

The Ineffectiveness of Flagging to Deter Migratory Birds from Oilfield Production Skim Pits and Reserve Pits

Historically, oil operators used a variety of methods in an attempt to deter migratory birds and other wildlife away from oil pits. Deterrence measures deployed included: flagging, metal reflectors, and flashing strobes (Esmoil and Anderson 1995). Some oil operators still continue to use colored flagging at oil production skim pits and reserve pits. Flagging is not effective at preventing wildlife mortality in oil pits.

An estimated 500,000 to 1 million birds are killed annually in oil field production skim pits, reserve pits and centralized oilfield wastewater disposal facilities (Trail 2006). The pits attract aquatic migratory birds, such as ducks and grebes, as well as hawks, owls, songbirds, bats, insects, small

mammals, and big game. The risk that oil pits pose to wildlife has been documented in several studies (Esmoil and Anderson 1995, Flickinger 1981, Flickinger and Bunck 1987, Trail 2006, and Ramirez 2005).

Deterrents such as flagging, strobe lights, metal reflectors and noise makers are not effective at preventing bird mortalities from occurring in oil pits. Esmoil and Anderson (1995) found that “pits with flagging, reflectors, and strobes all had similar mortality to pits without deterrents.” Comparisons of pits with flagging and without flagging showed no differences in mortality (Esmoil and Anderson 1995).

Field inspections of oilfield production facilities in Wyoming by the Service

and the U.S. Environmental Protection Agency (EPA) documented migratory bird mortalities in oilfield production skim pits with flagging (Ramirez 2005). The Service also has documented bird mortality in skim pits and reserve pits with flagging in Colorado, Montana, North Dakota, and Utah.

Migratory Bird Treaty Act

Under the Migratory Bird Treaty Act, 16 U.S.C. 703 (MBTA), the unauthorized take of migratory birds is a strict liability criminal offense; meaning that criminal liability can be proven without the United States being required to show that the offender had knowledge of the prohibition in the MBTA, or that the offender had a specific intent to “take” a migratory bird. As such, even when engaged in an otherwise legal activity where the intent is not to kill or injure migratory birds, criminal offenses can occur if bird death or injury results. Numerous court cases have upheld the convictions of oil operators under the MBTA for migratory bird mortality in oil pits (U.S. v. Stuarco Oil Co., 73-CR-129 (D. Colo., 17 August 1973); U.S. v. Union Texas Petroleum, 73-CR-127 (D. Colo., 11 July 1973); U.S. v. Equity Corp., Cr:75-51 (D. Utah, 8 Dec. 1975)).

Responsibilities of Federal Agencies to Protect Migratory Birds

Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds; January 10, 2001) directs Federal agencies whose actions are “likely to have a measurable negative effect on migratory bird populations” to integrate “bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable,

Flagging strung over an oilfield production skim pit., Campbell County, Wyoming (center top)



Mallard in flagged reserve pit in North Dakota (above and right)

adverse impacts on migratory bird resources when conducting agency actions." Federal agencies should not recommend practices such as "flagging" as the endorsement of ineffective deterrents is contrary to the intent of Executive Order 13186.

Section 7003 of the Resource Conservation and Recovery Act

The prevention of migratory bird mortality is not limited to the enforcement of the MBTA. EPA has used Section 7003 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. § 6973, to compel changes to facility operations and maintenance, as well as clean-ups and proper closure at oilfield production sites and oilfield wastewater disposal facilities. Section 7003 allows EPA to address situations where the handling, storage, treatment, transportation, or disposal of any solid waste may present an imminent and substantial endangerment to health or the environment. The term solid waste includes liquid wastes such as exploration and production waste waters.

In the case of migratory bird and other wildlife mortality in oilfield production skim pits, or in cases where the threat of mortality in the future is documented, EPA can initiate judicial action or issue an administrative order to any person, agency, or oil and gas facility operator that has contributed or is contributing to such handling, storage, treatment, transportation, or disposal to require the person to refrain from those activities or to take any necessary action to eliminate the environmental hazard.

The "take" or mortality of migratory birds or other wildlife is not required for EPA to issue an administrative order under Section 7003 (EPA 1997). The potential of an oilfield production skim pit or reserve pit to harm or kill migratory birds or other wildlife is enough to meet the "imminent and substantial endangerment" provision of Section 7003.

In United States v. Valentine, 885 F. Supp. 1506, 1513-14 (D. Wyo. 1995), the court determined that oil pits presented "imminent and substantial endangerment" under RCRA Section 7003 (EPA 1997).

Issuance of an administrative order is not limited to oil and gas facility operators with sites presenting

"imminent and substantial endangerment" to the environment. Section 7003 specifies that "any person" including any past or present generator, past or present transporter, or past or present owner or operator of a treatment, storage, or disposal facility may be liable. Section 1004(15) of RCRA defines "person" to include individuals, corporations, and political subdivisions of a state, as well as each department, agency, and instrumentality of the United States. In 1999, EPA issued an administrative order under Section 7003 of RCRA to a Federal land management agency as a result of inadequate remediation of orphan oil pits in Natrona County, Wyoming that led to the mortality of 76 migratory birds and two mule deer fawns.

Use of Flagging: MBTA and RCRA Liability

The use of flagging on oilfield production skim pits and reserve pits has proven ineffective at preventing bird mortality. Oil industry regulators that recommend flagging to oil operators as a bird deterrent for oil pits place the oil operators at risk for prosecution under the MBTA should migratory bird mortality occur.

Oil and gas production facilities and oilfield wastewater disposal facilities with oil-covered pits or exposed oil, even those using flagging as a deterrent, are at risk of posing an "imminent and substantial endangerment" to migratory birds and other wildlife. Owners and operators of such pits, and other persons who contribute to the endangerment at these pits are subject to the issuance of administrative orders under RCRA Section 7003 and potential fines of \$7,500 per day of violation of those orders. An agency responsible for clean up or other corrective action on an "orphan" oil and gas facility could also be subject to the issuance of administrative orders under RCRA Section 7003 if the agency is not taking any action or measures to eliminate the "imminent and substantial endangerment" posed by the orphan facility.



USFWS Special Agent retrieving bird carcass from oil pit with flagging

References

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