

GOVERNOR  
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March 7, 2006

Florene Davidson, Commission Secretary  
EMNRD Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Re: Written Comments on Proposed Revisions to OCD Rule 19.15.2.50 Pits and Below-Grade Tanks  
NMGF Project No. 10568

Dear Ms. Davidson:

The New Mexico Department of Game & Fish (NMGF) has reviewed the proposed revisions to the Pits and Below-Grade Tanks Rule. A representative of NMGF attended the February 27, 2006, stakeholders meeting. NMGF supports adoption of the proposed revisions, with additional considerations detailed below.

Oilfield pits pose potential chemical and physical threats to wildlife of all kinds. Hydrocarbon toxicity can directly occur from ingestion. Thermal regulation can be disrupted by oiling of fur or feathers. Studies have documented reproductive effects from ingestion of hydrocarbons by female birds, and even microliter quantities transferred from the maternal body through the eggshell can cause embryo mortality. In addition to these chemical hazards, wildlife can drown in water containers which they are unable to escape. The animal typically swims around and around the perimeter until it becomes exhausted and drowns. This has typically been a problem with tanks that have steep or vertical sides, but can become a hazard even at 3 to 1 slope if the surface is lined with a smooth-surfaced material.

For a number of reasons, it is difficult to document the extent of wildlife mortality associated with oilfield pits. The locations are widely scattered across the landscape, and mortality events may be concentrated or episodic (for example, during migration). Carcasses may disintegrate or sink in a matter of days, animals may die in locations remote from the site of ingestion or oiling, scavengers may remove carcasses, predators and scavengers may themselves be affected by ingestion of hydrocarbons. Therefore carcass observations represent only a small proportion of the true impact.

We would like to take this opportunity to acquaint you with one study, the Report of the United States Environmental Protection Agency Region 8 Oil and Gas Environmental Assessment Effort, dated January 2003. The entire report can be downloaded at [http://epa.gov/region08/land\\_waste/ogea/ogea.html](http://epa.gov/region08/land_waste/ogea/ogea.html). Teams representing EPA, BLM, BIA and various state agencies flew over all six Region 8 states. Flights covered an estimated 15-20% of the 28,000 oilfield pits in the region. On the basis of visual evidence of violations of wildlife exclusion or

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spill prevention and control regulations, 516 sites (15-22% of the sites flown) were identified for ground inspection. Operators were given prior notice of most of the ground inspections. Inspections were actually conducted at 475 sites (including 802 pits, a site could have more than one pit). There was evidence of operators addressing problems prior to the inspection at 185 sites. The inspections resulted in 348 informal actions and 80 formal enforcement actions. Violations were documented at 100% of the commercial facilities that were inspected and 61% of the production operations. 142 dead birds were found at 40 sites, and 14 other dead wildlife were found at 9 sites. Bird and wildlife mortalities were observed at reserve pits, flare pits and open-top tanks, as well as centralized disposal and evaporation ponds.

NMGF recommends that netting be required on drilling and workover pits when they are not active. Active should be defined as employees being present. The bottom edge of netting or fencing material should be covered with earth and wrapped with finer mesh material, such as silt fence, to exclude small wildlife. Tanks of any diameter should be screened, covered, netted or otherwise make inaccessible to birds and bats. Pits or ponds, other than drilling or workover, which can be expected to have longer duration on the landscape or to contain oil on a regular basis, should have a more substantial combination of netting and/or fencing, such as that shown on the enclosed US Fish and Wildlife Service guideline. Any open topped tank, pit or pond with steep or vertical sides, or a smooth-surfaced liner, should be provided with escape ramps or rafts, even if the water is clean of contaminants. A recommended design for vertical sided tanks is enclosed. Textured-surface liner material is also commercially available. Many fence and ramps materials are reusable when the pit is closed.

In the absence of a definition, revegetation success is in the eye of the beholder. NMGF recommends that OCD specify a minimum definition of successful revegetation, such as cover visually equal to 70% of surrounding for two consecutive growing seasons, dominance by two or more native species, and no noxious weeds. Also NMGF recommends that OCD retain the flexibility to allow and encourage beneficial use of non-contaminated, non-saline produced water, such as occurs in many parts of the San Juan Basin.

Thank you for the opportunity to comment on the proposed rule revisions. If there are any questions, please contact Rachel Jankowitz at (505) 476-8159 or [rjankowitz@state.nm.us](mailto:rjankowitz@state.nm.us).

Sincerely,



Lisa Kirkpatrick, Chief  
Conservation Services Division

cc: Brian Hanson, Ecological Services Field Supervisor, USFWS  
Scott Draney, NE Area Habitat Specialist, NMGF  
Pat Mathis, SW Area Habitat Specialist, NMGF  
George Farmer, SE Area Habitat Specialist, NMGF  
Rachel Jankowitz, Mining Habitat Specialist, NMGF

## STOCK TANK LADDERS FROM ROCKY MOUNTAIN BIRD OBSERVATORY

Ranching operations play a vital role in the rural economy and landscape, as well as being very important for wildlife conservation. In shortgrass prairie, where permanent water is a rare occurrence, stock watering facilities, mainly in the form of metal or rubber tanks, provide water sources for both livestock and wildlife. RMBO's Prairie Partners program, in cooperation with the Colorado Division of Wildlife, is providing wildlife escape ladders for stock tanks on private ranches to provide an escape route for birds and other wildlife that become trapped in the water while trying to obtain a drink. Prairie Partners has had numerous reports from private landowners in several states of various bird species drowning in stock tanks, including Ferruginous Hawk, Greater Sage Grouse, Burrowing Owls, and Western Meadowlarks. The stock tank ladders not only benefit species directly by reducing drowning occurrences, but the ladders are also an effective tool for increasing water quality.

The U.S. Forest Service (USFS) and the Nebraska Game and Parks Commission (NGPC) use wildlife escape ladders (Figure 1) and notice decreases in the occurrence of drowned mammals (NGPC, personal communication). The USFS ladder has open sides which may result in birds swimming the perimeter of the tank not finding the ramp. RMBO, with the help of private landowners, has created a new ladder design that incorporates expanded metal ramps on all sides, like an inverted half-cone (Figure 2). This design is intended to be more beneficial because animals swimming the edge of the tank will be more likely to find the ladder and escape. The ladders are coated with industrial paint to minimize rusting.

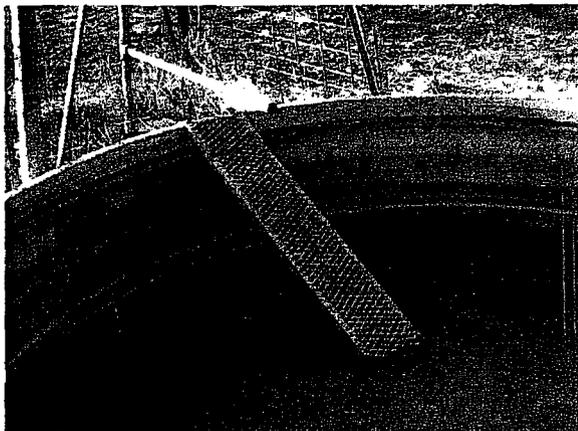


Figure 1: The USFS stock tank ladder design appears to reduce wildlife drowning, but birds and other wildlife swimming the tank edge may go under the ladder and be unable to escape.

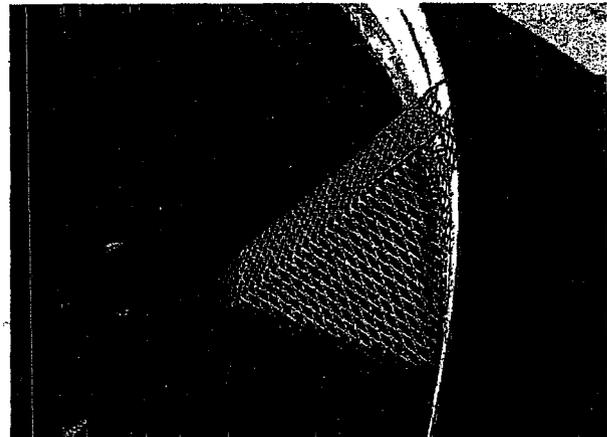


Figure 2: RMBO stock tank ladder design. Inverted half-cone shape allows for escape from all sides.

Members of Future Farmers of America (FFA) will assist with stock tank ladder construction, and possibly with monitoring stock tanks. This is a great tool for informing future farmers and ranchers and helping to get them involved in conservation at an early age. Stock tank ladders are a simple tool to help with wildlife conservation and to enhance water quality within stock tanks. We look forward to working with you to get stock tank ladders installed on your lands.

For more information please contact Tammy VerCauteren ([tammy.vercauteren@rmbo.org](mailto:tammy.vercauteren@rmbo.org)) at 970-482-1707.



### FWS Pit Netting Recommendations

Effective installation requires a design allowing for snow-loading and one that also prevents ground entry by small mammals and birds. A maximum mesh size of one and one-half inches (1 ½") will allow for snow-loading and will exclude most birds. Netting should be suspended a minimum of four feet to five feet (4' to 5') from the surface of the pit to prevent the net from sagging into the oil-covered pit during heavy snow-loads. Three inch (3") steel tubing can be used for support posts, set a maximum of seven feet (7') apart, buried a minimum of seven feet (7') in depth, and set in concrete. Three-inch (3") steel tubing is also used as a top rail to connect the posts. Cable is strung across this frame at seven-foot (7') intervals along the x-axis and the y-axis to form a grid of seven foot (7') squares by the cable. The netting is draped over this cable grid. Netting should be wide enough to drape down the sides of the frame to prevent ground entry by wildlife. A bottom perimeter cable strung along the bottom of the posts at ground level is used to attach the bottom of the net. Cables are strung over the net at seven-foot (7') intervals to prevent the wind from whipping the net back and forth. Proper maintenance should be performed to repair holes in the netting and to re-stretch sagging nets after heavy snow-loads.