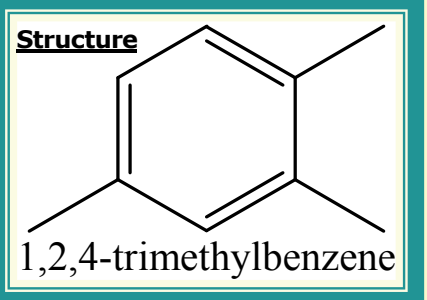
Procedure for Describing Process for Development of an Analytical Interim Practical Quantitation Levels (PQL)



1,2,4-Trimethylbenzene

CAS #95-63-6

1) A health-based Interim Generic Ground Water Quality Criterion (IGGWQC), developed by Office of Science toxicologists, is 100 ppb. For additional information, please see the Interim Ground Water Quality Criterion Document for 1,2,4-Trimethylbenzene.

2) A Published Methods Database is searched to determine if the requested contaminant is a listed parameter in any analytical method. A variety of different organizations contribute to this database, for example; USEPA, USGS, APHA (Standard Methods), AOAC (Association of Official Analytical Chemists), and NIOSH (Air Methods).

a. National Environmental Methods Index (NEMI), is a free, searchable clearinghouse of methods and procedures for both regulatory and non-regulatory monitoring purposes for water, sediment, air and tissues. It is jointly funded by the U.S. Geological Survey and U.S. Environmental Protection Agency.

b. NEMI is used by Office of Science scientists to compare and contrast the performance and relative cost of analytical methods, review the full text of the procedure to determine implementation, and review sampling methods that require specialized techniques for environmental monitoring.

Basis for PQL

1,2,4-Trimethylbenzene appears as a listed parameter in a published USEPA method "524.3, Purgeable Organic Compounds in Water by GCMS". The limit of detection in the method is 0.015 ppb. The practical quantification level (PQL) calculated from the MDL X 5 is 0.08 ppb.

See: National Environmental Methods Index (NEMI)

http://www.nemi.gov/

IGGWQC: 100 ppb

Interim PQL: 0.08 ppb

R. Lee Lippincott Ph.D

Office of Science
3/13/2014