

DESTRUCTION OF ABOUT 45 TONS OF MUSTARD AGENT
AT BATUJAJAR, WEST-JAVA, INDONESIA

I. BACKGROUND

1. In the period between 1940 and 1941 the Government of the then "Netherlands East Indies" manufactured several tens of tons of mustard agent - using the thiodiglycol method - in a plant at an army site at Batujajar near the city of Bandung, West-Java, Indonesia. This stockpile was intended as a deterrent against the possible initiation of chemical warfare in an eventual war in the region. When the war broke out, chemical weapons were not used. The stockpile of mustard agents remained at the site during the Japanese occupation period. In the period between 1949 and the beginning of 1950, the plant was dismantled. However, the mustard agent, stored in sealed tanks in underground shelters was not destroyed. National authorities of the two countries did not know of the existence of mustard agent and only a limited number of people were aware of this situation.
2. Not until the second half of the seventies was attention drawn to this matter by one of the persons who had been involved in the dismantling of the plant. The Indonesian Government, which wanted to eliminate this dangerous heritage, requested technical assistance from the Netherlands Government, being responsible for the matter. For this purpose, it was agreed that the Netherlands Government would provide technical assistance, including technical experts, while the Indonesian Government would provide security and logistics during the operation. The Netherlands Government charged the Prins Maurits Laboratory TNO to provide such a assistance.
3. Accordingly, the Netherlands Government sent a fact-finding mission in April 1978. The fact-finding mission located five steel tanks of 10 cubic metres in stone shelters half-filled with water at a terrain adjacent to an artillery shooting range and in close proximity of an inhabited area. One of the tanks had corroded to the extent that the contents had apparently leaked out. Water and soil samples were taken from within the remains of the tank, from within the shelter and from the soil just outside and underneath the shelter at various depths. No mustard agent could be detected in these samples but decomposition products were present and the evil smell of polysulphide containing hydrolysis products was clearly perceptible. The other four tanks were found to contain sulphur mustard in an estimated total amount of 35,000 litres with a purity of 95 per cent.
4. The presence of this large amount of mustard in close proximity to populated areas and the possibility that the tanks could begin to leak were a point of great concern to the Indonesian Government and it was decided that the mustard should be disposed of as soon as possible.

II. CONSIDERATIONS RELATIVE TO THE CHOICE OF THE METHOD OF DESTRUCTION

5. Possible methods for destruction or disposal of mustard are reviewed in the Canadian Paper (CD/173 of 3 April 1981 1/) and in Canadian and United States CCD Papers (CCD 434 2/ and 436 3/).
6. Initially, incineration of the mustard on board the M/T Vulcanus, which is owned by Ocean Combustion Services N.V., Rotterdam, was considered. This ship is equipped with two large incinerators and is frequently used for the destruction of industrial