NOTICE OF INTENT

Department of Natural Resources Office of Conservation

Hydraulic Fracture Stimulation Operations (LAC 43:XIX.118)

In accordance with the provisions of the Administrative Procedure Act (R.S. 49:950, et seq) and Title 30 of the Louisiana Revised Statutes of 1950 (R.S. 30:4 et seq), the Louisiana Office of Conservation hereby gives notice of its intent to amend LAC 43:XIX Subpart 1 (Statewide Order No. 29-B) Chapter 1 General Provisions.

The recent development of the Haynesville Shale in North Louisiana is made possible through the use of multi-stage hydraulic fracture stimulation technology. This technology involves the introduction of large amounts of fluids under very high pressure into a well to create fractures in the rock which then allow oil and/or gas to flow into the wellbore. The intense development of the Haynesville Shale in Louisiana and other shale resources across the United States has created a large amount of public interest in the hydraulic fracturing process and its potential effect on the environment.

In addition, in November 2010, a review of Office of Conservation policies and regulations associated with the hydraulic fracturing process was conducted by the non-profit, multi-stakeholder organization, STRONGER, Inc. to assess the effectiveness and adequacy of current regulations. Their report, finalized in March 2011, recommended some of the changes included in the proposed amendment.

As a result of the aforementioned conditions, a proposed rule was drafted by staff of the Office of Conservation using portions of the hydraulic fracturing regulations recently promulgated in the State of Arkansas and statutes recently passed in Texas as models.

The proposed rule requires that a work permit be obtained from the Office of Conservation (OC) prior to initiating hydraulic fracture stimulation operations on a well. Following completion of hydraulic fracturing operations, information on fracturing fluid composition and volumes are to be reported to OC or to a publicly accessible registry.

The intent of the rule is to provide transparency to ensure that hydraulic fracturing operations are conducted in a manner which is protective of the public health and the environment and to collect technical information on the hydraulic fracturing operations conducted in Louisiana.

Title 43 NATURAL RESOURCES

Part XIX. Office of Conservation—General Operations Subpart 1. Statewide Order No. 29-B Chapter 1. General Provisions

§118. Hydraulic Fracture Stimulation Operations

- A. The provisions of this Rule shall apply to all new wells for which an initial drilling permit is issued on or after the effective date of this Rule that are stimulated by the application of fluids, which contain proppant such as sand or man-made inert material, with force and/or pressure in order to create artificial fractures in the formation for the purpose of improving the capacity to produce hydrocarbons.
- B. An application for hydraulic fracture stimulation shall be made to the district office on Form DM-4R in accordance with the provisions of LAC 43:XIX.105 and a proper work permit shall be received from the district manager prior to beginning operations.
- C. Following completion of the Hydraulic Fracture Stimulation Operation, the operator shall, for purposes of disclosure, report the following information on or with the Well History and Work Resume Report (Form WH) in accordance with the requirements of LAC 43:XIX.105:
- 1. The types and volumes of the Hydraulic Fracturing Fluid (base fluid) used during the Hydraulic Fracture Stimulation Operation expressed in gallons; and
- 2. A list of all additives used during the Hydraulic Fracture Stimulation Operation, such as acid, biocide, breaker, corrosion inhibitor, crosslinker, demulsifier, friction reducer, gel, iron control, oxygen scavenger, pH adjusting agent, scale inhibitor, proppant and surfactant; and
- 3. For each additive type, listed under paragraph (2) above, the specific trade name and suppliers of all the additives utilized during the Hydraulic Fracture Stimulation Operation; and
- 4.A list of chemical ingredients contained in the hydraulic fracturing fluid that are subject to the requirements of 29 C.F.R. Section 1910.1200(g)(2) and their associated CAS numbers.
- 5. The maximum ingredient concentration within the additive expressed as a percent by mass for each chemical ingredient listed under paragraph (4).
- 6. The maximum concentration of each chemical ingredient listed under paragraph (4), expressed as a percent by mass of the total volume of hydraulic fracturing fluid used.
- 7.Notwithstanding paragraph (4), if the specific identity of a chemical ingredient and the chemical ingredient's associated CAS number are claimed to be trade secret, or have been finally determined to be entitled to protection as a trade secret under 29 C.F.R. Section 1910.1200(i), the entity entitled to make such a claim may withhold the specific identity of the chemical ingredient and the chemical ingredients associated CAS number from the list required by paragraph (4). If the entity entitled to make such a claim elects to withhold that information, the report must:
 - a. disclose the chemical family associated with the ingredient; and
- b. include a statement that a claim of trade secret protection has been made by the entity entitled to make such a claim.
- c. An operator will not be responsible for reporting information that is not provided to them due to a claim of trade secret protection by the entity entitled to make such a claim.

8. Nothing in paragraph (7) above shall authorize any person to withhold information which is required by state or federal law to be provided to a health care professional, a doctor, or a nurse.

9. The operator may furnish a statement signifying that the required information has been submitted to the Ground Water Protection Council Hydraulic Fracturing Chemical Registry or any other similar registry, provided all information is accessible to the public free of charge, to satisfy some or all of the information requirements of this subsection.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:4 et seq.

HISTORICAL NOTE: Promulgated by the Department of Natural Resources, Office of Conservation, LR 37

Family Impact Statement LAC 43:XIX.118 Hydraulic Fracture Stimulation Operations

In accordance with LSA-RS 49:972, the following statements are submitted after consideration of the impact of the proposed rule amendment at LAC 43:XIX.118, Hydraulic Fracture Stimulation Operations on family as defined therein.

- 1. The proposed rule amendment will have no effect on the stability of the family.
- 2. The proposed rule amendment will have no effect on the authority and rights of parents regarding the education and supervision of their children.
- 3. The proposed rule amendment will have no effect on the functioning of the family.
- 4. The proposed rule amendment will have no effect on family earnings and family budget.
- 5. The proposed rule amendment will have no effect on the behavior and personal responsibility of children.
- 6. Family or local government are not required to perform any function contained in the proposed rule amendment.

A public hearing will be held on Tuesday, August 30, 2011 at 9:00 a.m. in the LaSalle Building, LaBelle Hearing Room, 617 N. Third Street, Baton Rouge, LA 70802. Interested persons are invited to attend and submit oral comments on the proposed amendments. If accommodations are required under the Americans With Disabilities Act, please advise the Office of Conservation, Engineering Division at P.O. Box 94275, Baton Rouge, LA 70804-9275 in writing within ten (10) working days of the hearing date. Two hours of free parking are allowed in the Welcome Center parking garage with a validated parking ticket.

All interested persons are invited to submit written comments on the proposed regulation. Persons commenting should reference "Proposed Amendment of LAC 43:XIX.118". Such comments must be received no later than Friday, August 12, 2011, at 4:30 p.m., and should be sent to Mr. Chris Sandoz, Office of Conservation, Engineering Division, P. O. Box 94275, Baton Rouge, LA 70804-9275; hand delivered to 617 North Third Street, 9th Floor, Baton Rouge, LA 70802; by email to chris.sandoz@la.gov; or by fax to (225) 342-2584.

This proposed regulation is available on the Internet at http://dnr.louisiana.gov and is available for inspection at the following DNR office locations from 8 a.m. until 4:30 p.m.: 617 N. Third Street, Ninth Floor, Baton Rouge, LA 70802; Brandywine III, Suite 220, 825 Kaliste Saloom Road, Lafayette, LA 70508; State Office Building, Suite 668, 1525 Fairfield Avenue, Shreveport, LA 71101; 122 St. John Street, Room 228, Monroe, LA 71201.

James H. Welsh Commissioner of Conservation

FISCAL AND ECONOMIC IMPACT STATEMENT FOR ADMINISTRATIVE RULES RULE TITLE: Hydraulic Fracture Stimulation Operations

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There are no implementation costs or savings to state or local government units anticipated due to the proposed rule amendments. The proposed rule requires that a work permit be obtained from the Office of Conservation (OC) prior to initiating hydraulic fracture stimulation operations on a well. Following completion of hydraulic fracturing operations, information on fracturing fluid composition and volumes are to be reported to OC or to a publically accessible registry.

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There is no effect on revenue collections of state or local government units anticipated due to the proposed rule amendments.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NON-GOVERNMENTAL GROUPS (Summary)

The primary groups affected by these rules changes will be Exploration and Production companies and completion contractors. The only anticipated cost increases are associated with the additional reporting requirements.

Since both pre and post hydraulic fracturing paperwork is already required via DM-4R (work permit) and WH-1 (well history and work resume reports), the additional information required by the proposed rule will simply be added to existing paperwork. In the event reporting requirements cannot be handled by existing regulatory personnel employed by the E&P Company, industry representatives estimate the incremental cost to be \$1,200 per hydraulically fractured well. In 2010, there were 817 wells drilled to the Haynesville Shale. Assuming all of these wells were hydraulically fractured results in an additional cost of \$980,000 per year for the entire E&P industry. For comparison, assuming an average cost to drill and complete a Haynesville Shale well is \$10,000,000, the percentage cost increase associated with the new requirements would be 0.012%.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

There is no anticipated effect on competition and employment.