Paragraph (1) should read as follows:

"(1) Every oil tanker ... To this end a combination of at least two of the following should apply:

(a) 

(b) as existing texts."

(c)

The Norwegian delegation is of the opinion that the methods quoted to a varied extent must be applied on most tankers in order to combat pollution efficiently. Paragraph 1 should therefore express this more explicitly.

The situation may be visualized as presented in the attached diagram.

The order of magnitude of the main sources of operational cargo oil and sediment pollution from crude carriers today may be listed as follows:

1. Cleaning before hot-work 600,000 t.p.a.
2. Ships with no oil retention (20%) 1,200,000 t.p.a.
3. Cleaning water with part retention (80%) 50,000 t.p.a.
4. Ballast water with part retention (80%) 50,000 t.p.a.

1,900,000 t.p.a.
If all carriers used part retention and all sediments from hot-work cleaning were delivered to shore, the discharge at sea could be reduced from 1,900,000 t.p.a. to 150,000 t.p.a.

With improved retention practice, i.e., instrumental discharge and automatic change-over to retention tank, it should be possible even to reduce this outflow. If the bulk of the ballast water is discharged with an average oil content of 50 p.p.m., the oil thus discharged with 600,000,000 t. of water would be 30,000 t.p.a. By the application of segregated ballast tanks even the rest of this oil outflow with the ballast water could be eliminated.

The oil outflow with the tank cleaning water may be reduced substantially if all carriers were equipped with inert gas systems, thus permitting recirculation and heating of the cleaning water. It is expected that with a somewhat reduced cleaning frequency and heating of the slop, the oil discharge from decanting of the slop can be reduced to 30,000 t.p.a.

Thus, for zero discharge the average oil "load" on the proposed methods would be:

1. Segregated ballast tanks 30,000 t.p.a.
2. Slop retention on board (LOT) 3,000,000 t.p.a.
3. Shore facility: cleaning before hot-work 1,000,000 t.p.a.
   cleaning water from slop tank 30,000 t.p.a.