

**Michigan Department of Environmental Quality**  
**Interoffice Communication**

TO: File for Paroil 45 (CAS # 68410-99-1)

FROM: Doreen Lehner, Toxics Unit, Air Quality Division

SUBJECT: Memo to the file for Paroil 45 (CAS # 68410-99-1)

DATE: June 22, 2011

The compound known as Paroil 45 (CAS# 68410-99-1) is a polymerized chlorinated alkane (chlorinated paraffin) of intermediate chain length (C<sub>14</sub>). Short chain chlorinated paraffins are determined to be between 10 and 13 carbons in length and are known to be carcinogens according to the National Toxicology Program (NTP, 1986) studied chlorinated paraffins (C<sub>10</sub>-C<sub>12</sub>, 60% chlorine) and a C<sub>23</sub> chain length, 43% chlorine. The short chain chlorinated paraffin showed clear evidence of carcinogenicity in both sexes of mice and rats, while the C<sub>23</sub> chain paraffin showed no evidence of carcinogenicity for male rats, equivocal evidence in female rats and mice, and clear evidence in male mice. Even though Paroil 45 (CAS # 68410-99-1) was not specifically studied, it was determined that it was structurally close to the short chain chlorinated paraffins and should be considered as potentially carcinogenic in the absence of other data.

Therefore, at this time the chlorinated paraffins (CAS# 63449-39-8) IRSL of 0.03 µg/m<sup>3</sup> and SRSL of 0.3 ug/m<sup>3</sup> is to be used. The company applying for the air permit, Sealbond, is able to meet this SRSL. It is understood that Paroil 45 should be further studied to develop an ITSL at a later date when more information becomes available to evaluate this chemical.