

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: File for 1,2,3-Trichloropropane [CAS# 96-18-4]
FROM: Doreen Lehner, Toxics Unit, Air Quality Division
DATE: January 18, 2017
SUBJECT: 1,2,3-Trichloropropane [CAS# 96-18-4] ITSL change in the averaging time from 24 hours to annual

The current initial threshold screening level (ITSL) for 1,2,3-trichloropropane is 0.3 µg/m³ based on an annual averaging time. The ITSL established on 10/5/2009 is based on an Environmental Protection Agency (EPA) reference concentration (RfC) of 0.3 µg/m³ published in the EPA's Integrated Risk Information System (IRIS) database in 2009. EPA derived the RfC from the Johannsen et al., (1988) 13-week inhalation study in rats, which showed peribronchial lymphoid hyperplasia in male rats as the critical effect. When the screening level was derived in 2009 the averaging time was set at 24 hours. As the basis for the screening level used a 13-week inhalation study, the averaging time may appropriately be set at annual. Therefore, the averaging time is being changed from 24 hours to annual at this time.

References:

APCR. 2016. Air Pollution Control Rules, Promulgated pursuant to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, Michigan Department of Environmental Quality. 1994. Act 451, as amended (NREPA).

EPA. 2009. Integrated Risk Information System. 1,2,3-trichloropropane (CASRN 96-18-4). Available online at: https://cfpub.epa.gov/ncea/iris2/chemicalLanding.cfm?substance_nمبر=200

Johannsen FR, Levinskas GJ, Rusch GM, Terrill JB, Schroeder RE. 1988. Evaluation of the subchronic and reproductive effects of a series of chlorinated propanes in the rat. I. Toxicity of 1,2,3-trichloropropane. J Toxicol Environ Health 25:299-315.

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TO: 1,2,3-Trichloropropane file (CAS # 96-18-4)
FROM: Gary Butterfield
SUBJECT: Screening level for 1,2,3-Trichloropropane
DATE: October 5, 2009

The EPA has just released (9-30-09) a new RfC for 1,2,3-Trichloropropane of 0.3 ug/m³. EPA did not have an RfC for this chemical previously. AQD did not have a previous screening level for this chemical. See the IRIS printout for details on how the RfC was derived.