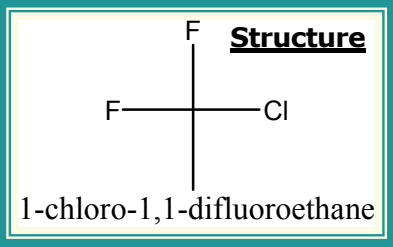
Procedure for Describing Process for Development of an Analytical Interim Practical Quantitation Levels (PQL)



1-Chloro-1,1-Difluoroethane

(HCFC-142b)

CAS #75-68-3

1) A health-based Interim Specific Ground Water Quality Criterion, developed by Office of Science toxicologists, is 100 ppm. For additional information, please see the Interim Ground Water Quality Criterion Document (IGWQC), for 1-chloro, 1,1-Difluoroethane.

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-Chloro-1,1-Difluoroethane was added along with other HCFCs as a parameter in a published USEPA method "624, Purgeable organic compounds in Water by Purge and Trap Capillary-Column GC/MS" by a New Jersey Department of Environmental Protection, Office of Quality Assurance certified laboratory for a client. Sufficient performance information was obtained from the laboratory to generate a PQL using the supplied data performed on a ground water matrix sample batch. The reported limit of detection in the method is 100 ppb. The practical quantification level (PQL) calculated from the MDL X 5 is 500 ppb or 0.5 ppm.

See: National Environmental Methods Index (NEMI)

http://www.nemi.gov/

ISGWQC: 100 ppm

Interim PQL: 0.5 ppm

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