STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)

Substance:  
I- Methylene chloride  
II- N,N-Dimethylformamide

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled  
Not Controlled  

under the schedules of the *Controlled Drugs and Substances Act* (CDSA) for the following reason(s):

• The substance is not similar to any of those included in the CDSA.

Prepared by:  
Date: August 19th 2011

Vincent Marleau

Verified by:  
Date: _________

Mark Kozlowski

Approved by:  
Date: _________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Nisrine Haddad
Drug Status Report

Drug:  
I- Methylene chloride  
II- N,N-Dimethylformamide

Drug Name Status:  
I- Methylene chloride  
II- N,N-Dimethylformamide are the common names.

Chemical Name:  
I- Dichloromethane  
II- N,N-Dimethylformamide

Other Names:  
I- Methane dichloride; Methylene bichloride; Freon 30.  
II- DMF; DMFA; Formamide, N,N-dimethyl-; Formic acid, amide, N,N-dimethyl-; N-Formyldimethylamine; N,N-Dimethylmethanamide

Chemical structure:

\[ \text{I} \quad \begin{array}{c} \text{Cl} \\ \text{Cl} \end{array} \quad \text{II} \quad \begin{array}{c} \text{N} \\ \text{H} \\ \text{H} \\ \text{O} \end{array} \]

Molecular Formula:  
I- CH₂Cl₂  
II- C₃H₇NO

Pharmacological class / Application: Fine Chemicals

CAS-RN:  
I- 75-09-2  
II- 68-12-2

International status:

US: Methylene Chloride and N,N-Dimethylformamide are not listed specifically in the Schedules to the US Controlled Substances Act and are not mentioned anywhere on the DEA website.

United Nations: These substances are not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.
Canadian Status: Methylene chloride and N,N-dimethylformamide are industrial solvents. Methylene chloride is predominantly used as a paint remover and is toxic through oral and dermal routes\(^1\). N,N-dimethylformamide is a synthetic compound that is used mostly in the textile and pharmaceutical industries as a solubilizing agent, reaction medium and polyvalent solvent. It is known to have toxic properties and is easily absorbed orally, by skin contact or by inhalation\(^2\). Methylene chloride and N,N-dimethylformamide are not currently listed in the CDSA and are not structurally similar to any of those included in the schedules to the CDSA.

**Recommendation:** Methylene chloride and N,N-dimethylformamide are not included under the Schedules to the CDSA and are not controlled substances.

**Date:** 19 August 2011

