

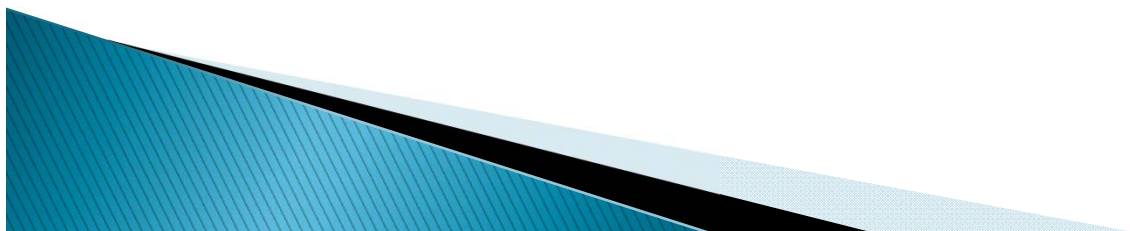
NDIC Oil & Gas Division

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Permit Manager

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North Dakota Society of Professional Land Surveyors



Overview

- ▶ NDIC drilling permit review policy
 - Occupied dwelling
 - Distance restrictions
- ▶ Area of Interest policy
- ▶ Surface owner notice
- ▶ Surveyor recommendations to O&G operators
- ▶ Plats
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NDIC Drilling Permit Review Policy

NDIC-PP 1.01. For all applications for a permit to drill under NDAC 43-02-02, 43-02-02.2, 43-02-02.3, 43-02-02.4, 43-02-03 and 43-02-05, regardless of location, the director shall consider the proximity of the proposed location to the following:

- a. A shallow glacial aquifer;
- b. A lake (with a water surface of 640 acres or more);
- c. Lake Sakakawea;
- d. A wellhead protection area;
- e. Near-surface coal, sand, or gravel deposit;
- f. Unstable soils or areas with a high potential for soil instability;
- g. A natural drainage;
- h. A 100-year (or less) floodplain;
- i. An occupied dwelling;
- j. A military facility;
- k. A plugged and/or abandoned well;
- l. A planned bypass route that has been proposed in an approved ten-year, or less, county, state, or federal road master plan;
- m. 33 feet of any section line which has not been closed or within 200 feet of the centerline of a state or federal highway;
- n. A city's extra-territorial boundary;
- o. A county, state, or federally designated historic site; a public recreation area; or a wildlife management area; and
- p. Any other areas or geographical formations the director deems appropriate.



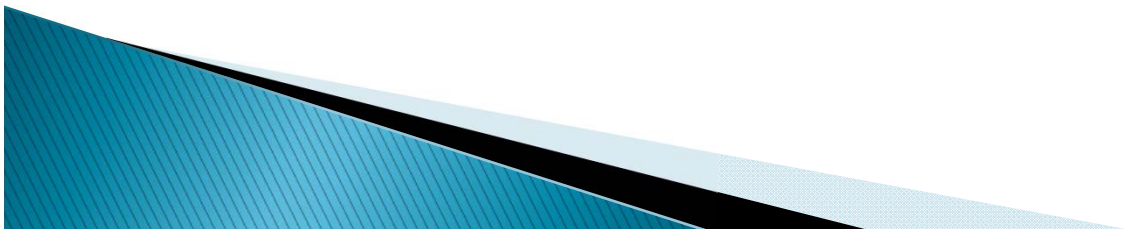
Occupied Dwellings

- ▶ NDCC 38-08-05 & NDAC 43-02-03-16
 - If pad is within 1000 feet of an occupied dwelling:
 - Production equipment must be located furthest from dwelling on the pad
- ▶ NDAC 43-02-03-28: “...No well or production or injection equipment installed nor saltwater handling facility or treating plant constructed less than 500 feet from an occupied dwelling unless agreed to in writing.”
 - NDIC may require detailed pad layout plat if questionable.



Distance restrictions

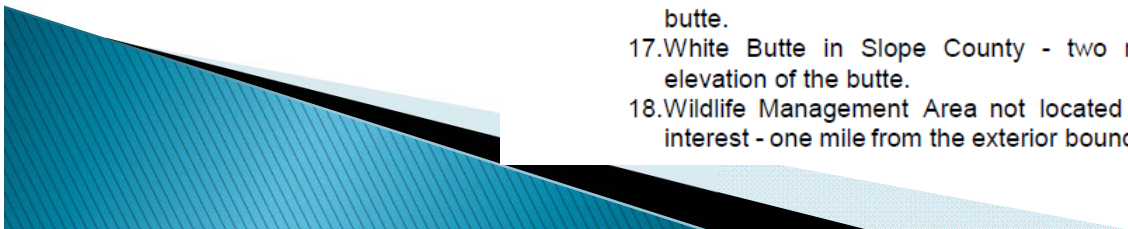
- ▶ Military facility
 - Operator must notify Minot AFB cable affairs if pad is within **1320 feet**
- ▶ Section Line **33 feet** Right Of Way.
 - County or township must approve variance.
 - No portion of the pad is allowed within Right Of Way (including cut or fill).
- ▶ State or Federal Highways
 - **200 feet** from center line of Highway in 'flat' areas.
 - **400 feet** from center line of Highway in badlands.



Areas of Interest Policy

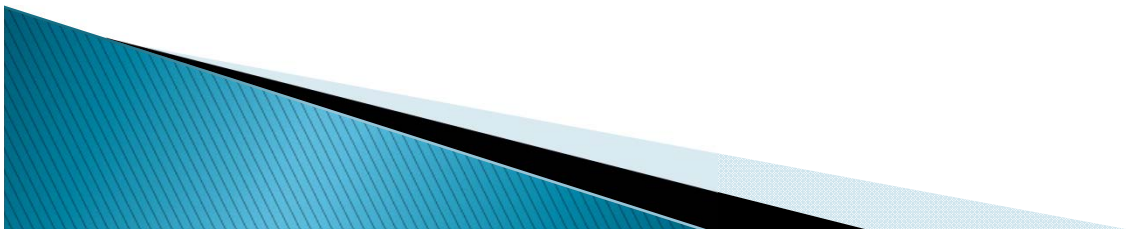
NDIC-PP 2.01. After May 1, 2014, any application for a permit within the following areas of interest that relates to public lands, shall comply with NDIC-PP 2.02 through NDIC-PP 2.04.

1. Black Butte - two miles from the maximum elevation of the butte.
2. Bullion Butte - two miles from the maximum elevation of the butte.
3. Camel's Hump Butte - two miles from the maximum elevation of the butte.
4. Columnar Junipers (Limber Pines) and Burning Coal Vein - one mile from the exterior boundary of the former Dakota National Forest.
5. Confluence of the Yellowstone and Missouri Rivers - two miles from the intersection of the centerline of the riverbeds.
6. Elkhorn Ranch - two miles from the exterior boundary of the National Park and State Park sites.
7. Killdeer Mountain Battlefield State Historic Site - one mile from the exterior boundary of each site.
8. Lake Sakakawea - one half mile from the shoreline at 1850' msl elevation (i.e., the spillway elevation).
9. Little Missouri River - one mile from the centerline of the riverbed as it is determined at the time of the application.
10. Little Missouri River National Grasslands that are designated by the United States Forest Service as backcountry recreation areas;
11. Little Missouri State Park as of 1/1/2014 - one mile from the park's exterior boundary.
12. Pretty Butte - two miles from the maximum elevation of the butte.
13. Sentinel Butte - two miles from the maximum elevation of the butte.
14. Theodore Roosevelt National Park - two miles from the park's exterior boundaries.
15. Tracy Mountain - two miles from the maximum elevation of the mountain.
16. West Twin Butte - two miles from the maximum elevation of the butte.
17. White Butte in Slope County - two miles from the maximum elevation of the butte.
18. Wildlife Management Area not located within any other area of interest - one mile from the exterior boundary.



Surface owner notice

- ▶ Notice of Operations—per NDCC 38-11.1-04.1 “before the initial entry upon the land for activities including inspections, staking, surveys, measurements,...the mineral developer ***shall provide at least seven days notice*** by registered mail or hand delivery to the surface owner unless waived by mutual agreement by both parties”.
 - Surveyor should confirm notice was given to surface owner.



Surveyor recommendations to operator

- ▶ Could the location be easily moved to avoid:
 - 'occupied dwellings'
 - Drainages
 - Floodplain
 - Bodies of water



Plats

- ▶ Guideline basis:

- NDCC, NDAC, ND Board of Professional Land Surveyors, and NDSPLS.

- ▶ Requirements:

- NDAC 43-02-03-16: "...The application for permit to drill shall be accompanied by an accurate plat certified by a registered surveyor showing the location of the proposed well with reference to true north and the nearest lines of a governmental section, the latitude and longitude of the proposed well location to the nearest tenth of a second, the ground elevation, and the proposed road access to the nearest existing public road."
 - Well location Plat, Horizontal Section Plat, Pad Layout, Cut & Fill Diagrams, and Production Facility plat



Common Plat issues

- ▶ Well Location Plat and Horizontal Section Plats
 - Measurement inconsistencies
 - Well Head Elevation
 - Account for quarter section monuments as appropriate
- ▶ Pad Layout plat
 - Cut and Fill
 - Pits
 - Must indicate new and reclaimed.
 - 33 feet Section Line Right Of Way
 - If edge of pad is close
 - Well head Elevation
- ▶ Production Layout Plat
 - NDAC 43-02-03-28: “...No boiler, electric generator, or treater shall be placed nearer than 150 feet to any producing well or oil tank. Placement as close as one hundred 125 feet may be allowed if a spark or flame arrestor is utilized on the equipment.”
 - Concern: treater or flare stack *in relation to* well head or oil tanks
 - “NO” +/-



