

# COMMUNITY REPORTED IMPACTS OF OIL-GAS OPERATIONS

**Counselor, N.M.**  
**Ojo Encino, N.M.**  
**Torreón-Starlake, N.M.**  
**Nageezi, N.M.**

January 22, 2017

## BUREAU OF LAND MANAGEMENT

New Mexico State Office

301 Dinosaur Trail, P.O. Box 27115 Santa Fe, New Mexico 87502-0115

January 19, 2017

### AMENDMENT NO. 1

Competitive Oil and Gas Lease Sale Notice dated November 7, 2016, for the January 25, 2017, Oil and Gas Lease Sale, is amended as follows:  
The following note has been added to all four parcels offered in the sale notice:

*Note: Due to a high density of residences within the locale, site-specific mitigation measures, as determined through environmental analysis consistent with the National Environmental Policy Act, will be applied to development proposals. These measures that would be applied as Conditions of Approval may include, but are not limited to, measures to address impacts from increased traffic, noise, and light pollution.*

If you have any questions, please contact Lourdes Ortiz at (505) 954-2146.

## Executive Summary

The Navajo Chapters of Counselor, Ojo Encino, Torreón-Starlake and Nageezi want to draw attention to community concerns that have been previously reported at BLM Farmington Field Office public scoping meetings in 2016 and presented to BLM New Mexico State Director, Amy Lueders, on January 17, 2017.

**The following 11 Navajo Chapter subdivisions in the Eastern Agency have passed resolutions that state, in part:**

1. **The Chapter is against all pending and future federal fluid mineral BLM leases** within Navajo Eastern Agency areas (or other lease sales which could directly or indirectly impact Eastern Agency Areas) until a reasonable revenue sharing mechanism is developed, the new Farmington Field Office Resource Management Plan Amendment is developed, and a full

understanding of potential environmental and health impacts of horizontal hydraulic fracturing is developed: and

**6. The Chapter shall cooperate** with other chapters, the Navajo Nation, and federal entities to better understand potential environmental and health impacts of horizontal hydraulic fracturing activities that could affect Navajo communities.

Becenti Chapter, Counselor Chapter, Huerfano Chapter, Lake Valley Chapter, Nageezi Chapter, Ojo Encino Chapter, Olijato Chapter, Pueblo Pintado Chapter, Torreon/Star Lake Chapter, Whitehorse Lake Chapter and Whiterock Chapter

All the above Chapters are located in the FFO-RMPA Planning Area with the exception of Olijato Chapter. Nageezi Chapter and Counselor Chapter are within the proposed lease area in the January 25, 2017 sale.

### **Traffic Safety Impacts**

Oil field tanker and truck traffic on dirt tracks and county roads throughout the Nageezi, Counselor and Lybrook areas and along Highway 550 cause the following safety issues reported by community residents:

- Speeding and reckless driving by oil company drivers
- Oil traffic on roads 24-7
- Dust pollution during dry season
- Deeply rutted and sometimes impassable roads during wet season
- Danger to local drivers and to school children getting off buses and walking home
- Danger to domestic animals and livestock moving along roadways
- Local residents report frequent illegal use of land by oil company employees taking short cuts through private property and causing damage to the land
- Illegal dumping of “wastewater” into area arroyos by oil tanker drivers
- Refusal by oversize oil truck drivers to move over to allow drivers to pass safely



Halliburton tanker making high-speed turn across traffic on Highway 550 in Counselor

## **Noise Impacts**

Oil well pad equipment including compressors, generators, pumps, drilling equipment, and infrastructure construction equipment generate continual noise that is both heard and low frequency noise (LFN) that is “felt” by residents.

Oil operations such as drilling, pumping, hydraulic fracturing, explosions and other well pad activities generate episodic noise that alarms, disturbs, irritates and depresses residents.

Oil and gas traffic, engine noise and operators voices generate noise throughout the day and nighttime hours causing lack of sleep, disturbance of routine daily interactions, inability to concentrate on tasks, interference with getting reading or schoolwork done, and loss of peace and quiet in formerly undisturbed rural settings.

Explosions and other unexpected loud noise from well sites cause livestock panic and flight, injuries and occasional mortality of animals, and loss of animal weight and productivity for area ranchers and farmers with livestock.<sup>1</sup>

## **Light Pollution Impacts**

There are many studies<sup>2</sup> on the negative impacts of nighttime light pollution on human health. Sleep disturbance, anxiety, restlessness and inability to concentrate, ulcers, and chronic fatigue are some of the symptoms reported by local residents exposed to well site lighting.

Intense lights used to flood well pads, lights on rigs, and flares in formerly unlit, uninhabited totally dark sky places, have immediate impacts on both humans and animals that live in the area. People modify their homes to shut out the unwanted illumination. Livestock seek areas away from the light if possible and wildlife usually leave the area.

## **Fumes, Smells & Air Pollution Impacts**

One of the most reported health concerns by residents in the Nageezi – Counselor area are the fumes and smells generated by the oil and gas operations.

Residents have reported:

- sudden and violent headaches
- dizziness,
- sore throats

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<sup>1</sup> Breiner, A., "What Cows Can Tell Us About The Dangers Of Fracking." *Think Progress*. 19 Sept. 2013. <<http://thinkprogress.org/climate/2013/09/19/2652731/cows-fracking-safety/>>.

Waldner, C.L. et al., “Associations Between Oil- and Gas-Well Sites, Processing Facilities, Flaring, and Beef Cattle Reproduction and Calf Mortality in Western Canada,” *Preventative Veterinary Medicine* 50 (July 19, 2001): 1–17.

<sup>2</sup> Public health implications of environmental noise associated with unconventional oil and gas development”, Hays, J. et al, Elsevier STOTEN-21420, 2016

- breathlessness
- sudden nausea
- chest pain
- spasmodic coughing
- nasal and bronchial irritation and faintness

after being exposed to fumes from nearby wells.

Parents from the Lybook Community School reported at a 2015 Counselor Chapter meeting that fumes from well operations along Highway 550 can be smelled on a daily basis by staff, parents and children outside on the school property. One parent also reported that children have been sent home when water has been shut off at the school due to possible contamination from some unspecified and unreported oil activities.



*From Highway 550 - Flaring at Mile Marker 133*

Benzene, Toluene, Ethylbenzene and Xylene (BTEX) emissions are released during the routine flaring period of gases from oil wells.

BTEX emission exposure has been repeatedly cited<sup>3</sup> as a leading cause of life-threatening birth defects in infants born to mothers exposed to benzene in their first trimester of pregnancy. Birth defects include congenital heart defects (CHDs), neural tube defects (NTDs), and pre-term and low weight birth.

Residents are concerned about what they don't know and are not being told about air emissions from oil and gas wells and how much risk they are being exposed to by living near oilfields. Since 2015, when oil drilling escalated sharply in the Nageezi – Counselor

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<sup>3</sup> EHP Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado, McKenzie et al, Vol. 122, April 2014

area, local cases of asthma and lung related disease and cancer have been reported as rising faster than in the rest of the Navajo Nation.<sup>4</sup>

There is no public air quality alert system so residents can be properly and accurately alerted when there is an accident, explosion, rupture or other sudden air quality emergency.<sup>5</sup>

There is no Emergency Preparedness evacuation plan for residents or children at Lybrook Community School or area-wide warning system. There has been no emergency hazardous material training for first responders that led to the WPX fire, July 2016, to be allowed to burn for 5 days impacting the community's air quality.

There is no designated or supplied emergency shelter or medical treatment center that has trained staff or contact numbers for residents.



*WPX Site after July 2016 fire that destroyed 36 tanks and was located 330' from private landowner's residence that suffered damage to a well and windmill, contamination of home interior, long term hospitalization of owner and mortality of livestock and domestic pets*

Submitted:

Counselor Chapter  
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<sup>4</sup> "Navajo Nation Mortality", report presented October 27, 2016, David Foley, Navajo Epidemiology Center

<sup>5</sup> Letter to BLM, "WPX Energy Tank Fire Industrial Accident near Counselor, NM, July 15, 2016 from Counselor, Ojo Encino and Nageezi Chapter Presidents and Concerned Citizens and Organizations