PERMITTING REQUIREMENTS AND PROCEDURES GUIDANCE DOCUMENT

FOR

COMMERCIAL EXPLORATION AND PRODUCTION WASTE FACILITIES AND TRANSFER STATIONS



Department of Natural Resources Office of Conservation Environmental Division

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COMMERCIAL FACILITY AND TRANSFER STATION APPLICATION PERMITTING PROCEDURES CHECK LIST

(LAC 43:XIX.Subpart 1.Chapter 5)

Applicant	:Date Received:
Docket N	o.:Date of Hearing:
1.	Schedule meeting with or call the Office of Conservation, Environmental Division to discuss application and permitting procedures.
2.	Prepare application (Section 519, see Application Checklist for a Commercial Facility)
3.	Publish Notice of Intent (1/4 page ad, boldface type) in appropriate newspaper (Section 519.B)
	A. The Advocate (Baton Rouge, LA - 3 days) Dates:
	B. Official Parish Journal (3 days) Dates:
	C. Journal of General Circulation of Facility Location, if different from official parish journal (3 days) Dates:
4.	After 30 days notice, submit original and one copy of the application to Office of Conservation, Environmental Division (Section 519.B.1.)
	Conservation, Environmental Division (1) reviews application for completeness, if complete (2) a hearing and (3) publishes hearing notice in the Louisiana Register (LR) and the Advocate (27)
5.	Applicant submits 6 copies of complete application to local governing authority of the parish at least 30 days before the scheduled hearing date (Section 527.E)
6.	Applicant files 2 additional copies of the complete application in the parish library closest to the proposed facility at least 30 days before the scheduled hearing date (Section 527.E)
7.	Applicant publishes <u>Hearing Notice</u> in the official parish journal and in the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal, on 3 separate days, at least 15 days prior to hearing date. (1/4 page ad, boldface type, for three days) (Section 529.A.3.)
8.	Office of Conservation, Environmental Division conducts public hearing (Section 527.D)
9.	Office of Conservation, reviews application and hearing record and issues final permit decision. (Section 527.F)

COMMERCIAL FACILITY & TRANSFER STATION PERMIT APPLICATION CHECKLIST

(Reference LAC 43:XIX.Subpart 1.Chapter 5)

Applican	t:Date Received:
Docket N	Vo.:Date of Hearing:
A	Non-refundable filing fee in the amount(s) required by LAC 43:XIX.701 et seq
	(Section 519.C.1)
B.	Non-refundable hearing fee in the amount(s) required by LAC 43:XIX.701 et seq
	(Section 519.C.2)
C.	List of names, addresses & telephone numbers of principal officers and local
	governing authorities (Section 519.C.3)
D.	Documentation of compliance with <u>location criteria</u> {(Section 507.A.) (Distance
	Requirements)}
	1. Name & Address - <u>land owners, etc.</u> within 1/4 mile (Section 519.C.4)
	2. Copies of waivers, if applicable (Section 519.C.4)
	3. Simplified drawing (map) {Section 519.C.4 (a),(b),(c),(d)}
E.	Detailed schematic diagram (Section 519.C.5)
F.	If applicable, following review and approval by the Injection and Mining Division,
	submit the appropriate disposal well application (Form UIC-2 COM SWD, Form UIC-
	2 SFI COM, or Form UIC-43); including all attachments (Section 519.C.6)
	1. Strike and dip geologic cross-sections at a minimum of a two mile radius (Section
	519.C.6)
G.	Documentation of compliance with location criteria of Section 507.A.5 and 6 for
	Flood Zones & Wetlands (Section 519.C.7.)
H.	Copy of title to property, lease or other agreement (Section 519.C.8.)
I.	Parish map - proposed facility location identified (Section 519.C.9.)
J.	Topographic map showing location of proposed site, highways, roads, water courses,
	flood plains, water wells, and pipelines within one mile of the site boundary (Section
	519.C.10)
K.	E&P Waste Management and Operations Plan including a detailed statement of the
	proposed of method of operation and procedures for the receipt, storage, treatment
	and/or disposal of E&P Wastes (Section 519.C.11 & Section 515)

L.	Documentation that the facility and/or disposal well(s) will comply with design criteria
	of Section 509; e.g. limited access, storage tank containment, offloading area spill
	containment, etc. (Section 519.C.12)
M.	Documentation of financial responsibility for pollution liability coverage (Section
	519.C.13 & Section 511)
N.	Closure funding (Section 519.C.14)
	1. Closure plan and cost estimate {Section 519.C.14.(a)}
	2. Draft documentation of closure funding {Section 519.C.14.(b)}
O.	Verification of discharge permit, copies of discharge applications pending, and/or
	Affidavit of No Discharge (Section 519.C.15)
P.	List of all other licenses and permits required for operation (Section 519.C.16)
Q.	List of all RCRA / RCRA Exempt Waste associated companies currently or formerly
	owned and/or operated by the applicant and all principal officers for the same (Section
	519.C.17)
R.	List of local, state and/or federal RCRA / RCRA Exempt Waste permits currently or
	formerly held by the applicant and/or principal officers (Section 519.C.18)
S.	List of all environmental regulatory violations for the past 5 years for each permit
	listed in accordance with Section 519.C.18 (Section 519.C.19)
T.	Names & addresses of official parish journal and journal of general circulation in the
	area of proposed facility (Section 519.C.20)
U.	Land treatment permit application requirements, if applicable (Section 523)
V.	Permit application requirements for other treatment and disposal options as defined in
	Section 547, if applicable (Section 525)
W.	Certification by the applicant's authorized representative that information provided in
	the application is true, accurate, and complete (Section 519.C.21)
X.	Complete and submit an original ENV Form OR-1 to obtain a disposer/operator code
	(Section 519.C.1.)
Y.	DNR Coastal Management - Coastal Use permit review, if located in the coastal zone
Z.	Responses to "IT Questions"

PERMITTING REQUIREMENTS AND PROCEDURES

The following are procedures for obtaining a permit for the construction and operation of a commercial facility for off-site storage, treatment and/or disposal of exploration and production (E&P) waste generated by the drilling and production of oil and gas wells. These procedures are taken from LAC 43:XIX.Subpart 1.Chapter 5, and are intended only to supplement and clarify the regulations. Questions concerning these procedures should be directed to the Office of Conservation, Environmental Division, P. O. Box 94275, Baton Rouge, LA 70804-9275, or by calling (225) 342-8244. Prior to preparing and submitting an application to the Louisiana Office of Conservation for a commercial E&P Waste storage, treatment or disposal facility, it would be beneficial for applicants to schedule a meeting with the staff of the Environmental Division to discuss application requirements and procedures.

1. Notice of Intent - Section 519.B.

At least thirty (30) days prior to filing an application, the applicant must publish a notice of intent in the official state journal, <u>The Advocate</u>, the official journal of the parish in which the proposed facility will be located, and in the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal. The list of Official Parish Journals is prepared by the Secretary of State, Publications Division, and is updated each year. The current list can be found at their web site (http://www.sos.la.gov/OurOffice/PublishedDocuments/OfficialParishJournals.pdf).

The notice of intent must be in bold-face type and not less than 1/4 page in size and shall be published on three separate days in each journal. An example of acceptable wording for such notice is included in Appendix A.

2. Thirty (30) days after all notice requirements have been satisfied, proof of publication of such notices and the permit application (original and one copy) can then be submitted to the Office of Conservation, Environmental Division in Baton Rouge.

3. General Information - Section 519.C

All applications must be submitted in duplicate and must include the general information listed in LAC 43:XIX.519.C.1 - 21, where applicable. Applications will be considered complete only after review and approval by the Environmental Division. Copies of applicable forms and examples of documents to be submitted in a permit application are included as Appendices B-H. Applications must include the following information listed as follows.

- a. A non-refundable filing fee in accordance with the latest revisions to LAC 43:XIX.701 et seq.
- b. A non-refundable hearing fee in accordance with the latest revisions to LAC 43:XIX.701 et seq.
- c. A list of names, addresses, and telephone numbers of the principal officers of the company or corporation and the names and addresses of local governing authorities.

- d. Documentation of compliance with the location criteria of Section 507.A.2. Provide the following information:
 - (1) a list of names and addresses of all property owners, residents, off-set operators and industrial facilities within 1/4 mile of the proposed facility or disposal well,
 - (2) copies of waivers required by Section 507.B. where applicable (See Appendix L),
 - (3) a simplified drawing (map) showing the property boundaries of the commercial facility or transfer station, the boundaries and ownership of all land adjacent to the facility, the location and identification of all residential, commercial or public buildings or hospitals within 1/4 mile of the facility property boundaries, and all public water supply wells and private water supply wells within one mile of the proposed facility.
- e. A detailed schematic diagram of the proposed facility of sufficient scale to show the placement of access roads, buildings, and unloading areas, and the location and identification of all storage tanks, barges, and other containers (including design capacities), treatment system/equipment, levees, flow lines, filters, the Class II disposal well(s), and all other equipment and operational features of the storage, treatment and/or disposal system.
- f. If a disposal well is proposed, following review and approval by the Injection and Mining Division, submit the appropriate approved injection well application (Form UIC-2 COM SWD, Form UIC-2 SFI COM, or Form UIC-43) with all required attachments and approval letters. (See Appendix B)
- g. Documentation of compliance with the applicable location criteria of Section 507.A.5 and 6, with regard to flood zones and wetland areas.
- h. A copy of the title of the property upon which the proposed facility will be located (if owned by the applicant). Otherwise, provide a copy of a lease, option to lease or other agreement.
- i. A parish map of sufficient scale to identify the location of the proposed facility,
- j. A topographic map showing the location of the proposed site and any highways or roads that abut or traverse the site, all water courses, flood plains, water wells, and pipelines within one mile of the site boundary.
- k. As required in Section 515, provide a detailed E&P Waste Management and Operations Plan that includes, but is not limited to the proposed method of operation of the facility and procedures for the receipt, storage, treatment and/or disposal of E&P Wastes.
- 1. Documentation that the facility and/or disposal well will comply with the applicable design criteria of Section 509 (documentation of limited access may be shown on the diagram required in Section 519.C.4 and 5).

- m. Documentation of how the applicant intends to comply with the financial responsibility for pollution liability coverage requirements (see Appendix F for acceptable insurance certificate wording).
- n. Documentation of how the applicant intends to comply with the closure funding requirements (see Appendices D & E). Applicants must provide a detailed closure plan and cost estimate for future closure of the proposed facility according to the guidelines in Appendix C in order to determine the methods and costs for closure.
- o. Verification that a discharge permit has been applied or received from DEQ or submit a completed, signed and notarized Affidavit of No Discharge (see Appendix G).
- p. A list of all other licenses and permits needed by the applicant to conduct the proposed commercial activities. Include identification number for each application for those permits or licenses or, if issued, the identification numbers of the permits or licenses. The typical additional permits/approvals that may be required to conduct proposed commercial activities include but may not be limited to LDEQ minor source air permit, coast guard approval for barge type and transportation requirements for sites proposing to receive and transport via barge, and local or state DOTD approval for access to the proposed site.
- q. Provide the names of all companies currently or formerly owned and/or operated by the applicant (company requesting a permit) and/or the principal officers of the applicant for the receipt, storage, treatment, recycling and/or disposal of E&P Waste or hazardous or nonhazardous industrial or municipal solid waste.
- r. Provide a list of local, state and/or federal permits currently or formerly held by the applicant (company requesting a permit) and/or the principal officers of the applicant for the receipt, storage, treatment, recycling and/or disposal of E&P Waste or hazardous or nonhazardous industrial or municipal solid waste.
- s. For each permit included on the list required in Section 519.C.18, provide a list of all environmental regulatory violations, if any, cited by applicable local, state or federal regulatory agencies, including all resulting notices of violation, compliance notices, penalty assessments, or other enforcement actions and the current compliance status of each violation. The list should include all violations cited within the five years immediately preceding the date of application for a commercial facility or transfer station permit.
- t. The names and addresses of the official journal of the parish in which the proposed facility will be located and the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal.

- u. Certification by an authorized representative of the applicant that information submitted in the application is true, accurate and complete to the best of the applicant's knowledge. (See Appendix K)
- v. Coastal Use Permit In order for the Office of Coastal Restoration and Management to review an application for a coastal use permit, the following minimal information is necessary:
 - (1) A description of the method of operation process
 - (2) Plat identifying location of proposed facility
 - (3) Discharge permit or Affidavit of No Discharge
 - (4) Any plans for major construction activities that may occur during either the construction or operation of the proposed facility (dredging, etc...) that may affect the coast.
- w. Detailed responses to "IT Questions" are required (see Appendix J).
- 4. Permit Application Requirements for Land Treatment Systems Section 523.

In addition to the general information, the information required in Section 523 must be included in each application for approval of a commercial facility incorporating the use of land treatment cells.

5. Permit Application Requirements for Other Treatment and Disposal Options - Section 525

In addition to the general information, the information required in Section 525 must be included in each application for approval of a commercial facility incorporating the use of treatment and/or disposal options other than land treatment and as defined in Section 547.

- 6. Permitting Procedures Section 527
 - a. The Office of Conservation, Environmental Division will review a commercial facility application within ninety (90) days of receipt and inform the applicant of its completeness.
 - b. If the application is not complete, the applicant will be advised of additional information to be submitted for approval or the applicant will be required to resubmit the application.
 - c. Upon acceptance of the application as complete, the Office of Conservation, Environmental Division will set a time and date and secure a location for the required public hearing to be held in the affected parish. The applicant may be asked to assist in this matter.

- d. At least thirty (30) days prior to the hearing, the applicant is required to file six (6) copies of the complete application with the local governing authority of the parish in which the proposed facility is to be located to be made available for public review. Two additional copies of the complete application shall be filed in the parish library closest to the proposed facility. The applicant must submit documentation to Conservation prior to the hearing that the required copies were delivered.
- 7. Public Hearing Notice Requirements Section 529.
 - a. Upon acceptance of the application as complete, the Office of Conservation, Environmental Division shall publish in the next available issue of <u>The State Register</u>, a notice of the filing and the location, date and time of the public hearing to be held in the affected parish. Such public hearing shall not be less then thirty (30) days from the date of notice in The State Register.
 - NOTE: <u>The State Register</u> publishes on the 20th of each month. In order to assure publication of notices within the same month, the Environmental Division must submit a request for publication of a hearing notice to the <u>Register</u> no later than 12:00 Noon on the 10th of that month.
 - b. At least thirty (30) days prior to the scheduled public hearing, the Office of Conservation, Environmental Division shall publish in <u>The Advocate</u> a notice of the filing of the application and the location, date and time of the hearing.
 - c. The applicant shall publish a substantially similar notice in the <u>official journal</u> of the affected parish and in the journal of general circulation in the area where the proposed facility is to be located, if different from the official parish journal, on three (3) separate days at least fifteen (15) days prior to the date of the hearing. Such notice shall not be less than one-quarter (1/4) page in size and printed in bold-face type. An example of acceptable wording for such notice is included in Appendix H.
- 8. The public hearing shall be fact finding in nature and not subject to the procedural requirements of the Louisiana Administrative Procedure Act. All interested persons shall be allowed the opportunity to present testimony, facts, or evidence related to the application.
- 9. Permit Issuance Section 527.F.
 - a. The applicant shall be notified of the Commissioner's decision concerning the permit application by letter within 120 days of the close of the public comment period.
 - b. Approval or the granting of a permit to construct a commercial facility or transfer station (and any associated disposal well), shall be valid for a period of one (1) year. If construction is not completed in that time, the permit shall be null and void. Requests for an extension of this one (1) year requirement may be approved by the Commissioner for extenuating circumstances only.

c. Before beginning construction, permittees will be required to provide documentation of compliance with the closure requirements (bond, letter of credit, etc.) A newly constructed facility will not be permitted to receive waste or inject E&P Waste fluids until the facility has been inspected for compliance with the conditions of the permit, the financial responsibility (insurance) requirements have been met, the disposal well(s) has passed a mechanical integrity test witnessed by an agent of the Office of Conservation and submittal of documentation demonstrating the required disposal well completion data (i.e./logs, well history, etc.) has been reviewed and approved by the Injection and Mining division.

Appendix A

Notice of Intent (Example)

NOTICE OF INTENT TO FILE AN APPLICATION FOR APPROVAL OF A COMMERCIAL FACILITY

NOTICE OF INTENT

IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA AND THE RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES, OFFICE OF CONSERVATION,

(NAME OF APPLICANT) (ADDRESS OF APPLICANT)

IS HEREBY PUBLISHING A NOTICE OF INTENT TO FILE AN APPLICATION WITH THE COMMISSIONER OF THE OFFICE OF CONSERVATION, POST OFFICE BOX 94275, BATON ROUGE, LOUISIANA 70804-9275. SAID APPLICATION WILL REQUEST APPROVAL FROM THE ENVIRONMENTAL DIVISION TO OPERATE A COMMERCIAL EXPLORATION AND PRODUCTION WASTE (STORAGE, TREATMENT AND/OR DISPOSAL) * FACILITY.

THE PROPOSED FACILITY WILL BE LOCATED IN PARISH, SECTION___,TWP____, RNG___, APPROXIMATELY___MILES <u>(DIRECTION)*</u> FROM__(<u>NEAREST CITY, COMMUNITY)*</u>, LOUISIANA.

APPLICANT INTENDS TO (STORE, TREAT, AND/OR DISPOSE)* OF EXPLORATION AND PRODUCTION WASTE GENERATED FROM THE DRILLING AND PRODUCTION OF OIL AND GAS WELLS BY MEANS OF (DEEP WELL INJECTION INTO THE SUBSURFACE; SURFACE IMPOUNDMENTS, LAND TREATMENT; PHYSICAL AND CHEMICAL METHODS; INCINERATION; ETC.)* AFTER INITIAL STORAGE IN (TANKS; SURFACE IMPOUNDMENTS; BARGES; ETC.)*

* Make these items applicable to each proposed facility.

If located within city limits, replace with: AT (*street address*), (*city*), LOUISIANA.

Wording may vary in some instances but must contain the following information at a minimum:

- 1) Name and address of the applicant;
- 2) Location of the proposed facility;
- 3) Nature and content of the E&P Waste types proposed for receipt; and
- 4) Methods(s) of storage, treatment and/or disposal to be used

Appendix B

Injection Well Applications

Applicants utilizing disposal wells for injection of E&P Waste must submit the appropriate injection well application for each injection well to the Office of Conservation, Injection and Mining division for review and approval. Following review and approval, the complete application(s) with documentation demonstrating approval from the Injection and Mining division must be submitted to the Office of Conservation, Environmental Division to fulfill the requirements of this application. Injection well applications can be downloaded from the DNR website at:

http://dnr.louisiana.gov/

Applicants utilizing a disposal well for injection of E&P Waste fluids (produced salt water, etc.) must complete *Form UIC-2 COM SWD*.

http://dnr.louisiana.gov/assets/OC/im div/docs page/UIC2 SWDCOM.pdf

Applicants utilizing a disposal well for slurry fracture injection of E&P Waste must complete Form UIC-2 SFI COM.

http://dnr.louisiana.gov/assets/docs/conservation/documents/uic02comsfi.pdf

Applicants utilizing a disposal well for injection of E&P Waste into a solution-mined salt cavern must complete *Form UIC-43*.

http://dnr.louisiana.gov/assets/docs/conservation/documents/uic43.pdf

A copy of injection well applications may also be obtained by contacting the Office of Conservation, Injection and Mining Division at 225-342-5515.

Appendix C

Guidelines for Preparation of Closure Plans and Cost Estimates

GUIDELINES Closure Plan and Cost Estimates

Saltwater Disposal Wells, Transfer Stations, and Related Facilities

In order to adequately evaluate the estimate cost to plug and abandon each saltwater disposal well, remove related storage facilities, and return the well site to as close as possible to its original condition, a revised closure plan and cost estimate must be submitted to the office by February 1 of each year. The closure plan and cost estimate must be prepared by an independent professional consultant and must not include any services or equipment provided by owners or partners of the facility or related sister companies. All work shall be performed by outside contractors(s) and must include the cost of overall professional project supervision and technical support. The minimum information to be provided is as follows:

- 1) A cover letter containing at least the following information:
 - a) Name and type of facility(disposal well, transfer station, etc.) for which the closure plan is being submitted;
 - b) If applicable, well Serial Number;
 - c) Location (parish and nearest town or community)
 - d) Site code;
 - e) Name, address, and telephone number of third -party independent consultant responsible for the preparation of the closure plan;
 - f) A brief description of changes or alterations made to the facility since the last closure plan was submitted.
- 2) An itemized plugging and abandonment procedure (step by step prognosis) including, but not limited to the following:
 - a) if applicable, the amount of casing that will be cut and/or pulled;
 - b) the location of all plugs and retainers to be set; and
 - c) the sacks of cement to be used for each squeeze, plug, retainer, etc.
- 3) A schematic diagram of the well as it is presently completed.
- 4) A schematic diagram of the well indicating its condition after proposed plugging and abandonment procedures are completed.
- 5) Estimated costs to be incurred for all plugging and abandonment activities, including but not limited to the following:
 - a) Rig time;
 - b) Rental tools;

- c) Mud/brine costs;
- d) Wireline costs;
- e) Cement and retainers;
- f) Welding metal cap on casing;
- g) Removal (trucking) and disposal of saltwater, oil and sludge to an off-site disposal facility. Disposal cost should be price charged to generators;
- h) Cleaning and gas-freeing certification of storage tanks and barges;
- i) Removal of all storage tanks, piping, equipment, concrete and debris. Salvage value up to the cost of removal is allowed only on storage tanks provided the owner has clear title to the entire facility;
- i) Site restoration activities such as digging, backfilling, grading and seeding; and
- k) Supervision of closure activities by an outside contractor. This amount shall be the greater of \$500 or 5% of the total estimated cost of closure.
- 6) A current site diagram, including a piping and instrument diagram (P&ID) of tank batteries, etc. on the premises. The diagram should identify the size and contents all piping, indicate the direction of fluid flow, and show all tanks, sumps (capacity, physical dimensions and contents), pumps, valves, safety devices, and instruments(pressure gauges, level indicators, etc.) Each year the site diagram must be updated to reflect any changes or alterations.
- 7) Estimated cost to dispose of waste stored in barges or tanks at any approved transfer station and to remove any and all equipment relative to the transfer station's operation (i.e. barges, tanks, cranes, piping, concrete and equipment). The provisions of paragraph 5g through 5k above also apply to transfer stations.
- 8) A summary page describing each proposed closure activity and its associated cost. These costs should be totaled and clearly identified as the total closure cost. Any supporting bids or estimates from outside contractors should be attached. The description of the services and costs to be performed by outside contractors should match those activities itemized in the summary.

The closure plan and cost estimate must include provisions for closure acceptable to the Commissioner and must be designed to reflect the cost to the Office of Conservation to complete the approved closure of each facility.

GUIDELINES Closure Plan and Cost Estimate

Exploration & Production Waste Storage, Treatment and Disposal Facilities Utilizing Land Treatment Systems and Related Facilities

In order to adequately evaluate the estimated cost to adequately close each exploration and production waste storage, treatment and disposal facility utilizing land treatment systems, and return the site to as close as possible to its original condition, a revised closure plan and cost estimate must be submitted to this Office by February 1 of each year. Such closure plan and cost estimate must be prepared by an independent professional consultant and must not include any services or equipment provided by owners or partners of the facility, or related sisters companies. All work shall be performed by outside contractor(s) and must include the cost of overall professional project supervision and technical support. The minimum information to be provided is as follows:

- 1. Provide detailed descriptions of closure procedures and cost estimates for each existing land treatment cell and surface impoundment pond, if applicable. Include closure activities relative to the treatment and degradation of existing waste inventories, surface and subsurface waste control, leveling of levees, grading and establishment of final vegetative cover, cover maintenance, closure monitoring, and post-closure monitoring. Assume each cell is filled to maximum capacity of 15,000 bbl per acre solid waste.
- 2. The closure and post-closure monitoring program must address quarterly sampling and testing schedules for:
 - a. soil in the treatment zone,
 - b. water collected from the unsaturated zone monitoring systems,
 - c. surface runoff water, and
 - d. groundwater. (See LAC 43:XIX.549.D & E for monitoring requirements)
- 3. Costs for closure and post-closure maintenance activities (labor, utilities, roads, levees, vegetative cover, mowing, etc.) must be determined. Include costs to plug and abandon all monitor wells and remove all nonpermanent structures.
- 4. Costs for sampling and testing of water from land treatment cell underdrain monitoring system and groundwater from monitor wells during the closure period. To certify closure, water collected from the unsaturated zone monitoring system and groundwater must meet background water quality data. Sampling and testing is to be performed quarterly until closure is certified (assume two years for purposes of the estimate). Once closure is certified, post-closure monitoring must be performed on intervals of 6 mos., 1,2, and 5

years. Samples are to be analyzed for the following parameters: TDS, TSS, pH, Na, EC, TPH, Total Benzene, As, Ba, Cr, Pb and Zn.

5. Soil and runoff water monitoring:

- a. Soil monitoring cost estimates shall include a provision for analyses for the following parameters: pH, TPH, EC, TCLP Benzene, SAR, ESP, As, Ba, Cd, Cr, Cu, Pb, Hg, Mo, Ni, Se, Ag, and Zn.
- b. Costs for sampling and testing surface runoff water shall include provisions for analyses for the following parameters: pH, TPH, TCLP Benzene, EC, SAR, TSS, Cl, As, Ba, Cd, Cr, Cu, Hg, Pb, Se and Zn.
- c. Such tests are to be performed quarterly until closure is certified (assume two years for purposes or the estimate). Once closure is certified, post-closure monitoring must be performed on intervals of 6 mos., 1, 2, and 5 years.

ADDITIONAL FACTORS & GUIDELINES TO CONSIDER WHEN PREPARING LAND TREATMENT FACILITIES CLOSURE ESTIMATE

- 1. Assume that the site will be closed by the State of Louisiana, not the operator, with <u>all</u> work contracted out, including overall project supervision and technical support, and no use of owner site work earth-moving equipment.
- 2. During closure period (2 yrs), assume the facility is operated with the same costs of operation except the cost of accepting additional waste.
- 3. Before closure activity actually starts, include cost of consultants and site monitoring associated with initial assessment of the site and the formation of a specific closure plan to be followed. Include an initial "pre-closure" site monitoring analysis composed of the same parameters analyzed for a quarterly report.
- 4. Site monitoring requirements during closure shall be identical as during normal operation.
- 5. All above-ground structures are to be removed. Storage tanks and barges are to be cleaned and certified gas-free. Treatment plants & pumps are to be dismantled.
- 6. Assume each surface impoundment pond is filled to within two feet of the levee top and is discharged once a week during closure. Chemical parameters to be monitored shall be those designated by DEQ for such discharges. After the final batch of water is discharged, treatment and monitoring of the sediment left shall be the same as solids in the land treatment cells. Assume two feet of sediment.
- 7. The plan and estimate format should be presented chronologically year-to-year and clearly distinguish between closure and post-closure activities. Assume a two year closure period and five year post-closure period.
- 8. Include a current site plan map (to scale) identifying all permanent and nonpermanent structures and showing the size and maximum capacity of each cell and profile of all levees.
- 9. Include funds for one major workover for an injection well, if applicable.
- 10. Other costs to be considered:
 - A. Road & levee maintenance
 - B. Maintenance & final disposition of sanitary facilities
 - C. Security of site
 - D. Inflation (Assume latest CPI rise)
 - E. Chemical additives & soil conditioners to enhance & control degradation
 - F. Contingency add 10%
 - G. Fringe benefits & payroll taxes associated with the employment of on-site management & labor
 - H. Hauling of debris associated site closure of landfill or other off-site disposal facility

cost	reference	sources us	f a separate ed for estin	nating site	For closure work, etc.	and post-clo Preferred	osure and si reference i	hould state s the most

GUIDELINES Closure Plan and Cost Estimate

Exploration and Production Waste Storage, Treatment and Disposal Facilities Utilizing Incineration, Dewatering, Solidification, or Other Treatment Equipment

In order to adequately evaluate the estimated cost to adequately close each exploration and production waste storage, treatment, and disposal facility, remove related storage facilities, and return the site to close as possible to its original condition, a revised closure plan and cost estimate must be submitted to this office by February 1 of each year. Such closure plan and cost estimate must be prepared by an independent professional consultant, must not include any labor, tools, and equipment, etc., to be provided by owners or partners of the facility, and at a minimum must include the following information:

- 1. A detailed description of proposed future closure procedures, including, but not limited to the following:
 - a. Dismantling and removal of all treatment equipment (incinerators, centrifuges, belt presses, water treatment systems, conveyor systems, etc.);
 - b. Removal (trucking, barging, etc.) and disposal of all E&P Waste stored onsite (assume storage equipment is full);
 - c. Remove of all storage tanks, barges, piping, pumps, and related equipment;
 - d. Site restoration activities such as digging, backfilling, grading and seeding; and
 - e. Estimated cost of carrying out the above closure activities.
- 2. If land treatment cells are utilized, refer to applicable closure plan and cost estimate guideline.
- 3. Include cost for post-closure monitoring and plugging and abandonment of monitor wells (if any) according to applicable state regulations.
- 4. Provide the estimated cost to dispose of waste stored in barges or tanks at any approved commercial facility and to remove any and all equipment relative to the facility's operation (i.e. barges, tanks, cranes, piping, and other equipment).

The closure plan and cost estimate must include provisions for closure acceptable to the Commissioner and must be designed to reflect the costs to the Office of Conservation to complete the approved closure of each facility.

Appendix D

Irrevocable Letter of Credit

(Acceptable Wording)

A letter of credit may be submitted to provide for adequate closure of a commercial facility according to LAC 43:XIX.513.

EXAMPLE OF ACCEPTABLE WORDING

IRREVOCABLE LETTER OF CREDIT

Dears Sirs:
We hereby establish our Irrevocable Letter of Credit Noin your favor, at the request and for the
account of (company name) up to the aggregate amount of (amount) available upon presentation by the
Commissioner of Conservation, Office of Conservation, Department of Natural Resources, State of
Louisiana, on:
1) your sight draft, bearing reference to this letter of credit No; and
2) your signed statement reading as follows: "I certify that the amount of the draft is payable pursuant
to regulations issued in accordance with the requirements of Louisiana R.S.30:1 et seq."
This letter of credit is effective as of, 20, and shall expire on October 1, 20, but such
expiration date shall be automatically extended for a period of at least one year on October 1, 20, and
on each successive expiration date, unless at least 120 days before the current expiration date, we notify
both you and (company name) by certified mail that we have decided not to extend this letter of credit
beyond the current expiration date. In the event you are so notified, any unused portion of the credit shall
be available upon presentation of your sight draft for 120 days after the date of receipt by both you and
(company name), as shown on the signed return receipts.
This letter is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision),
International Chamber of Commerce Publication No. 600 ("UCP 600").
We hereby agree with you and negotiating banks or bankers that drafts drawn under and in compliance
with the terms of this credit shall be duly honored on due presentation to the drawee.
{Signatures(s) and title(s) of official(s) of issuing institution and date}
(Two Bank signatures required)

(Note: Beneficiary is Office of Conservation, Department of Natural Resources, State of Louisiana.)

Appendix E Surety Bond (Acceptable Wording)

A surety bond may be submitted to provide for adequate closure of a commercial facility according to LAC 43:XIX.513

STATE OF LOUISIANA PARISH OF EAST BATON ROUGE

EXAMPLE OF ACCEPTABLE WORDING

	SURETY BUND
FROM:	PRINCIPAL
	AND
	SURETY
TO:	OFFICE OF CONSERVATION
Γ	DEPARTMENT OF NATURAL RESOURCES
S	TATE OF LOUISIANA
THIS	SURETY BOND is given by, principal, and,
Surety, to	Office of Conservation, Department of Natural Resources, State of Louisiana, 70804-9275, pursuant to the
following	terms and conditions:
Princi	pal and surety are bound to creditor in the sum of \$Dollars, for the payment of
which prin	cipal and surety jointly and severally bind themselves, their successors and assigns.
Princi	pal has applied to Creditor to receive a permit or has in effect a permit issued by Creditor to operate a
commerci	al facility, Site Code, for the receipt, storage, treatment and/or disposal of exploration and production
waste in _	Parish, Louisiana pursuant to the provisions of LSA-R.S. 30:4(I)(10), and LAC
43:XIX.St	abpart 1.Chapter 5, Sections 513 and 567. Principal is required to provide bonding to insure the adequate
closure of	such facility and this bond is issued for said purpose.
	his obligation shall run continuously and shall remain in full force and effect until and unless the bond is sprovided herein or as otherwise provided by law.
Creditor.	urety may cancel the bond only by sending notice of cancellation by certified mail to both Principal and Cancellation cannot occur or be effective until 120 days after the date of receipt of notice of cancellation by ipal and Creditor. Further, such notice of cancellation or cancellation shall not affect this surety bond in any obligation which may have arisen prior thereto.

Surety shall become liable on this bond obligation if and when Principal fails to perform his obligation to adequately close the facility as determined by Creditor after notice and in accordance with administrative procedures.

Following such determinations, Creditors shall draw on the surety bond by requesting payment by certified mail, and Surety shall pay the amount thereof within 30 days of receipt of said demand. If payment is not made within said 30 days period Surety shall also be liable for legal interest from date of receipt of demand, 10% of principal and interest as attorneys fees and all court cost incurred to collect the obligation.

The amount of the bond liability is as expressed herein, but Principal and Surety take notice of the legal requirements for annual review of the closure bond amounts, which is based upon cost estimates for adequate closure. Following this review Creditor may increase, decrease or allow the amount to remain the same. Upon notice from Creditor, if an increase is required, Principal shall cause the bond amount to be increased or shall otherwise provide the added security within 60 days after notice.

IN WITNESS WHEREOF, the principal ar	nd Surety have executed this surety bond at
on this day of	, 20
WITNESSES:	
	Principal
	Surety
Approved, accepted and executed by Credito	or at Baton Rouge, Louisiana this day of, 20
WITNESSES:	
	OFFICE OF CONSERVATION
	By:

Appendix F

Documentation of Financial Responsibility

(Pollution Liability Coverage)

This appendix also includes acceptable wording for certificates of insurance or letters of credit which may be submitted for applicable pollution liability coverage requirements of Section 511.

COMMERCIAL FACILITY CERTIFICATE OF LIABILITY INSURANCE

- 1. [Name of Insurer], (the "Insurer") of [address of Insurer] hereby certifies that it has issued liability insurance covering bodily injury and property damage to [name of insured], (the "insured"), of [address of insured] in connection with the insured's obligation to demonstrate financial responsibility under LAC 43:XIX.511. The coverage applies at [site code or address for each facility] for [insert "sudden and accidental pollution liability" or "environmental impairment"]. The limits of liability are [insert the dollar amount of "each occurrence" and "annual aggregate" limits of the Insurer's liability], exclusive of legal defense costs. The coverage is provided under policy number _______, issued on [date]. The effective date of said policy is [date].
- 2. The insurer further certifies the following with respect to the insurance described in LAC 43:XIX.511.E.1.
- a. Bankruptcy or insolvency of the insured shall not relieve the insurer of its obligation under the policy.
- b. The insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated.
- c. Whenever requested by the Commissioner of Conservation, the insurer agrees to furnish to the Commissioner a signed duplicate original of the policy and all endorsements.
- d. Cancellation of the insurance, whether by the insurer, the insured, a parent corporation providing insurance coverage for its subsidiary, or by a firm having an insurable interest in and obtaining liability insurance on behalf of the owner or operator of the commercial facility or transfer station, will be effective only upon written notice and only after the expiration of 60 days after a copy of such written notice is received by the Commissioner of Conservation.
- e. Any other termination of the insurance will be effective only upon written notice and only after the expiration of 30 days after a copy of such written notice is received by the Commissioner of Conservation.

I hereby certify that the wording of this instrument is identical to the wording specified in LAC 43:XIX.511.E as such regulation was constituted on the date this certificate was issued, as indicated below, and that the insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more states, and is authorized to conduct insurance business in the state of Louisiana.

[Signature of authorized representative of Insurer]
[Type name]
[Title], Authorized Representative of [Name of Insurer]
[Address of Representative]
DATE OF ISSUANCE:

(Proof of insurance must be provided by a certificate of liability insurance which must be worded as provided above except that the instructions in brackets are to be replaced with the relevant information and the brackets deleted)

EXAMPLE OF ACCEPTABLE WORDING

for Pollution Liability Coverage

IRREVOCABLE LETTER OF CREDIT

Dear Sirs:

We hereby establish our Irrevocable Letter of Credit No In your favor, at the request and
for the account of (company name and site code) up to the aggregate amount of (amount) available upon presentation
by the Commissioner of Conservation, Louisiana Office of Conservation, Department of Natural Resources, on:
1) your sight draft, bearing reference to this Letter of Credit No; and
2) your signed statement reading as follows: "I certify that the amount of the draft is payable
pursuant to regulations issued in accordance with the requirements La. R.S. 30:1 et seq."
This letter of credit is effective as of, 20, and shall expire on April 1, 20, but such
expiration date shall be automatically extended for a period of at least one (1) year on April 1, 20, and on each
successive expiration date, unless at least 30 days before the current expiration date, we notify you and (company
<u>name</u>) by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In
the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft
for 30 days after the date of receipt by both you and sight draft for 30 days after the date of receipt by both you and
(company name), as shown on the signed return receipts.
This letter is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision),
International Chamber of Commerce Publication No. 600 ("UCP 600").
We hereby agree with you and negotiating banks or bankers that drafts drawn under and in compliance with
the terms of this credit shall be duly honored on due presentation to the drawee.

{Signature(s) and title(s) of official(s) of issuing institution and date}

Appendix G

Affidavit of No Discharge

This form is to be completed by all applicants who do not intend to discharge E&P Waste fluids under a permit issued by the Department of Environmental Quality, Water Pollution Control Division.

STATE OF LOUISIANA

DEPARTMENT OF NATURAL RESOURCES

AFFIDAVIT OF NO DISCHARGE

State of	
Parish (or County) of	
Before me, the undersigned notary public, person	onally came and appeared (Name of owner or principal officer) who
after being duly sworn, says:	
I am (Title of owner or principal officer) of (fin	rm, partnership, corporation, etc.). I am familiar with the (existing
<u>proposed</u>)configuration and operations of (firm,	partnership, corporation, etc.) facility which (is) or (will be) located
in Section, Township, Range	in (name of parish) Parish, Louisiana. This affidavit is being
executed for the purpose of notifying the Louisia	ana Department of Natural Resources that there(is_no_discharge
or (will be no discharge) from the (Company) fa	acility into the waters of the State of Louisiana of any Exploration and
Production Waste (E&P Waste) or rainwater, s	storm water or other fluids or materials which have contacted E&F
Waste. Further, this report is a true and correct in	reflection of the operation reported herein and that no pertinent matter
inquired into in this report, and known by him, h	nas been omitted therefrom.
Sworn to and subscribed before me this (day) da	y of <u>(month)</u> , 20
	(Signature of the Principal Officer)
	(Typed Name of Principal Officer)
WITNESSES:	
- <u></u>	
	Affix Notary Seal to this Affidavit
	(Signature of notary public)
	Notary Public in and for (parish, county) (state)
	My commission expires

Appendix H Notice of Hearing (Example)

NOTICE OF HEARING

IN ACCORDANCE WITH THE LAWS OF THE STATE OF LOUISIANA, AND WITH PARTICULAR REFERENCE TO THE PROVISIONS OF LRS 30:4, NOTICE IS HEREBY GIVEN THAT THE COMMISSIONER OF CONSERVATION WILL CONDUCT A PUBLIC HEARING AT (time) A.M./P.M., (day of week), (date) IN (room) OF (building), (address), (city), LOUISIANA.

AT SUCH HEARING THE COMMISSIONER OF CONSERVATION OR HIS DESIGNATED REPRESENTATIVE WILL GIVE ALL INTERESTED PARTIES AN OPPORTUNITY TO PRESENT DATA, VIEWS, OR TESTIMONY ORALLY OR IN WRITING RELATIVE TO THE APPLICATION OF

(NAME OF APPLICANT) (ADDRESS)

TO	CONSTRUCT	AND	OPERATE	A	COMME	RCIAL	FACILI	ΤY	IN
SEC	TION,	TOWN	ISHIP	, 1	RANGE_	, O	F		
PAR	ISH, LOUISIA	NA FOI	R THE PU	RPO	SE OF (storing,	treating,	ana	l/or
dispo	osing)* OF EXP	PLORAT	ION AND	PRO	DUCTIO	N WAS	ГЕ ВҮ М	ИEA	NS
OF (deep well injec	tion; sur	face impour	ndme	ents; land	treatme	nt; physi	cal d	and
chen	nical methods; in	icinerati	on; etc.)*						

THE APPLICATION IS AVAILABLE FOR INSPECTION BY CONTACTING MR. GARY W. SNELLGROVE, OFFICE OF CONSERVATION, ENVIRONMENTAL DIVISION, 617 NORTH 3RD STREET, BATON ROUGE, LOUISIANA 70802, PHONE (225) 342-8244, OR BY CONTACTING THE_(Parish police jury, parish council or other local governing authority and parish library)*.

^{*} MAKE THESE ITEMS APPLICABLE TO EACH PROPOSED FACILITY.

Appendix I

ENV Form OR-1

(To obtain disposer/operator code)

Refer to internet website to view a copy

(http://dnr.louisiana.gov/assets/OC/env_div/ep_waste_sec/EP2015Form_OR1_fill.pdf)

Note that an original ENV Form OR-1 must be submitted.

Appendix J

IT Questions

IT Questions

Louisiana Constitutional Article IX, §1, of the Louisiana Constitution imposes a duty of environmental protection on all State agencies and officials which require a balancing process in which environmental costs and benefits must be given careful consideration along with economic, social and other factors. The balancing process was required of State agencies by Save Ourselves, Inc., et al. vs, the Louisiana Environmental Control Commission, et al. 452 So.2d 1152 (La. 1984), hereafter "IT Decision".

The "IT Decision" involved a hazardous waste permit under the State's Hazardous Waste Management Plan consistent with the federal Resource Conservation and Recovery Act (RCRA). To meet its obligation under the "IT Decision", the Louisiana Department of Environmental Quality (DEQ) prepared a list of questions which addresses what DEQ deemed necessary to make permit decisions. The main questions touch upon certain issues and considerations which would be applicable to Office of Conservation waste permit decisions, although we are not administering a RCRA authorized program.

In order to satisfy the constitutional requirements, the Office of Conservation must conduct the 'balancing process' utilizing the information and data which will form part of the record supporting the decision on your application to permit your proposed activity. As the applicant for a waste permit, it is necessary for you to provide such information as will be required to evaluate your application considering the "IT Decision". We suggest your staff review the court case to determine what information you believe must be provided.

You must furnish this Office with such information in adequate detail together with sufficient justification and supporting data to allow us to fulfill our constitutional obligation. The following list of questions are those prepared by the DEQ and should be used as guidance when preparing a response to the "IT Decision". Please, restate the questions before providing your response.

A. Have the potential and real adverse environmental effects of the proposed facility been avoided to the maximum extent possible?

(This question requires the permittee to identify adverse environmental effects, both potential and real.)

- 1. What are the potential environmental impacts of the permittee's proposed facility?
 - a. What wastes will be handled?
 - i. Classes of chemicals
 - ii. Quantities (hazardous and non hazardous)
 - iii. Physical and chemical characteristics
 - iv. Hazardous waste classification (listed, characteristic, etc.)

- b. How will they be handled?
 - i. Treatment
 - ii. Storage
 - iii. Disposal
- c. Sources of waste
 - i. On-site generation (type and percentage of total handled)
 - ii. Off-site generation (type and percentage of total handled)
- d. Where will the wastes be shipped if not handled at this site?
- e. What wastes will remain on-site permanently?
- 2. By which of the following potential pathways could releases of hazardous materials from the proposed facility endanger local residents or other living organisms?
 - a. Air
 - b. Water
 - c. Soil
 - d. Food
- 3. What is the likelihood or risk potential of such releases?
- 4. What are the real adverse environmental impacts of the permittee's proposed facility?
 - a. Short term effects
 - i. land area taken out of system
 - b. Long term effects
- B. Does a cost benefit analysis of the environmental impact costs balanced against the social and economic benefits of the proposed facility demonstrate that the latter outweighs the former?

(This question requires the permittee to perform a cost-benefit analysis, or at least a quantitative indication of the economic benefits and a qualitative description of the negative impacts expected from the permittee's operation. The later should come from the answer to question No A above.)

1. How was it determined that this facility was needed?

- a. Local or regional survey
 - i. On-site or off-site needs
 - ii. Regional solid waste management benefit
 - iii. Generic survey of solid waste needs (compatibility with master plan)
- 2. What will be the positive economic effects on the local community?
 - a. How many permanent jobs will be created?
 - b. What is the expected annual payroll?
 - c. What is the expected economic multiplier from item B2?
 - d. What is the expected tax base and who will receive benefits?
- 3. What will be the potential negative economic effects on the local community?
 - a. What are the possible effects on property values?
 - b. Will public costs rise for:
 - i. Police protection
 - ii. Fire protection
 - iii. Medical facilities
 - iv. Schools
 - v. Roads (also see below)
 - c. Does the prospective site have the potential for precluding economic development of the area by business or industry because of risk associated with establishing such operations adjacent to the proposed facility?
- 4. Was transportation a factor in choosing the proposed site?
 - a. What mode(s) of transportation will be used for the site?
 - i. Truck
 - ii. Rail
 - iii. Barge
 - iv. Other
 - b. What geographical area will it serve?
 - c. By how much will local road traffic volume increase?
 - i. Can local roads handle the traffic volume expected?

- ii. Can local roads handle the weight of trucks?
- d. What are the long-term expectations of the proposed site?
 - i. Longevity of the facility
 - ii. Who owns the facility?
 - iii. Are the owners financially backed by others?
 - iv. When is closure anticipated?
 - v. Who is responsible for the site after closure?
 - vi. What assurances will there be that the site will be closed in accordance with the plan?
 - vii. What financial assurances will be established to demonstrate the ability to handle problems after closure?
 - viii. Who certifies that the site is properly closed?
 - ix. How are people protected from unwittingly buying land after closure?
 - (a) Is the closed facility recorded in the deed?
 - (b) What future uses are possible?

C. Are there alternative projects which would offer more protection to the environment than the proposed facility without unduly curtailing nonenvironmental benefits?

(This question requires the permittee to demonstrate having considered alternate technologies.)

- 1. Why was this technology chosen (e.g., incineration over landfilling?)
 - a. Are other technologies available?
 - b. Describe the engineering design and operating techniques used to compensate for any site deficiencies.
- 2. Is the proposed technology an improvement over that presently available?
- 3. Describe the reliability of technology chosen.
 - a. Past experiences
 - b. Environmental Impacts
- 4. Describe the sequence of technology used from arrival of wastes to the end process at the facility (flow chart).
 - a. Analysis of waste
 - b. Unloading

d.	Treatment		
e.	Monitoring		
f.	Closure		
g.	Post-closure		
h.	Disposal		
i.	Any residuals requiring further handling		
5.	Will this facility replace an outmoded/worse polluting one?		
6.	What consumer products are generating the waste to be disposed? Are there alternative products that would entail less hazardous waste generation?		
D. Are there alternative sites which would offer more protection to the environment than the proposed facility site without unduly curtailing nonenvironmental benefits? (This is the questions that deals directly with siting criteria.)			
1.	Why was this site chosen?		
a.	Specific advantages of the site.		
b.	Were other sites considered and rejected?		
c.	Is the location of the site irrevocable; i.e., would denial of permit based on site preclude the project?		
2.	Is the chosen site in or near environmentally sensitive areas?		
a.	Wetlands		
b.	Estuaries		

c. Storage

c. Critical habitat

i. Indian mounds

d. Historic or culturally significant area

- ii. Antebellum houses
- iii. Tourist attractions or facilities (e.g., bed and breakfast inns)
- iv. Campgrounds or parks
- 3. What is the zoning and existing land use of the prospective site and nearby area?
 - a. Is the site located near existing heavy industrial, chemical process or refinery operations?
 - b. Is there a precedent for chemical contamination near the site or is the soil and water pristine?
 - c. Is the area particularly noted for its esthetic beauty?
- 4. Is the site flood prone?
 - a. Is the site in a flood plain?
 - i. How current are the maps used to make flood plain determinations?
 - ii. What is the elevation of the site?
 - iii. Is diking required or desired to provide flood protection?
 - (a) What is the design height of the dike?
 - (b) How is the dike protected from erosion?
 - (c) What frequency and design storm was used?
 - (d) Is the access to the site over or through dikes?
 - b. Is the site hurricane vulnerable?
 - i. Is the site in an area subject to storm surge?
 - ii. What are the design storm specifications?
 - iii. Should damage from wave action be considered?
 - iv. For what levels of wind speed is the facility designed?
- 5. Is groundwater protected?
 - a. Are aquifers or recharge area underlying the site used for drinking water?
 - b. What is the relationship of the site to the water table?
 - c. What wells exist in the area?
 - d. What is the flow rate and direction of the groundwater flow?
 - e. What is the groundwater quality in the underlying aquifers?

- f. Is there a hydraulic connection between the aquifers?
- 6. Does prospective site pose potential health risks as defined by proximity to:
 - a. Prime agricultural area (crop or pasture land)
 - b. Residential area
 - c. Schools or day care centers
 - d. Hospitals or prisons
 - e. Public buildings or entertainment facilities
 - f. Food storage area
 - g. Existing community health problems that may be aggravated by operation of additional hazardous waste disposal capacity
- 7. Is air quality protected?
 - a. Is the site within an ozone or non-attainment area?
 - b. What contaminants are likely to be generated at the site?
 - c. What protection is afforded from each contaminant generated by the site?
 - d. What is the potential for unregulated emissions?
 - f. What plans are implemented to provide for odor control?
 - g. Who will be affected by emissions?
 - i. What is the direction of the prevailing winds?
 - ii. Describe the expected frequency of "bad air" conditions.
 - h. Describe the control of vapors at various stages of process.
- 8. Have physical site characteristics been studied; what has been done in terms of a geotechnical investigation?
 - a. Site geology
 - b. Hydrology
 - c. Topography

- d. Soil properties
- e. Aquifer location
- f. Subsidence problems
- g. Climatic conditions

E. Are there mitigating measures which would offer more protection to the environment than the facility as proposed without unduly curtailing nonenvironmental benefits?

(This question requires the permittee to demonstrate having considered the most stringent techniques for reducing or more efficiently handling waste.)

- 1. Is this facility part of a master plan to provide waste management? Whose plan?
 - a. How does it fit into the plan?
 - b. What geographical area is served by the plan?
- 2. Does this facility fit into an integrated waste management system? (Reduction, recovery, recycling, sales tax, exchange, storage, treatment, disposal).
 - a. On-site
 - b. Regional
- 3. Can waste be disposed by some other means?
 - a. Technology limitations
 - b. Cost factors
 - c. Other reasons
- 4. What quality assurance control will be utilized to protect the environment?
 - a. Plans for lab work
 - b. How are out-of-spec wastes handled?
 - c. What happens to rejected wastes?

- d. Treatment stabilization
- e. Segregation of noncompatible wastes
- f. Handling of containerized wastes
- 5. Innovative techniques used to control release of waste or waste constituents into the environment.
 - a. Surface impoundment
 - b. Land application treatment
 - c. Landfill (burial)
 - d. Incinerator
 - e. Container storage
 - f. Tanks

Appendix K

Applicant's Certification Statement (Acceptable Wording)

APPLICANT'S CERTIFICATION STATEMENT

I, (Name of Principal Officer), (Title of Principal Officer) of (Company Name), do hereby certify that I am familiar with the proposed operations of (Company Name) and that the information submitted in this application to Louisiana Department of Natural Resources, Office of Conservation, Environmental Division for a commercial exploration and production waste (treatment, transfer station, etc.) facility is true, accurate, and complete to the best of my knowledge.

(Signature of the Principal Officer)	Date:
(Typed Name of Principal Officer)	Date.
WITNESSES:	
(Typed Name of Witness)	(Typed Name of Witness)
	Affix Notary Seal to this Certification
	(Signature of notary public)
	Notary Public in and for (parish, county) (state)
	My commission expires

Appendix L

Waiver of the Distance Requirement (Acceptable Wording)

WAIVER OF OBJECTION

State of Louisiana	
Parish of	
(Company Name) constructing and of (E&P Waste) (treatment, disposal, etc.) Furthermore, I certify that I am the (co.)	at I am aware of the proposal of and have no objection to perating a commercial exploration and production waste c.) facility located at (location of proposed facility). The owner of, authorized representative of <name building).<="" church,="" citial,="" commercial,="" hospital)="" of="" or="" public,="" school,="" th="" the=""></name>
(Signature)	Date:
(Typed Name and Title, if applicable) (Name of Company, if applicable, Ad	
WITNESSES:	
(Signature)	Date:
(Typed Name)	
Signature)	Date:
(Typed Name)	