Drug Status Report

**Drug:**
I - 7-Chloro-5-(2-fluorophenyl)-2,3-dihydro-1H,4-benzodiazepine-2-methanamine  
II - 7-Chloro-1,3-dihydro-5-(2-fluorophenyl)-2-nitromethylene-2H-1,4-benzodiazepine, 4-oxide

**Drug Name Status:**  
I - 7-Chloro-5-(2-fluorophenyl)-2,3-dihydro-1H,4-benzodiazepine-2-methanamine (I)  
II - 7-Chloro-1,3-dihydro-5-(2-fluorophenyl)-2-nitromethylene-2H-1,4-benzodiazepine-4-oxide  
are is the chemical names.

**Chemical Name:**  
I - 7-Chloro-2,3-dihydro-5-(2-fluorophenyl)-1H,4-benzodiazepine-2-methanamine  
II - 7-Chloro-1,3-dihydro-5-(2-fluorophenyl)-2-nitromethylene-2H-1,4-benzodiazepine-4-oxide  

**Other Names:**  
I - 2-aminomethyl-7-chloro-2,3-dihydro-5-(2-fluorophenyl)-1H,4-benzodiazepine;  
Aminomethylbenzodiazepine;  
II - 7-Chloro-1,3-dihydro-5-(2-fluorophenyl)-2-nitro-methylene-2H-1,4-benzodiazepine;

**Chemical structure:**

![Chemical structure image]

**Molecular Formula:**  
I - C\textsubscript{16}H\textsubscript{15}ClFN\textsubscript{3}; II - C\textsubscript{16}H\textsubscript{11}ClFN\textsubscript{3}O\textsubscript{2}

**CAS Number:** I - 59467-64-0; II - 60656-76-0

**Pharmacological class / Application:** Pharmaceutical related substances

**International status:**

US: The substances are not listed specifically in the Schedules to the CSA and are not mentioned on the DEA website. However, Midazolam is listed under Schedule IV to the CSA.

United Nations: The substances are not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International
Control. Midazolam, however, is listed in Green List under Schedule IV.

Canadian Status: Substances I and II are intermediates in the synthesis of midazolam and are not listed specifically in the CDSA. Midazolam is listed under Item 18 (22.1) of Schedule IV to the CDSA, under the heading “Benzodiazepines, their salts and derivatives”. With the exception of brotizolam, the benzodiazepines have a characteristic core structural feature. Two variations of the characteristic feature are shown below:

![Molecular structures of I and II](image)

Based on the molecular structures of I and II, the substances contain the core structure of the benzodiazepines and therefore are included in item 18 of Schedule IV.

Recommendation: 7-Chloro-5-(2-fluorophenyl)-2,3-dihydro-1H-1,4-benzodiazepine-2-methanamine (I) and 7-Chloro-1,3-dihydro-5-(2-fluorophenyl)-2-nitromethylene-2H-1,4-benzodiazepine-4-oxide are included in Item 18 of Schedule IV to the CDSA and are controlled substances.

July 16th 2010