

are in various stages of development. One, the "monopod," is unique. It has an hourglass shape designed to deflect the ice. It would be easy to transport, easy to submerge. It would be anchored to the sea floor by pilings driven through horizontal pontoons resting on the bottom.

If tanker transportation is approved by the Federal Environmental Assessment and Review Office, Dome Petroleum intends to build an Arctic Production and Loading Atoll (APLA). It would be, essentially, a bisected artificial island with a protected harbour which could support four drilling rigs. Oil would be carried to it by subsea pipelines from other production islands.

The Eastern Arctic

In 1977 the Department of Indian and Northern Affairs consulted with the native people living in the eastern Arctic, with twenty-six oil companies and with other interested groups.

It then established a four-year, multi-million dollar program, the Eastern Arctic Marine Environmental Studies Program, "to determine the environmental constraints" that must be observed in the area of Baffin Island, Davis Strait and Lancaster Sound when drilling begins.

An advisory board with representatives from the ten Inuit communities in the area was formed to monitor the studies.

Taking Care of the Turf

The Arctic has a vulnerable environment and the Canadian government watches it with painstaking care.

The Federal Environmental Assessment Review Office is the agency in primary charge.

It is assisted by a seven-member Environmental Assessment Panel. The panel has been considering oil production options in the Arctic for over a year—atolls or offshore platforms, pipeline or tankers.

The panel conducted a series of public hearings, both in the North and South. In each Beaufort Sea community the panel explained its purpose and representatives of the oil companies explained theirs. There were comments and questions from the floor.

The review considered the environmental, the social and the economic impacts that might occur in the North between now and the year 2000. The panel drafted guidelines for the Industry's Environmental Impact Statement.

The first draft of the statement was submitted in June, 1981, by Dome, Esso and Gulf. The revised draft will be examined by the panel

members who will confer with technical consultants and public representatives. They may then require the companies to make further adjustments. The panel's final report will be sent to the Minister of Environment.

A Slick Experiment

The Canadian government and the oil industry conducted an oil spill survey in Balaena Bay beginning in 1977.

First they spilled a lot of oil off the village of Tuktoyaktuk at the edge of the Beaufort Sea.

That summer scientists collected it by booms and found that it could be confined successfully for cleanup.

Further experiments showed that if a spill is near storage facilities it can be skimmed off the surface. If it is in an isolated area it can be burned.

They also found that if the oil spreads under ice it can be monitored by satellite and tracked until it surfaces in the spring. The scientists concluded, cautiously, that it may be easier to handle oil spills in ice-laden waters than in iceless ones.

The Canadian, U.S. and Norwegian governments are cooperating with the oil companies in a \$5 million Baffin Island Oil Spill project to study the environmental impact of an oil spill close to shore.

Last summer 3,300 gallons of crude were released into a bay off Cape Hatt, on the northern tip of Baffin Island, and two days later another 3,300 gallons, to which a chemical dispersant had been added, were spilled into another bay nearby. The spills will be monitored over the next several years and the rates of recovery in the two bays compared.



Oil rising to the surface in Balaena Bay: the circular pattern is caused by containment booms under the ice.