## GUIDELINES FOR DRINKING-WATER QUALITY: FOURTH EDITION INCORPORATING THE FIRST AND SECOND ADDENDA

Assessment date	1993
Principal reference	WHO (2003) Chloropicrin in drinking-water

Decreased survival and body weights have been reported following long-term oral exposure in laboratory animals. Chloropicrin has been shown to be mutagenic in bacterial tests and in in vitro assays in lymphocytes. Because of the high mortality in a carcinogenesis bioassay and the limited number of end-points examined in the 78-week toxicity study, the available data were considered inadequate to permit the establishment of a guideline value for chloropicrin.

## Chlorotoluron

Chlorotoluron (CAS No. 15545-48-9) is a pre emergence or early post emergence herbicide that is slowly biodegradable and mobile in soil. There is only very limited exposure to this compound from food.

Guideline value	0.03 mg/l (30 μg/l)
Occurrence	Detected in drinkingwater at concentrations of less than 1 µg/l
TDI	11.3 $\mu$ g/kg body weight, derived from a NOAEL of 11.3 $\mu$ g/kg body weight per day for systemic effects in a 2-year feeding study in mice using an uncertainty factor of 1000 (100 for interspecies and intraspecies variation and 10 for evidence of carcinogenicity)
Limit of detection	$0.1\mu\text{g/l}$ by separation by reversed-phase HPLC followed by UV and electrochemical detection
Treatment performance	0.1 μg/l should be achievable using GAC
Guideline value derivation	
<ul> <li>allocation to water</li> </ul>	10% of TDI
<ul><li>weight</li></ul>	60 kg adult
<ul><li>consumption</li></ul>	2 litres/day
Assessment date	1993
Principal reference	WHO (2003) Chlorotoluron in drinking-water

Chlorotoluron is of low toxicity following single, short-term and long-term exposures in experimental animals, but it has been shown to cause an increase in adenomas and carcinomas of the kidneys of male mice given high doses for 2 years. As no carcinogenic effects were reported in a 2-year study in rats, it has been suggested that chlorotoluron has a carcinogenic potential that is both species and sex specific. Chlorotoluron and its metabolites have shown no evidence of genotoxicity.

## **Chlorpyrifos**

Chlorpyrifos (CAS No. 2921-88-2) is a broad-spectrum organophosphorus insecticide used for the control of mosquitoes, flies, various crop pests in soil and on foliage, household pests and aquatic larvae. Although it is not recommended for addition to water for