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

Substance: Designer Thioamphetamines (see Table 1)

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 compounds are considered to be analogues of amphetamines and must be included under item 1 of Schedule III to the CDSA.

Prepared by: ____________________________ Date: Sept 13th, 2011
Evelyn C Soo

Verified by: ____________________________ Date: ____________
Mark Kozlowski

Approved by: ____________________________ Date: ____________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by:
Drug Status Report

**Drug:** Designer thioamphetamines. (See table 1 for chemical information)

**Pharmacological class / Application:** Amphetamines

**International status:**

US: None of the substances are listed specifically in the Schedules to the US *Controlled Substances Act*. However, they may be considered controlled under the analogue provision of the CSA.

United Nations: The 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: The designer thioamphetamines listed in Table 1 are a series of designer amphetamines synthesized by Shulgin and tested for their potential stimulant/hallucinogenic potential and are not listed specifically in the CDSA. “Amphetamines, their salts, derivatives, isomers, analogues and salts of derivatives, isomers and analogues” are currently listed as item 1 of Schedule III to the CDSA. The substances are considered to be amphetamine analogues. Specifically, 2,5-bismethylthio-4-methylamphetamine, 5-methoxy-4-methyl-2-methylthioamphetamine and 2-methoxy-4-methyl-5-methylthioamphetamine are considered to be structural analogues of 2,5-dimethoxy-4-methylamphetamine; 5-methylthio-2,4-dimethoxyamphetamine is considered to be a structural analogue of 2,4,5-trimethoxyamphetamine; 4-ethyl-4-methoxy-2-methylthioamphetamine and 4-ethyl-2-methoxy-5-methylthioamphetamine are structural analogues of 4-ethyl-2,5-dimethoxyamphetamine and lastly 4-methylthiopethamphetamine is considered a structural analogue of methamphetamine. For these reasons, the designer thioamphetamines listed in Table 1 must be included under item 1 of Schedule III to the CDSA.

**Recommendation:** The designer thioamphetamines listed in Table 1 are included under item 1 of Schedule III to the CDSA and are controlled substances.

**Date:** 13 September, 2011
Table 1: Chemical information of designer thioamphetamines.

<table>
<thead>
<tr>
<th>Name of Compound</th>
<th>Synonyms</th>
<th>CAS-RN</th>
<th>Chemical Structure</th>
<th>Chemical Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIS-TOM</td>
<td>2,5-Bismethylthio-4-methylamphetamine</td>
<td></td>
<td><img src="image" alt="BIS-TOM Structure" /></td>
<td>C_{12}H_{19}N_{2}S_{2}</td>
</tr>
<tr>
<td>META-DOT</td>
<td>5-Methylthio-2, 4-dimethoxyamphetamine</td>
<td></td>
<td><img src="image" alt="META-DOT Structure" /></td>
<td>C_{12}H_{19}N_{2}O_{2}S</td>
</tr>
<tr>
<td>2-TOET</td>
<td>4-Ethyl-5-methoxy-2-methylthioamphetamine</td>
<td></td>
<td><img src="image" alt="2-TOET Structure" /></td>
<td>C_{13}H_{21}N_{1}OS</td>
</tr>
<tr>
<td>5-TOET</td>
<td>4-Ethyl-2-methoxy-5-methylthioamphetamine</td>
<td></td>
<td><img src="image" alt="5-TOET Structure" /></td>
<td>C_{13}H_{21}N_{1}OS</td>
</tr>
<tr>
<td>2-TOM</td>
<td>5-Methoxy-4-methyl-2-methylthioamphetamine</td>
<td></td>
<td><img src="image" alt="2-TOM Structure" /></td>
<td>C_{12}H_{19}N_{2}OS</td>
</tr>
<tr>
<td>5-TOM</td>
<td>2-Methoxy-4-methyl-5-methylthioamphetamine</td>
<td></td>
<td><img src="image" alt="5-TOM Structure" /></td>
<td>C_{12}H_{19}N_{2}OS</td>
</tr>
<tr>
<td>4-MTMA</td>
<td>4-Methylthiomethamphetamine</td>
<td></td>
<td><img src="image" alt="4-MTMA Structure" /></td>
<td>C_{11}H_{17}NS</td>
</tr>
</tbody>
</table>