I have examined and am familiar with 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 or imprisonment or both (LSA-R.S. 30:17).									
PRINT NAME OF WELL OWNER/OPERATOR	TITLE OF COMPANY OFFICIAL								
DIGITAL SIGNATURE OF WELL OWNER/OPERATOR									

SUBMIT THE FOLLOW AS A COMPLETE APPLICATION FOR A CLASS VI WELL:

- All application materials must be prepared in accordance with LAC 43:XVII.Chapter 36 and should be submitted electronically following <u>LDENR Class VI Application Submittal Guidelines</u>. Hard copy materials should not be submitted unless otherwise directed by the Office of Conservation. <u>Redacted materials should be submitted</u> while CBI rules are being developed within the Office of Conservation.
- Form UIC-60 CCS
 - The field designation will be based upon which Office of Conservation district the well is to be located in (click <u>here</u> to see the district outlines):
 - WILDCAT-SO LA LAFAYETTE DIST (9727)
 - WILDCAT-NO LA SHREVEPORT DIST (9715)
 - WILDCAT-NO LA MONROE DIST (9709)
 - USDW Information
 - The depth of the base of the Underground Source of Drinking Water (USDW) should be based on the e-log of the nearest offset well that shows the USDW. Please ensure that an annotated copy of this well log is included in the GSDT submission.
 - Conduct a search from the proposed well location to locate the closest well with an e-log that shows the lowermost USDW. The USDW can be determined from the deep induction curve on the e-log. Resistivity changes with temperature and depth, therefore the guidelines below are used to approximate the lowermost USDW in sands at the following depths:
 - i. Ground surface to 1,000 feet: 3 ohms or higher is considered USDW;
 - ii. 1,000 feet to 2,000 feet: 2 ½ ohms or higher is considered USDW; and
 - iii. 2,000 feet and deeper: 2 ohms or higher is considered USDW.
 - Clay or shale intervals with resistivity values higher than these are not considered USDW.
 - Proposed Well Information
 - Well construction depths and formation depths for the Class VI well should be based on projected subsurface information as indicated in the application rather than a single offset e-log.
 - The signature of the well owner/operator must be a verifiable digital signature rather than a scan.
- One Form MD-10-R-A <u>for each existing well to be converted</u> (only required if conversion is proposed)
- One original Certified Location Plat that complies with the requirements of the IMD-GS-10 Policy;
- Freshwater Wells
 - Applicants must submit a tabulation of all freshwater wells within the area of review (AOR). A diligent search must be attempted to locate all freshwater wells within the AOR of the proposed injection well. You may use the attached Freshwater Well List example or make up your own list, so long as all the information is included.
 - A DILIGENT SEARCH MUST BE ATTEMPTED TO LOCATE ALL REGISTERED FRESHWATER WELLS WITHIN THE AOR, which involves conducting a foot search of the AOR and searching the water well registry on SONRIS.
 - Applicants must submit laboratory analyses of water samples from a representative sampling of the freshwater wells included on the Freshwater Well List. IMD should be consulted on the final list of wells to be sampled, otherwise additional sampling may be required during the application process. The laboratory analyses must be signed originals from a LDEQ LELAP <u>accredited laboratory</u>. The analysis sheet(s) must identify the freshwater well sampled and, at minimum, include measurements of chlorides, TDS, pH, alkalinity, dissolved CO2, specific gravity, and temperature of the fluid sample when specific gravity was measured.

- Certification of geoscientific and engineering submittals
 - Per LAC 43:XVII.3603.H.2, all applications, reports, plans, requests, maps, cross-sections, drawings, opinions, recommendations, calculations, evaluations, or other submittals including or comprising geoscientific work as defined by La. R.S. 37:711.1 et seq. must be prepared, sealed, signed, and dated by a licensed Professional Geoscientist (P.G.) authorized to practice by and in good standing with the Louisiana Board of Professional Geoscientists.
 - Per LAC 43:XVII.3603.H.3, all applications, reports, plans, requests, specifications, details, calculations, drawings, opinions, recommendations, evaluations or other submittals including or comprising the practice of engineering as defined by La. R.S. 37:681 et seq. must be prepared, sealed, signed, and dated by a licensed Professional Engineer (P.E.) authorized to practice by and in good standing with the Louisiana Professional Engineering and Land Surveying Board.
 - For electronic submission, the seal, signature, and date of signature must be transmitted in a secure mode that reasonably precludes the seal, signature, and date being reproduced or modified. Examples of programs that provide a secure mode include DocuSign and Adobe Acrobat Pro. The seal must follow the same design as prescribed by the relevant professional board.
 - A signature page with the relevant seals, signatures, dates, and other information should be included immediately after the application cover page. A table identifying which attachments and portions of the application each professional is responsible for should be included. See attached example.
- Answer the following questions regarding the proposed permit activity as part of the environmental analysis required by La R.S. 30:1104. See attached guidance for additional information.
 - Have the potential and real adverse environmental effects of the proposed permit activity been avoided to the maximum extent possible?
 - Does a cost-benefit analysis of the environmental impact costs versus the social and economic benefits of the proposed activities demonstrate that the latter outweighs the former?
 - Are there alternative activities which would offer more protection to the environment than the proposed activity without unduly curtailing nonenvironmental benefits?
 - Are there alternative sites which would offer more protection to the environment than the proposed site without unduly curtailing nonenvironmental benefits?
 - Are there mitigating measures which would offer more protection to the environment than the proposed activity without unduly curtailing nonenvironmental benefits?
- Financial Responsibility
 - Applicants must submit documentation of active financial responsibility for plugging and abandonment of injection wells prior to issuance of the Permit to Construct.
 - Active financial responsibility instruments to cover the cost of corrective action, post-injection site care
 and site closure, and emergency and remedial response are not required prior to the issuance of the
 Permit to Construct but are required prior to the Authorization to Inject.

The Injection & Mining Division can be reached by telephone at 225-342-5515 or email Injection-Mining@la.gov.

FRESHWATER WELL LIST

□ A DILIGENT SEARCH WAS MADE TO LOCATE ALL FRESHWATER WELLS WITHIN THE PROPOSED AOR AND NO WELLS WERE LOCATED.

□ A DILIGENT SEARCH WAS MADE TO LOCATE ALL FRESHWATER WELLS WITHIN THE PROPOSED AOR AND THE FOLLOWING WELLS WERE LOCATED.

Map ID No.	Well Name	Owner	Total Depth	Water Level	Geologic Unit	Use Description	Well Status	Location Coordinates (GCS, NAD 27)		
	weir wanne		(ft.)	(ft.)			Well Status	Latitude	Longitude	