

# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

## INTEROFFICE COMMUNICATION

February 24, 2005

To: Hydrotreated light naphtha file (CAS # 64742-49-0)

From: Gary Butterfield

Subject: Screening level for Hydrotreated light naphtha

Hydrotreated light naphtha is also known as VM & P naphtha. It is described in the ToSCA inventory as a complex hydrocarbon mixture obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having chain lengths in the range of 4 to 11 carbons, with a boiling point of minus 20 to 190 degrees Celsius.

The following references or databases were searched to identify data to determine the screening level: U.S. Environmental Protection Agency (EPA) Integrated Risk Information System (IRIS), National Institute for Occupational Safety and Health (NIOSH) Registry for Toxic Effects of Chemical Substances (RTECS), American Conference of Governmental and Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs), Michigan Department of Environmental Quality (DEQ) library, International Agency for Research on Cancer (IARC) Monographs, Chemical Abstract Service (CAS) Online (1968 - February 2005), National Library of Medicine (NLM) - Toxline, and National Toxicology Program (NTP) Status Report.

There was no toxicity information located during the literature searches that could be used to calculate an ITSL. The CAS and NLM on-literature searches were conducted on Feb 17, 2005.

The description (carbon chain length, boiling point, etc.) for this material is similar to the description of refined petroleum solvents used by NIOSH to identify the materials for which the REL can apply. It is therefore considered appropriate to use the NIOSH REL based ITSL of 3500 ug/m3 with 8 hour averaging for hydrotreated light naphtha when it is confirmed that the amount of aromatic hydrocarbons is less than 20%, as this condition is also contained in the NIOSH REL documentation.

The ITSL for hydrotreated light naphtha is being set at 3500 ug/m3 with 8 hour averaging.

### References:

NIOSH. 1977. NIOSH criteria for a recommended standard... Occupational exposure to refined petroleum products. DHEW No. 77-192