Title: Solvents		Copy No: ##
SOP No.: 3.04/2.4/S	Effective Date: June 20, 2013	Location: ###

QSM Approval:

# **Solvents**

#### 1. Introduction

The analysis of environmental samples for organic contaminants requires the use of a variety of organic solvents. These solvents vary greatly in flammability, volatility and toxicity. Adherence to the following procedures will ensure safe handling of these materials.

### 2. Procedure

- 2.1 Solvents are stored in the designated Solvent Storage Facility for the building and are logged out on the log sheets as they are removed.
- 2.2 There must be 2 people in attendance; at least one should be a full time employee, when solvents are picked up and stored away.
- 2.3 Solvents are transported to the laboratory in protective carriers. These carriers are used to transport bottles of solvent from shelf to shelf.
- 2.4 A reasonable amount of solvents (typically a one week supply) are kept in the laboratory at any time.
- 2.5 Solvent bottles are tightly capped and stored in the designated solvent cupboards. The lot numbers of the solvents are recorded into the solvent logbook (Ultra Trace Laboratory only).
- 2.6 WHMIS workplace labels are firmly attached to each solvent squeeze bottle.
- 2.7 Solvent spillage is minimized during sample processing.
- 2.8 Transferring solvent from suppliers' bottle to squeeze bottle can be facilitated by using a funnel to avoid spills.
- 2.9 Small spills are immediately soaked up (SOP 3.06/x.x/S). Dichloromethane, hexane and acetone will damage the floor! (Refer to the Emergency Response Plan in the event of a larger spill).

2.10 Spill pillows are readily accessible in each laboratory.

- 2.11 Waste solvents are carefully poured through a funnel into the appropriate 22 L solvent waste container (chlorinated or non chlorinated). For solvent waste procedures, see SOP 6.01/X.X/S-EMS "Disposing of Hazardous Waste".
- 2.12 Empty solvent bottles are capped and a cross is struck through the label (do not obliterate name or UN number).
- 2.13 The bottles are stored in a designated location until they are returned to the company from where they were purchased to be recycled (see SOP 6.04/X.X/S-EMS "Recycling Caledon Solvent Bottles").

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#### Environment Environnement Canada Canada

Air Quality Research Division / Division de la recherche en qualité de l'air Analysis and Air Quality Section / Section des analyses et de la qualité de l'air 335 River Rd, Ottawa, ON K1A 0H3

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## 3. Revisions

•	IXC VISIOIIS	
	September 1995:	Author: Chung Chiu. New document (SOP no. ORG 05).
	September 1997:	Revisions not recorded
	October 2001:	New header added
		Section 3 added
	November 2005:	Rephrased section 2.3
	October 2009:	Added that 2 people must be in attendance when picking up
		solvents
		Protective carriers are used from shelf to shelf during transportation
		Waste solvent is transferred to the appropriate container for
		disposal
		Numerical Formatting of Section 2
	June 2013:	Reviewed by: Alison Walkey
		Introduction: Changed "necessitates" to "requires"
		Section 2.2: Changed "of who" to "at least one should"; Added
		"and stored away"
		Section 2.5: Changed stored in ventilated cupboards under
		fumehoods" to "stored in designated solvent cupboards"
		Section 2.8: Changed "is" to "can be"
		Section 2.9: Changed to "SOP 3.06/x.x/S" from "SOP 3.06"
		Section 2.12: Deleted sentence "These bottles are promptly
		removed from the laboratory."
		Section 2.13: Changed the bottles are "transferred to a storage area in the building" to "stored in a designated location until"
		area in the bundling to stored in a designated location until
	Lead Reviewer:	Alison Walkey
		Technologist, Organic Laboratory
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Approved by: Title: May Siu Supervisor, Organic Laboratory

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