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OIL POLLUTION
COMPENSATION
FUND

EXECUTIVE COMMITTEE
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Agenda item 3

FUND/EXC.28/4
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INCIDENTS INVOLVING THE IOPC FUND

RIO ORINOCO

Note by the Director

1 The Incident

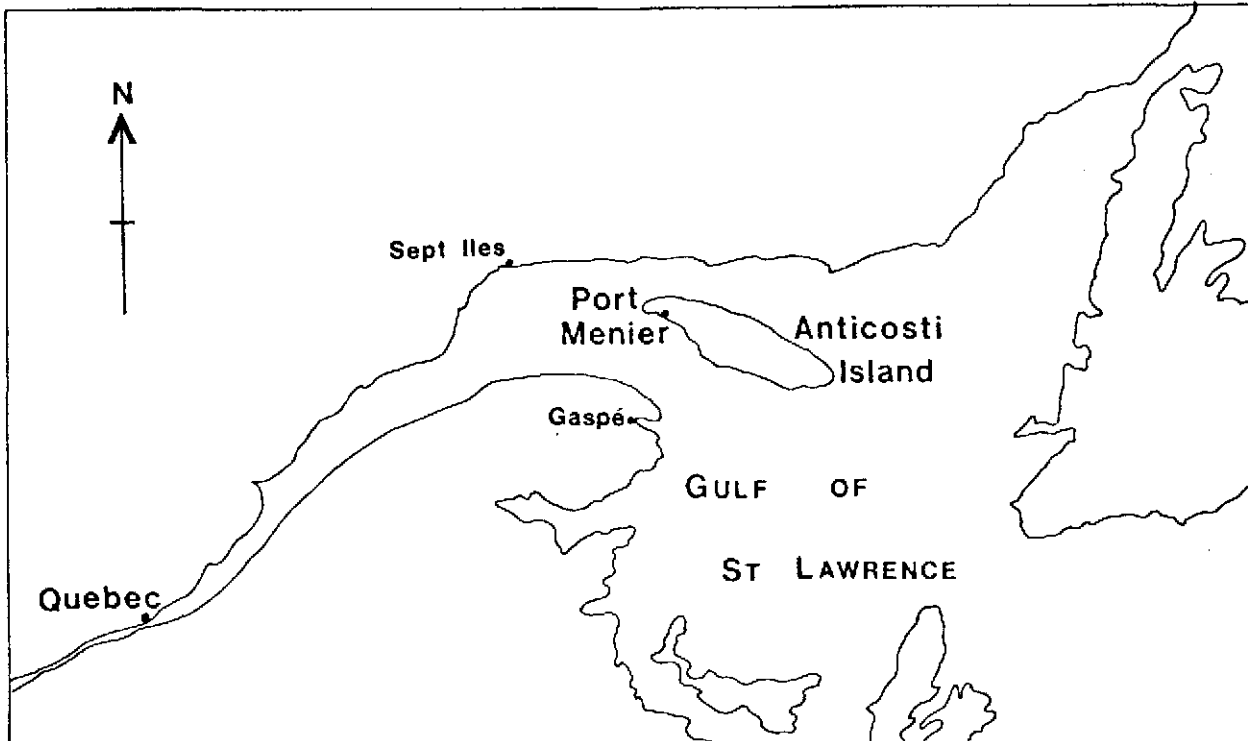
1.1 The asphalt carrier RIO ORINOCO (5 999 GRT), registered in the Cayman Islands, experienced problems with her main engine whilst en route from Curacao to Montreal with about 9 000 tonnes of heated asphalt cargo and about 300 tonnes of intermediate fuel oil and heavy diesel oil on board. When effecting repairs in the Gulf of St Lawrence, the ship dragged anchor in bad weather and grounded on the south coast of Anticosti Island on 16 October 1990. An estimated 185 tonnes of the intermediate fuel oil was spilled and came ashore east of the grounding position. About ten kilometres of the coastline were heavily polluted, and small patches were spread over a further 30 kilometres. Changing weather conditions redistributed some of the beached oil westwards, small quantities reaching Baie d'Ellis, off Port Menier, eight kilometres west of the grounding position. No asphalt cargo was spilled. Over subsequent weeks the cargo cooled and a significant part became solid.

1.2 Anticosti Island is a licensed hunting reservation and nature reserve supporting some 135 000 deer and large numbers of seabirds. The shores are grazed by the deer, and birds feed and roost there. Oil thus constitutes a threat to both. The island also supports small salmon and lobster fisheries.

1.3 The Canadian Coast Guard made attempts to collect oil at sea but with little success in the difficult sea conditions. On-shore clean-up operations were carried out during the period up to 10 November 1990 and also in July 1991.

1.4 A salvage team arrived at the site of the incident on 16 October. Tugs and equipment were mobilised and a salvage contract based on the principle "no cure no pay" (Lloyds Open Form 90) was signed on 18 October. The weather then deteriorated and the grounded ship moved again, finishing wedged between two rock shelves. The salvage master cancelled the salvage contract on 22 October. Members of the salvage team remained on site and preparations for tugs to tow off the ship continued. Three attempts were made by the shipowner between 1 and 5 November to pull the ship free, but with no success. Renewed attempts to refloat the vessel were made by the Canadian Coast Guard in December 1990. After extensive preparations, the ship was finally refloated on 7 August 1991 and taken to a safe haven at Sept Iles.

1.5 The RIO ORINOCO was entered with Sveriges Ångfartygs Assurans Förening ("the Swedish Club") both in respect of hull insurance and in respect of P & I insurance.



1.6 The RIO ORINOCO was declared a constructive total loss^{<1>} by the hull insurer on 18 November 1990, and the Canadian Coast Guard then assumed control of the ship. On 23 November, the shipowner informed the Coast Guard that he was financially incapable of removing the ship and her cargo.

1.7 The limitation amount applicable to the RIO ORINOCO was fixed by the Canadian Court at Can\$1 182 617 (£640 500). The limitation fund was constituted by the P & I insurer by means of letter of guarantee.

2 On-shore Clean-up Operations

2.1 On-shore clean-up operations were carried out during the period up to 10 November 1990 by contractors on behalf of the shipowner. The operations focused on the cobble and bedrock shorelines typical of this coast. Access to the beaches was difficult as there are no coastal roads, but a team of about 80 contracted personnel, supported by vessels, helicopters and a hovercraft, were able to clean the most heavily oiled areas manually, reaching the beaches from the sea. Intermittent periods of bad weather and ice formation made clean-up difficult, and the operations were terminated for the winter on 10 November, due to deteriorating conditions. By that time most of the beaches had been cleaned, and the environmental impact is believed to have been minimal. It was agreed between the Canadian authorities and the Director that the state of the beaches and the need for additional cleaning would be assessed in the spring of 1991, once weather conditions permitted.

2.2 A joint inspection of the affected coast was carried out from 6 to 8 June 1991 by representatives of the competent Canadian authorities and experts representing the Swedish Club and the IOPC Fund. The inspection showed that the natural weathering processes during the winter had resulted in considerable improvements in all previously oiled areas, and no new areas of oiling were observed. Residual contamination was in the form of tar balls of oil mixed with sediment and debris

<1> From an insurance point of view, a constructive total loss arises when the insured object is not in fact totally lost, but it is likely to become so, in view of the improbability, impracticability or expense of repair or recovery (cf the United Kingdom Marine Insurance Act 1906, Section 60(1)).

along the strand line, or as stains on rocks or debris. This oily material was located mostly along short sections of beach which had previously been heavily contaminated. Rising temperatures were softening thicker accumulations, some of which were spreading slightly, but thinner patches and stains showed considerable weathering. Although remaining residues constituted little or no threat to wildlife, the use of the shores by hunters, fishermen, hikers and residents justified some further cleaning.

2.3 A cleaning programme was developed, based upon manual collection of tar balls and solid lumps of oil mixed with small stones or debris into heavy-duty plastic bags. Oil was scraped from larger stones and rocks. Moderately contaminated beach material was moved down into the wave zone to accelerate natural weathering of residues. Oily dead vegetation was cut and bagged for disposal. Collected bags were temporarily stockpiled above the water line and collected and transferred by helicopter for disposal. The shoreline clean-up commenced on 4 July and was completed on 31 July 1991.

3 Waste Disposal

3.1 During the clean-up operations carried out in the autumn of 1990, about 300 tonnes of oily waste (mainly oiled stones and seaweed) were recovered. Various possibilities of treating the waste were investigated. Bids from several contractors were received by the Swedish Club. A contract has recently been concluded with a private company providing for the disposal of the waste in the United States of America.

3.2 Oily waste recovered during the clean-up in July 1991 was transported in slings by helicopter to Port Menier, where disposal was effected during experiments with a burning system developed by the Coast Guard. The burner was located at the end of a jetty to avoid any possibility of nuisance to local residents and any risk of forest fire. Oily wood and vegetation were consumed almost completely by the process, and stones were left free of oil. The residues were disposed of locally in small pits, after being treated with lime to reduce the pH to an acceptable level.

4 Removal of the RIO ORINOCO, her Bunker Oil and her Cargo

4.1 Under Canadian law, the Government may take the necessary measures to minimise or prevent pollution from a ship, including the removal and destruction of the ship, when it has reasonable cause to believe that the ship is likely to cause pollution. The Coast Guard maintained that the RIO ORINOCO, her asphalt cargo and remaining bunker oil represented a threat of pollution, as there was a serious risk that the ship would break if left over the winter. Once in the water, the solid but brittle asphalt could break into pieces which would contaminate the shoreline the following summer. In view of the approaching winter, the Coast Guard considered that all options to prevent the ship from losing her cargo should be explored and carried out.

4.2 The Director engaged an independent expert to follow closely the operations taken for the purpose of removing the RIO ORINOCO and her cargo. This expert was present at the site of the wreck during a large part of the operations and took part in numerous discussions with the Canadian authorities concerning the various options available. In November 1990 the Director and the Legal Officer participated in discussions in Ottawa with representatives of the Coast Guard.

4.3 It was decided by the Coast Guard that the remaining bunker oil should be removed, to the extent possible. The major part of this oil was removed in December 1990 by contractors on behalf of the shipowner. The bunker oil was pumped from the ship's tanks into vacuum lorries placed on another vessel, and the oil was then transferred to storage tanks stowed in the hold of that vessel. Some bunker tanks of the RIO ORINOCO had been damaged and contained considerable quantities of sea water. The oil in these tanks was separated from the sea water before being transferred to the other vessel. On completion of the oil removal operation, only unpumpable residues (approximately 10-15 tonnes) remained on board the RIO ORINOCO. It is estimated that 100 tonnes of bunker oil was removed.

4.4 After the attempts made by the shipowner in November 1990 to pull the ship free of the ground had failed, the various options for removing the ship were discussed between the Coast Guard, the Swedish Club and the IOPC Fund. In November and December 1990, preparations were made for further attempts to tow the ship from its wedged position. The operations were carried out by private companies under contract with the Coast Guard.

4.5 These operations can be summarised as follows. The ship had been damaged to such an extent that, even after all the intact bunker tanks had been emptied and the damaged bunker tanks had been pressurised with air as far as possible, there was insufficient residual buoyancy for the ship to float. It was not possible to remove the cargo by pumping because it had become solid. After various options to deal with the situation had been considered, the Coast Guard decided to try to eliminate the pollution threat by using two barges, one connected to each side of the RIO ORINOCO, to provide additional buoyancy. Two barges were chartered and prepared for the operation in a nearby shipyard. Naval architects and salvage experts were contracted to assess the feasibility of this method. The barges were brought alongside the ship in a ballasted condition and should have been connected to the ship at low water. The barges should then have been de-ballasted on a rising tide to provide sufficient lift to allow the ship to be pulled clear of the ground, and the ship should thereafter have been towed to a suitable location where the cargo should have been removed. The preparations were completed in early December. However, due to unusually bad weather, it was decided on 21 December 1991 to call off any attempt to remove the vessel until the following spring.

4.6 After the attempts in December 1990 to refloat the RIO ORINOCO had failed, the Coast Guard retained a contractor to maintain the vessel over the winter period. The Coast Guard, in consultation with the IOPC Fund, studied various options for removing the vessel and her cargo. The task was put up for tender, and seven contractors submitted proposals. A contract was signed with a Canadian contractor (Group Desgagnés). Under the contract, Group Desgagnés should, against a lump sum, remove the RIO ORINOCO from her grounded position and take her to a place of safety in Gaspé or Sept Iles. The method to be used would consist of removing part of the asphalt cargo so as to facilitate the refloating of the vessel. The contract was based on a "no cure no pay" formula.

4.7 Preparations for the operations were made in July 1991. The ship's boilers, which had been in use throughout the winter, were checked and the thermal oil system on deck was drained. Fresh thermal oil was introduced to a modified heating circuit. The asphalt cargo had solidified in all tanks and had to be reliquified before it could be pumped. The coils were gradually lowered into the cargo. As the asphalt reliquified, it was possible to lower them to their full extent. Special measures were taken to prevent pollution during the operations. In particular, at least three tanks contained seawater, and there was a risk that eruptions of asphalt could take place during the heating process. Between 23 July and 5 August, five loads of asphalt, totalling some 2 300 tonnes, were removed. The asphalt was shipped 75 miles to Gaspé, where the contractor had arranged disposal.

4.8 The most favourable tides in the relevant period occurred between 8 and 12 August, and it was important, therefore, that any refloating attempt be made during that period. The RIO ORINOCO was refloated and pulled free late on 7 August. The ship was then towed to Sept Iles without any complications arising.

4.9 No spill of bunker oil or asphalt occurred during the refloating or during the towing operation. There was only a slight sheen on the surface of the sea which was soon dispersed by natural wave action. A helicopter overflight showed no impact of oil on the shore.

4.10 The Canadian authorities arranged for a judicial sale of the RIO ORINOCO. The vessel and her cargo were acquired by the Group Desgagnés, the only bidder, for an amount of Can\$100 000 (£54 000).

5 Claims Already Dealt With by the Executive Committee

5.1 As already mentioned, on-shore clean-up operations were carried out during the period up to 10 November 1990 by contractors on behalf of the shipowner. The Swedish Club presented a claim in the amount of Can\$1 227 255 (£664 600) against the IOPC Fund in subrogation in respect of these

operations. The claim relates to clean-up on shore, transport of the collected waste to a temporary storage site, storage in containers at that site and cleaning of polluted birds. A major item, Can\$255 229 (£138 200), relates to replacement of damaged booms.

5.2 At its 26th session, in March 1991, the Executive Committee authorised the Director, pursuant to Internal Regulation 8.4.2, to settle the claim submitted by the Swedish Club for the on-shore clean-up operations carried out during the period ending 10 November 1990 (document FUND/EXC.26/5, paragraph 3.2).

5.3 The major part of the bunker oil remaining in the RIO ORINOCO was removed in December 1990. The Swedish Club submitted a claim to the IOPC Fund in subrogation amounting to Can\$257 462 (£139 400) in respect of the removal operations.

5.4 At its 26th session, the Executive Committee considered whether the operations to remove the remaining bunker oil fell within the definition of "preventive measures" laid down in the Civil Liability Convention. The Committee was of the opinion that these operations fell within that definition, as there was a considerable risk that the bunker oil would escape and cause further pollution to the coast around the grounding site. The Committee considered, therefore, that the expenses incurred on behalf of the shipowner would be admissible under Article V.8 of the Civil Liability Convention and Article 4.1 of the Fund Convention. In view of this decision, the Committee authorised the Director, pursuant to Internal Regulation 8.4.2, to settle also the claim presented by the Swedish Club in respect of these operations (document FUND/EXC.26/5, paragraph 3.3).

5.5 In June 1991, the Swedish Club submitted an additional claim in subrogation totalling Can\$156 316.61 (£84 650). This claim related to the cost of cleaning polluted equipment used during the on-shore operations up to 10 November 1990 (Can\$130 408.20) and to the cost of renting and transporting containers used for storage of collected oily waste (Can\$25 908.41). At its 27th session, in June 1991, the Executive Committee authorised the Director to settle also this additional claim (document FUND/EXC.27/6, paragraph 4.2).

5.6 The claims submitted so far by the Swedish Club, referred to in paragraphs 5.1, 5.3 and 5.5 above, were settled in June 1991 by the Director at an aggregate amount of Can\$1 641 034 (£888 700). Due to certain difficulties in obtaining the formal approval of the settlement by the shipowner, the claim has not yet been paid. It is expected that the agreement will be finalised very soon and that the IOPC Fund will be able to pay the Swedish Club the part of the Club's claim which is in excess of the limitation amount, viz Can\$458 417 (£248 300).

6 Canadian Government's Claims

6.1 In August 1991, the Canadian Government submitted a claim for Can\$6 864 996 (£3 720 000) in respect of the operations carried out up to 31 January 1991 in connection with the attempts to remove the ship from its grounded position. This claim relates to the operations carried out by various private companies under contract with the Coast Guard, eg inspection of the vessel by divers, inspection and repair of the ship's boilers, services of a naval architect and a salvage master, hire of two barges, services connected with the attempts to remove the ship, supervision of the ship during the winter and the cost of the Coast Guard's monitoring of these operations (eg in respect of personnel, equipment, ships and aircraft).

6.2 At its 26th session, the Executive Committee considered whether the attempts made in November and December 1990 to remove the RIO ORINOCO and her cargo fell in principle within the definitions of "pollution damage" and "preventive measures" laid down in Article I.6 and I.7 of the Civil Liability Convention. Basing its considerations on the interpretation which the Committee had given to the definition of "preventive measures" in the PATMOS case, the Committee considered that the primary purpose of the operations to remove the ship and cargo carried out up to 31 January 1991 in the RIO ORINOCO case had been to prevent pollution. The Executive Committee therefore decided that these operations fell, in principle, within the definition of "preventive measures" (document FUND/EXC.26/6, paragraph 3.4).

6.3 The Canadian Government's claim is being examined by the IOPC Fund Secretariat, with the assistance of experts. The Director hopes to be able to complete the examination by late September 1991, so as to be able to submit the claim to the Executive Committee for consideration and approval at its 28th session. The results of the examination will be set out in an addendum to this document.

6.4 The Canadian Government will submit a claim for the costs incurred in connection with the operations carried out after 31 January 1991 to refloat the RIO ORINOCO. It is expected that this claim will be in the region of Can\$4.5 million (£2.4 million).

7 Further Claim by the Swedish Club

7.1 The Swedish Club will incur costs for disposing of the oily waste collected on the beaches during the autumn of 1990 (see paragraph 3.1 above). The Club will claim reimbursement from the IOPC Fund of these costs, which are estimated at some Can\$210 000 (£113 700).

7.2 In addition, the Swedish Club will claim reimbursement of its costs for the clean-up operation carried out in July 1991 and for the disposal of the waste collected during these operations. This claim is estimated at approximately Can\$350 000 (£190 000).

8 Other Possible Claims

So far there are no indications that any individuals have suffered pollution damage as a result of this incident. However, claims from fishermen and other individuals cannot be ruled out.

9 Action to be Taken by the Executive Committee

The Executive Committee is invited to:

- (a) take note of the information contained in this document; and
 - (b) give the Director such instructions relating to this incident as the Committee finds appropriate.
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