## Drug Status Report

Drug: O-Desmethyl Sufentanil

Drug Name Status: O-Desmethyl Sufentanil is the common name

## **Chemical Name:**

N-(4-(Hydroxymethyl)-1-(2-(2-thienyl)ethyl)-4-piperidinyl)-N-phenylpropanamide

## **Chemical structure:**

Molecular Formula: C<sub>21</sub>H<sub>28</sub>N<sub>2</sub>O<sub>2</sub>S

Pharmacological class / Application: fentanyl related substance

## International status:

US: The substance is not currently listed explicitly on the schedules to the US Controlled Substances Act and is not mentioned on the DEA website. However, due to the analogue provisions of the CSA, O-Desmethyl Sufentanil may be controlled.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Item 16 of Schedule I is "Fentanyls, their salts, derivatives and analogues and salts of derivatives and analogues." The structure of fentanyl is shown below. A review of the current family of fentanyls indicates that all members have one common root structure. This fentanyl root structure is shown below and must be considered essential in order to consider a substance a member of the fentanyl family of drugs and hence included in this item of Schedule I. The substituents R through R<sub>3</sub> may be hydrogen, alkyl or aryl groups.

Fentanyl root structure

O-Desmethyl Sufentanil contains the essential structural elements of the fentanyl root structure and therefore should be considered to be included in item 16 of Schedule I. It clearly is an analogue (substantially similar to) of sufentanil (below).

Sufentanil

Recommendation: O-Desmethyl Sufentanil is included in item 16 of Schedule I and is a controlled substance.

August 21, 2008