

Largest-ever sale of Canadian road graders completed

The Export Development Corporation, with the Bank of Montreal, is helping finance Canada's largest-ever foreign sale of road graders valued at \$19 million. Two loan agreements have been signed, covering the sale of 475 graders by Dominion Road Machinery Co. Ltd. (DRM) of Goderich, Ontario, to the Republic of Turkey.

The transaction brings to three the number of EDC-supported sales of DRM graders to Turkey this year. Last February, the Turkish Ministry of Rural Affairs bought 37 of the units. The record sale is expected to result in about 500 man-years of Canadian labour and involves at least seven major sub-suppliers.

E.G. Hill, DRM Vice President, Manufacturing, said his company expects to increase by 50 people its present 1,000-strong work force at its rural Ontario plant, north of London. Additional business from spare part sales also will result.

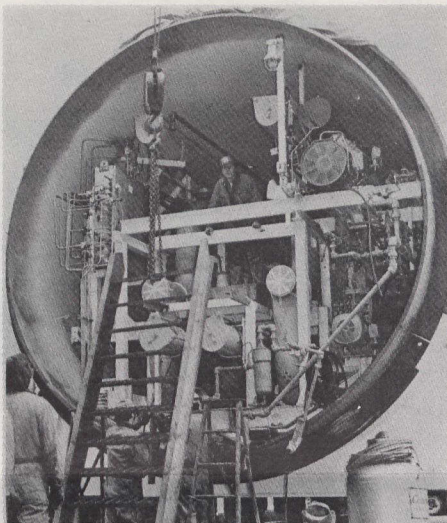
Dominion Road Machinery is the largest manufacturer of road graders in Canada and one of the three largest in the world. Since 1970, the company has sold more than 1,250 units to Turkey, filling more than half of the Government's orders for this type of equipment. DRM graders also have been exported to 60 other countries with many of the sales supported by EDC financing.

EDC bill becomes law

EDC's bill to increase the maximum liability ceiling under the Corporation's export credits insurance program has received Royal assent to become law.

The bill increases the maximum liability under operations authorized by the Corporation's Board of Directors to \$2.5 billion from the previous limit of \$750 million. Liability under the Government of Canada's account, administered by EDC on behalf of the Government, increases to \$1 billion from \$750 million.

Greater demands on the Corporation's resources by Canadian exporters required EDC to seek the increased limits.



Late last year, EDC and the Bank of Montreal signed an agreement to lend \$14 million to support a \$27.4-million sale to Brazil of an undersea petroleum-gathering and production system designed and built by Lockheed Petroleum Services Ltd. (LPS) of New Westminster, B.C. LPS has recently informed EDC that the manifold centre, a key component in the complete system, is now ready for delivery. Destined for the 500-foot deep Garoupa oil field, the manifold is more than 78 feet long, 15 feet in diameter, and weighs about 1,000 tons. When in place, it will commingle crude oil flows from nine satellite wells. Pictured above, the "bird cage" — a steel frame with all manifold centre internals — is being pulled into the manifold centre hull. In addition to financing part of the sale, EDC, through its Foreign Investment Guarantees program, insured the subsea service system for the manifold.

Irrigation by sewage

An unexpected chain of events during a research project in Swift Current, Saskatchewan may have uncovered a means of economically treating raw sewage.

Wally Nicholaichuk and Volkmar Biederbeck, two scientists at the Agriculture Canada Research Station there, have spent much of the past three years investigating possible hazards of irrigating farmland with sewage from the city of Swift Current. So far, their research has shown that no ill effects have resulted on either soil or on animals that eat crops produced on the sewage-irrigated land.

One of the potentially more dangerous

components of sewage — bacteria that originate in the intestines of humans and other mammals — was noticeably reduced in field tests after irrigation with sewage. The researchers simulated field conditions in the laboratory.

"We found that the coliform bacteria were killed as they passed through the main pump lifting the sewage from the lagoon to field level," Dr. Biederbeck said.

The researchers concluded that sudden pressure changes in the pump subjected the bacterial cells to extreme physical stress, killing up to 90 per cent of them.

The scientists also found that addition of very small amounts of chlorine to the sewage before pumping — less than 1 per cent of that normally used for chlorination — resulted in an even greater kill of coliforms during pumping.

Work will continue for two years into possible practical uses of this phenomenon as the researchers prepare a handbook on crop irrigation with sewage effluent. Negotiations have begun between the city and four area farmers for disposal of sewage. Up to 750 acres will be irrigated with sewage, with the city delivering it by pipeline to the contract farms. The majority of the land now is seeded to alfalfa and other forage crops.

Water search in Ghana

Canada is providing Ghana with a \$9-million grant to expand an extensive well-digging program in the northern part of the country.

The current Canadian assistance complements earlier efforts to ensure safe supplies of drinking water for the nearly 900,000 residents of the region. The new grant, from allocations of the Canadian International Development Agency, brings to \$17 million the total CIDA contribution for well-digging and the construction of urban water supply systems for major towns in Ghana.

When Canadian involvement in the program is phased out in late 1979, about 2,500 wells will have been dug in the 11,000-square-mile area, each serving from 300 to 500 people. So far, some 1,250 wells have been dug and are in operation.

The Canadian assistance also provides for the training of Ghanaian workers on drill rigs and in the maintenance of the water pumps.