

Exploratory drilling for oil is an aspect of exploration activities. Exploratory drilling and associated support activities and features include: transportation to site; setup of 90–100 person camps and support camps (requiring lights, generators, snow removal, water plants, wastewater plants, dining halls, sleeping quarters, mechanical shops, fuel storage, camp moves, landing strips, aircraft support, health and safety facilities, data recording facility and communication equipment); building gravel pads; building gravel islands with sandbag and concrete block protection, ice islands, and ice roads; gravel hauling; gravel mine sites; road building; pipelines; electrical lines; water lines; road maintenance; buildings; facilities; operating heavy equipment; digging trenches; burying pipelines and covering pipelines; sea lift; water flood; security operations; dredging; moving floating drill units; helicopter support; and drill ships such as the SDC, CANMAR Explorer III, and the Kulluk.

Development activities associated with oil and gas industry operations include: road construction; pipeline construction; waterline construction; gravel pad construction; camp construction (personnel, dining, lodging, maintenance shops, water plants, wastewater plants); transportation (automobile, airplane, and helicopter traffic; runway construction; installation of electronic equipment); well drilling; drill rig transport; personnel support; and demobilization, restoration, and remediation.

Production activities include: personnel transportation (automobiles, airplanes, helicopters, boats, rolligons, cat trains, and snowmobiles); and unit operations (building operations, oil production, oil spills, cleanup, restoration, and remediation).

Alaska's North Slope encompasses an area of 88,280 square miles and contains 8 major oil and gas fields in production: Endicott/Duck Island; Prudhoe Bay; Kuparuk River; Point McIntyre; Milne Point; Badami; Northstar; and Colville River. These 8 fields include 21 current satellite oilfields: Sag Delta North; Eider; North Prudhoe Bay; Lisburne; Niakuk; Niakuk-Ivashak; Aurora; Midnight Sun; Borealis; West Beach; Polaris; Orion; Tarn; Tabasco; Palm; West Sak; Meltwater; Cascade; Schrader Bluff; Sag River; and Alpine. Exploration and delineation of known satellite fields identified within existing production fields would also be appropriate for coverage under the provisions of this proposed rule.

During the period covered by the proposed regulations, we anticipate a level of activity per year at existing production facilities similar to that during the timeframe of the previous regulations. In addition, during the period of the rule, we anticipate that the levels of new annual exploration and development activities will be similar to those of the previous 3 years.

### Biological Information

#### *Pacific Walrus*

The Pacific walrus (*Odobenus rosmarus*) typically inhabits the waters of the Chukchi and Bering seas. Most of the population congregates near the ice edge of the Chukchi Sea pack ice west of Point Barrow during the summer. Walrus migrate north and south following the annual advance and retreat of the pack ice. In the winter, walrus inhabit the pack ice of the Bering Sea, with concentrations occurring in the Gulf of Anadyr, south of St. Lawrence Island, and south of Nunivak Island. The most current conservative, minimum population estimate is approximately 200,000 walrus. Pacific walrus use five major haul out sites on the west coast of Alaska. There are no known haulout sites from Point Barrow to Demarcation Point on the Beaufort Sea coast.

Walrus occur infrequently in the Beaufort Sea, and although individuals are occasionally seen in the Beaufort Sea, they do not occur in significant numbers to the east of Point Barrow. If walrus are observed, they are most likely to be seen in nearshore and offshore areas during the summer, open-water season. They will not be encountered during the ice-covered season.

Walrus sightings in the Beaufort Sea have consisted solely of widely scattered individuals and small groups. For example, while walrus have been encountered and are present in the Beaufort Sea, there were only five sightings of walrus between 146° and 150°W during Minerals Management Service (MMS) sponsored aerial surveys conducted from 1979 to 1995.

Pacific walrus mainly feed on bivalve mollusks obtained from bottom sediments along the shallow continental shelf, typically at depths of 80 m (262 ft) or less. Walrus are also known to feed on a variety of benthic invertebrates, such as, worms, snails, and shrimp, and some slow-moving fish; and some animals feed on seals and seabirds.

Mating usually occurs between January and March. Implantation of a fertilized egg is delayed until June or July. Gestation lasts 11 months (a total

of 15 months after mating) and birth occurs between April and June during the annual northward migration. Calves weigh about 63 kg (139 lb) at birth and are usually weaned by age two. Females give birth to one calf every two or more years. This reproductive rate is much lower than other pinnipeds; however, some walrus may live to age 35–40 and remain reproductively active until late in life.

#### *Polar Bear*

Polar bears (*Ursus maritimus*) occur in the circumpolar Arctic and they live in close association with polar ice. In Alaska, their distribution extends from south of the Bering Strait to the U.S.-Canada border. Two stocks occur in Alaska: the Chukchi/Bering seas stock, whose minimum size is approximately 2,000, and the Southern Beaufort Sea stock, which was estimated in 2002 to have 2,273 bears.

Females without dependent cubs breed in the spring and enter maternity dens by late November. Females with cubs do not mate. Each pregnant female gives birth to one to three cubs, with two cub litters being most common. Cubs are usually born in December. Family groups emerge from their dens in late March or early April. Only pregnant females den for an extended period during the winter; however, other polar bears may burrow in depressions to escape harsh winter winds. The reproductive potential (intrinsic rate of increase) of polar bears is low. The average reproductive interval for a polar bear is 3–4 years. The maximum reported age of reproduction in Alaska is 18 years. Based on these data, a female polar bear may produce about 8–10 cubs in her lifetime.

Ringed seals (*Phoca hispida*) are the primary prey species of the polar bear, although polar bears occasionally hunt bearded seals (*Erignathus barbatus*) and walrus calves. Polar bears also scavenge on marine mammal carcasses washed up on shore and have been known to eat anthropogenic nonfood items such as Styrofoam, plastics, car batteries, antifreeze, and lubricating fluids.

Polar bears have no natural predators, and they do not appear to be prone to death by disease or parasites. The most significant source of mortality is humans. Since 1972, with the passage of the Act, only Alaska Natives are allowed to hunt polar bears in Alaska. Bears are used by Alaska Natives for subsistence purposes, such as for consumption and the manufacture of handicraft and clothing items. The Native harvest occurs without restrictions on sex, age, number, or season, provided that takes