Dinoseb 2

Maritime Chemical Accident

1974, July 24

Allentown, Pennsylvania, USA

Dinitrobutylphenol (DNBP, Dinoseb) (Class 6) extremely toxic pesticide; **marine pollutant**

Summary: On July 24, 1974, there was a **heavy rainfall** in Allentown, Pennsylvania. Shortly thereafter the fish started dying in a lake which was a tributary to a public water supply. On August 9 the incident was reported to the authorities. It was found out that a parking lot close to the lake had been treated with the **herbicide** dinitrobutylphenol (also known as DNBP or Dinoseb) on July 21. This herbicide is extremely toxic and approved for use only in dilute amounts. However, the parking lot had been treated with undiluted product and held very high levels of the herbicide. The outlet from the lake was closed and different options discussed. According to the manufacturer the product would be persistent for at least nine months. By that time it might have contaminated both surrounding waters and the groundwater. It was therefore decided that the lake and the parking lot must be decontaminated. This was done with the help of a new mobile hazardous spills treatment trailer. This trailer was equipped with a self-contained water treatment system using activated carbon adsorption. The trailer arrived on August 12 and the treatment was started. The intake was placed right by the head of the lake where the highest concentrations of DNBP were found. At first the effluent was put back into the lake as the efficiency of the system was uncertain. Analytical data soon showed that the system was working properly and the effluent was therefore released downstream from the lake. Most of the gravel on the parking lot was removed and sent to a secure site. The parking lot was then hosed with water and the outflow was collected in a sump which had been dug for this purpose. The water in the sump was then treated in the trailer system. The lake and the parking lot were declared as decontaminated by August 22.

Cause of Accident: Improper use of an extremely toxic herbicide.

Comments on Response: The trailer system proved to be efficient and useful. The problem with this incident was that it took from July 24 to August 9 before anyone contacted the proper authority. This incident clearly shows the importance for people handling dangerous chemicals to be aware of the potential risks.

Source of Information: "Removal of spilled herbicide from a New Jersey lake", Article from the 1976 National Conference on Control of Hazardous Material Spills. (Abstracted July 2002 by Edvard Molitor, Swedish Coast Guard H.Q.)