STATE OF LOUISIANA OFFICE OF CONSERVATION BATON ROUGE, LOUISIANA

ORDER NO. U-HS

Order establishing reasonable and uniform practices, safeguards and regulations for present and future operations related to the exploration for and production of gas from the Haynesville Zone in urban areas.

Pursuant to power delegated under the laws of the State of Louisiana, and particularly Title 30 of the Louisiana Revised Statutes of 1950 and after public hearing held under **Docket No 09-535** in Shreveport, Louisiana on **May 21, 2009** following legal publication of notice and notice in accordance with the rules prescribed by the Commissioner of Conservation, the following Order is issued and promulgated by the Commissioner of Conservation as being reasonably necessary to protect the health, safety and general welfare of the public, minimize the potential impact to property and mineral rights owners, protect the quality of the environment, encourage the development of and production of gas from the Haynesville Zone and otherwise to carry out the provisions of the laws of this State.

DEFINITIONS

- (A) All technical industry words or phrases related to the drilling for and production of gas not specifically defined in this Order shall have the meanings customarily attributable thereto by prudent gas industry operators.
- (B) The following words, terms and phrases, when used in this Order, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Ambient Noise Level. The all encompassing noise level associated with a given environment, being a composite of sounds from all sources at the location, constituting the normal or existing level of environmental noise at a given location.

<u>Building</u>. Any structure used or intended for supporting or sheltering any use or occupancy.

Daytime. The period in any day between 6:00 a.m., local time, and 8:00 p.m., local time.

<u>Decibel (dB)</u>. The unit for measuring the intensity of a sound/noise and is equal to 10 times the logarithm to the base 10 of the ratio of the measured sound pressure squared to a reference pressure which is 20 micropascals.

<u>Drilling</u>. Digging or boring a well for the purpose of exploring for, developing or producing gas.

<u>Drillsite</u>. The premises used during the drilling, completion and operation of a well.

<u>Flowback</u>. The process of flowing a completed/fractured well for the purpose of recovering water and residual sand from the gas stream prior to producing the well into a sales line.

<u>Fracture or Fracturing</u>. The process of stimulation using water and propants injected under pressure in a well to create fractures in the Haynesville Zone so as to enable, or facilitate, production of gas therefrom.

Gas. Any fluid, either combustible or noncombustible, which is produced in a natural state from the earth and which maintains a gaseous or rarefied state at standard temperature and

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pressure conditions and/or the gaseous components or vapors occurring in or derived from petroleum or natural gas.

<u>Haynesville Zone</u>. The subsurface interval consisting primarily of shale and situated below the deepest Cotton Valley sands and above the top of the Smackover formation.

<u>Inspector</u>. The enforcement specialist of the Office of Conservation for the area in which the well is being drilled.

Nighttime. The period in any day between 8:00 p.m., local time, and 6:00 a.m., local time.

Office of Conservation. The Louisiana Office of Conservation created pursuant to Louisiana laws and particularly the provisions of LSA-R.S. 30:1 et seq.

Operator. The person listed as operator on the drilling permit issued by the Office of Conservation for the drilling of the well.

<u>Public Building</u>. Any building used or designed to and intended to be used for the purpose of assembly of persons for such purposes as education, deliberation, entertainment, amusement, or health care. Public buildings include, but shall not be limited to, theaters, assembly halls, auditoriums, armories, mortuary chapels, dance halls, exhibition halls, museums, gymnasiums, bowling lanes, libraries, skating rinks, courtrooms, schools, restaurants and hospitals.

<u>Public Park</u>. Any land area dedicated to and/or maintained for traditional park-like recreational purposes by a public body, but shall not include privately owned or privately managed land areas.

<u>Religious Institution</u>. Any building in which persons regularly assemble for religious worship and activities intended primarily for purposes connected with such worship.

Residence. A house, duplex, apartment, townhome, condominium, mobile home or other building designed for dwelling purposes, including those for which a building permit has been issued on the date the application for a drilling permit is filed with the Office of Conservation for a well in the area.

<u>Urban Area</u>. Any area in the Parishes of Bossier, Caddo, DeSoto, Sabine. Natchitoches, Red River, Webster or Bienville, State of Louisiana, which is within: (1) the limits of an incorporated city, town or village; or (2) a subdivision consisting of twenty (20) or more lots as to which a subdivision plat has been prepared and filed in the parish conveyance records pursuant to the provisions of LSA-R.S. 33:5051.

Well. A hole drilled to a depth to penetrate into the Haynesville Zone.

FINDINGS

The Commissioner of Conservation finds as follows:

1. That in order to protect the health, safety and general welfare of the public, minimize the potential impact to property and mineral rights owners, protect the quality of the environment, and encourage the development and production of gas from the Haynesville Zone, it is necessary to establish reasonable and uniform practices, safeguards and regulations for present and future operations related to the exploration for and production of gas from the Haynesville Zone in urban areas.

ORDER

NOW, THEREFORE IT IS ORDERED THAT:

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1. Scope.

(A) The provisions of this Order shall apply only to wells which are drilled to or completed in the Haynesville Zone, and which are within seven hundred fifty (750) feet of a residence, religious institution, public building or public park in an urban area, pursuant to a drilling permit issued after the effective date of this Order.

(B) In order to determine applicability of these rules, any operator filing an Application for Permit to Drill for Minerals within the Haynesville Zone shall indicate on the location plat accompanying such application one of the following statements: "This well is subject to the provisions of Order U-HS." or "This well is not subject to the provisions of Order U-HS." This requirement is in addition to the existing rules concerning wells drilled to a depth of 10,000 feet or more given in LSA-R.S.30:28.D.

2. Well Setbacks.

- (A) Except as provided in (B) and (C) hereof, no well shall be drilled less than five hundred (500) feet from any residence, religious institution, public building or public park located in an urban area. The distance shall be calculated from the wellbore, in a straight line, without regard to intervening structures or objects, to the closest exterior point of the building, or to the closest boundary of a public park.
- (B) Notwithstanding the foregoing, as to any building within five hundred (500) feet of the proposed well, if the owner of the building is a party to an oil, gas and mineral lease covering the property on which the building is located (or successor in interest to the lessor's interest under such lease), then the setback distance from any such building shall be two hundred (200) feet unless otherwise provided in the oil, gas and mineral lease.
- (C) In addition, if the operator obtains the written consent of all owners whose residence, religious institution, public building or public park is located in an urban area and within a five hundred (500) feet radius around the proposed well, then the setback distance from such well shall be two hundred (200) feet. A copy of the written consents shall be filed with the application for the drilling permit to which the consent applies.
- (D) These provisions apply to any residence, religious institution, public building or public park located in an urban area which is existing or under construction on the date Application for Permit to Drill for Minerals is filed with the Office of Conservation.

3. Drilling, Completion and Production Operations.

- (A) <u>Fencing</u>. Security fencing at least six (6) feet in height, shall enclose the wellhead and production facilities.
- (B) <u>Maintenance of Drillsite</u>. The drillsite and the site of production facilities shall be kept free of standing water, weeds, brush, trash and other waste material; provided, however, that exploration and production waste generated from the drilling of the well may be kept on the drillsite until disposed of in accordance with the provisions of Statewide Order No. 29-B. A drillsite may not be used for storage of pipe, equipment or other materials which are not intended for use on the well at such site. Neither the drillsite, nor the structures thereon, shall be permitted to become dilapidated, unsightly or unsafe.
- (C) <u>Dust, Vibration and Odors</u>. All drilling, completion and production operations shall be conducted in such a manner so as to minimize, so far as practicable, dust, vibration and noxious odors, and shall be conducted in accordance with generally accepted practices incident to such operations in urban areas. All equipment used in such operations shall be operated in such a manner as to minimize dust, vibration and noxious odors so far as practicable. Proven technological improvements in industry standards of drilling, completion and production in urban areas shall be adopted as they become available if capable of significantly reducing factors of dust, vibration and odor and if economically feasible.

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(D) <u>Site Lighting</u>. To the extent practicable to do so, and recognizing that adequate lighting is essential to conducting drilling, completion and production operations safely and efficiently, site lighting shall be directed downward and internally towards the drillsite so as to minimize glare on public roads and adjacent buildings within three hundred (300) feet of the well.

- (E) <u>Muffling Exhaust</u>. Exhaust from any internal combustion engine or compressor used in connection with the drilling of any well or for use on any production equipment shall not be discharged into the open air unless it is equipped with an exhaust muffler, or an exhaust box constructed of non-combustible materials sufficient to suppress noise and disruptive vibrations. All such equipment shall be maintained in good operating condition according to manufacturer's specifications.
- (F) Venting and Flaring of Gas. After fracturing a well, the operator shall employ appropriate equipment and processes as soon as practicable to minimize gas releases into the open air. Gas may be flared as opposed to being vented, provided that no open flame shall be located closer than two hundred (200) feet from any building not used in operations on the drillsite and the open flame shall be screened in such a way as to minimize detrimental effects to adjacent property owners.
- (G) <u>Discharge</u>. Unless otherwise allowed by state law or regulation, permit from the applicable governing body or by private contract, no person shall place or discharge any oil, naphta, petroleum, asphalt, tar, hydrocarbon substances or any refuse including wastewater or brine from any operation on a drillsite, or the contents of any container used in connection with any operation on the drillsite, into or upon: (1) any public right-of-way, alley, street, lot, storm drain, ditch, sewer or sanitary drain; (2) any body of water: or (3) any private property.
- (H) Work Hours. No construction activities involving excavation of, alteration to, or repair work on any access road or drillsite, shall be performed during nighttime hours. Deliveries of equipment and materials by trucks having more than two (2) axles, which materials or equipment is associated with drilling and/or production, well servicing, site preparation and other related work conducted on the drillsite, shall be limited to daytime hours except in cases of fire, blowout, explosion or any other emergency or where the delivery of equipment or materials is necessary to prevent the cessation of drilling, completion or production operations. In addition, all drillstem and other open hole testing, and all fracturing operations, shall be conducted during daytime hours.

(I) Noise.

- (1) Prior to commencement of any operation on a well covered by this Order, the operator shall establish a continuous seventy-two (72) hour ambient noise level at the drillsite. The seventy-two (72) hour time span shall include at least one twenty-four (24) hour reading during either a Saturday or Sunday. The sound level meter used in conducting noise evaluations shall meet the American National Standard Institute's standard for sound meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data. Documentation of this seventy-two (72) hour ambient noise level shall be maintained by operator and made available to the inspector of the Office of Conservation upon request.
- (2) No well shall be drilled, or any equipment operated in such a manner so as to create any noise which causes the exterior noise level when measured at a distance of five hundred (500) feet from the well head, or other equipment generating noise, that:
- (a) exceeds the seventy-two (72) hour ambient noise level by more than seven (7) decibels during daytime hours or by more than five (5) decibels during nighttime hours;
- (b) exceeds the daytime average ambient noise level by more than ten (10) decibels during fracturing or flowback operation; or

(c) exceeds the seventy-two (72) hour ambient noise level by more than five (5) decibels during any flowback operations conducted during nighttime hours.

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(3) Adjustments to the noise standards as set forth above in subsection 2(a),(b) and (c) of this section may be permitted intermittently in accordance with the following:

- (4) The operator shall periodically monitor the exterior noise level at a distance of five hundred (500) feet from the wellhead, or other equipment generating the noise, to ensure compliance with these provisions. If a complaint is received from any person owning an interest in any residence, religious institution, public building or public park located in an urban area and within seven hundred fifty (750) feet from the wellhead, the operator shall, within twenty-four (24) hours of receipt of the complaint, continuously monitor for a seventy-two (72) hour period at a distance of five hundred (500) feet from the wellhead, or other equipment generating the noise, the exterior noise level generated by drilling or other operations to ensure compliance.
- (5) No compliance order shall be issued by the Office of Conservation for a violation of these noise standards until such time as it has been determined by an Office of Conservation inspector that a violation has occurred and the operator has been given twenty-four (24) hours from receipt of notice of non-compliance to correct the violation. Additional extensions of the twenty-four (24) hour period may be granted by the Office of Conservation in the event that the source of the violation cannot be identified after reasonable diligence by the operator.
- (J) <u>Water</u>. An operator using a water well to supply water to a well covered by this Order, whether for drilling or fracturing operations, shall comply with the provisions of LSA-R.S. 38:3097 et seq., and the rules and regulations of the Office of Conservation promulgated pursuant thereto.
- (K) Road Use. In connection with the filing of an Application for a Permit to Drill for Minerals (Form MD-10-R) concerning a well covered by this Order, Operator shall certify that it has provided the chief executive officer of any affected incorporated city, town or village, and parish, with a report regarding the anticipated routes of drillsite access.

This Order was signed at Baton Rouge, Louisiana, this 22nd day of June, 2009 and shall be effective on and after August 1, 2009.

OFFICE OF CONSERVATION OF THE STATE OF LOUISIANA

JAMES H. WELSH

COMMISSIONER OF CONSERVATION

^{*}Cumulative minutes during any one hour.