

Canada/Alberta launch multi-million dollar oil sands research program

Agreement has been reached by the Federal Government and the provincial government of Alberta on the establishment of an environmental research program estimated at \$40 million in the Alberta oil sands.

In a joint announcement, Jeanne Sauvé, Minister of Environment Canada, and W.J. Yurko, Minister of the Environment, Alberta, outlined a comprehensive plan for co-ordination, funding and implementation of the project. The primary purpose is to obtain data that can be used to devise measures for the protection of the environment during the recovery, transport and processing of oil-sands products. The money will be expended over ten years.

The agreement is for five years, renewable for a further period of up to five years. Canada and Alberta will each spend about \$2 million annually.

Initial emphasis will be on determining present renewable resource and environmental conditions in the Athabasca oil sands, something which has not been done before in an intensive manner.

Information obtained through the program will be published and made available to government, industry and the public to aid in planning development and environmental protection.

A large number of researchers will be involved and while some will reside at Fort McMurray, others will be working in the field for days, weeks or months. Consulting companies and universities will also participate.

Field studies are expected to begin this summer on such projects as establishing networks of monitoring systems and obtaining inventories of the renewable resources. All air quality and meteorological data obtained will be fed into a meteorological centre at Fort McMurray, where it will be used to construct a mathematical model for forecasting pollution.

Atmospheric emissions from oil-extraction plants may have an impact on vegetation. Several studies will examine these effects, especially those of sulphur dioxide on plants and forests.

Water-monitoring stations will be added to existing ones on the Athabasca River, and others will be located on the tributaries. The groundwater systems in the oil sands will be determined. Surface and groundwater systems can transfer pollutants from mining operations, so these systems will be described in the oil sands area.

Aquatic resources in lakes and rivers will be studied, since effluents entering water courses may be harmful to the fishery potential. In addition, the wildlife resources and the impact of development on these resources will be examined.

As mining progresses, there will be a need to restore the mine sites. Researchers will examine the problems of storing overburden, obtaining suitable species and stock for replanting, and properly restoring productive ecosystems.

Loan for Tunisian dam

Canada and Tunisia have signed a loan agreement in which Canada has agreed to provide \$55 million for the construction of the Sidi-Saad dam, the Secretary of State for External Affairs, Allan J. MacEachen, announced recently.

The Sidi-Saad dam on the Zéroud River in Tunisia will protect the Kairouan plain from flash floods and help to accelerate agricultural development in the region by enabling the irrigation of 4,080 additional hectares of arable land. The total cost of the dam is estimated at \$90 million, the balance of which is to be financed by the Government of Tunisia.

Completion of the project will take seven years but most of the work is expected to be finished by 1980. The dam, to be located 60 kilometres from the city of Kairouan, is to serve only as a water reservoir. It will measure 60 metres high, 618 metres long, and have a capacity of 5.3 million cubic metres.

The Sidi-Saad complex, in addition to the main dam, is to have a retaining wall of earth and a drainage channel as well as a coffer dam for protection of the site during construction.

The Canadian funds are to be used to finance preliminary studies and the management of the project, which is to be undertaken by a team of Canadian professional engineering consultants. Canadian funds are also to be used to cover the cost of transporting Canadian materials and equipment to the site.

Tunisia is to finance the cost of labour and accompanying costs such as certain construction materials, equipment, fuel and Tunisian workers.

Snowmobiles and soil

An Agriculture Canada researcher at Lennoxville, Quebec, takes soil temperatures to study what damage may be caused to the environment by snowmobiles. So far, he has learned that soil under a snowmobile track is frozen as deeply as soil that has no protective snow covering. In future work, he hopes to determine the effect of snowmobiles on crops.

