

Michigan Department of Environmental Quality

Air Quality Division

Air Toxics Screening Level Justifications Open for Public Comment

The Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) develops air toxics screening levels which are health-based ambient air concentrations that provide public health protection. These screening levels are developed according to Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. These screening levels are used in the implementation of Michigan's air permitting rules that apply to new or modified sources that emit a toxic air contaminant and are required to obtain a Permit to Install. Under these rules, the emission of a toxic air contaminant cannot result in a maximum ambient air concentration that exceeds an applicable health-based screening level.

Historically, AQD toxicologists developed screening levels and posted them on the AQD webpage, whereas the "justification" memos describing the bases for the screening levels were only available upon request. The public has always had the ability to comment to the AQD informally about the screening levels and how they were derived. Under rule revisions that went into effect on December 20, 2016, the AQD has formalized the comment process. The AQD will provide a 30-day formal public comment period on all health-based screening levels and their justifications.

The comment period has closed and the Department of Environmental Quality is responding to comments received on the following chemicals:

A 30-day comment period was held from **December 21, 2017 to January 22, 2018** for a list of 2 chemical screening levels and justification documents. No comments were received.

A 30-day formal public comment period was held from **August 14 to September 14, 2017**, for the list of 4 chemical screening levels and justification documents. No substantive comments were received.

A 60-day formal public comment period was held from **February 14 to April 14, 2017**, for the initial list of over 1200 screening levels and justification documents. Substantive comments were received for 26 chemicals. Responses to comments were completed by the **October 11, 2017** deadline and have been sent directly to commenters and are posted on the webpage for all screening levels and justifications. Substantive comments were received for:

CAS #	Chemical Name	Results of Review
74-93-1	Methyl mercaptan	No change in ITSL.
75-21-8	Ethylene oxide	No change in IRSL or SRSL.
75-56-9	Propylene oxide	No change in IRSL or ITSL.
98-00-0	Furfuryl alcohol	No change in IRSL.
106-99-0	1,3-Butadiene	ITSL changed from 2 µg/m ³ (24-hour averaging time) to 33 µg/m ³ (annual averaging time).
107-21-1	Ethylene glycol	ITSL changed from 1,000 µg/m ³ (1-hour averaging time) to 4,700 µg/m ³ (1-hour averaging time).
107-98-2	Propylene glycol monomethyl ether	ITSL changed from 2,000 µg/m ³ (annual averaging time) to 3,700 µg/m ³ (1-hour averaging time).
108-10-1	Methyl isobutyl ketone	IRSL changed from 1.3 µg/m ³ (annual averaging time) to 2 µg/m ³ (annual averaging time). SRSL changed from 13 µg/m ³ (annual averaging time) to 20 µg/m ³ (annual averaging time).
108-65-6	Propylene glycol monomethyl ether acetate	ITSL changed from 3,000 µg/m ³ (annual averaging time) to 5,400 µg/m ³ (1-hour averaging time).
109-99-9	Tetrahydrofuran	No change in screening level; however, AQD agrees that THF is not a human carcinogen.
111-46-6	Diethylene glycol	ITSL changed from 21,000 µg/m ³ (24-hour averaging time) to 1,600 µg/m ³ (annual averaging time).
115-07-1	Propylene	ITSL changed from 1,500 µg/m ³ (annual averaging time) to 8,600 µg/m ³ (8-hour averaging time).
115-11-7	Isobutene	ITSL changed from 21 µg/m ³ (annual averaging time) to 110,000 µg/m ³ (annual averaging time).
118-74-1	Hexachlorobenzene	ITSL changed from 0.035 µg/m ³ (24-hour averaging time) to 0.35 µg/m ³ (24-hour averaging time).
540-88-5	Tertiary butyl acetate	ITSL changed from 9,500 µg/m ³ (8-hour averaging time) to 2,400 µg/m ³ (8-hour averaging time) for all isomers.
584-84-9	2,4-Toluene diisocyanate	No change in IRSL or SRSL.

CAS #	Chemical Name	Results of Review
637-92-3	Ethyl tertiary butyl ether	The ITSL changed from 373 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 9,000 $\mu\text{g}/\text{m}^3$ (annual averaging time).
872-50-4	N-Methylpyrrolidone	The ITSL changed from 700 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 5,600 $\mu\text{g}/\text{m}^3$ (24-hour averaging time).
7440-02-0	Nickel	The IRSL was changed from 0.0042 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 0.0058 $\mu\text{g}/\text{m}^3$ (annual averaging time). The SRSL was increased from 0.042 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 0.058 $\mu\text{g}/\text{m}^3$ (annual averaging time).
12035-72-2	Nickel subsulfide	No change in IRSL or SRSL.
25265-71-8	Dipropylene glycol	This chemical should be treated as a particulate. The ITSL was rescinded and is regulated as a PM NAAQS.
25498-49-1	Tripropylene glycol monomethyl ether	The ITSL changed from 11 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 20 $\mu\text{g}/\text{m}^3$ (annual averaging time).
29911-27-1	Dipropylene glycol monopropyl ether	The ITSL changed from 5 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 180 $\mu\text{g}/\text{m}^3$ (annual averaging time).
29911-28-2	Dipropylene glycol monobutyl ether	ITSL changed from 11 $\mu\text{g}/\text{m}^3$ (annual averaging time) to 800 $\mu\text{g}/\text{m}^3$ (24-hour averaging time) .
55934-93-5	Tripropylene glycol monobutyl ether	No change in ITSL.
57018-52-7	Propylene glycol tert-butyl ether	The ITSL of 329 $\mu\text{g}/\text{m}^3$ (annual averaging time) is rescinded and changed to an IRSL of 0.7 $\mu\text{g}/\text{m}^3$ (annual averaging time) and SRSL of 7 $\mu\text{g}/\text{m}^3$ (annual averaging time).