



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

MAY 5 2016

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

MEMORANDUM

SUBJECT: Preliminary Risk-Based Concentration Value for Chloroprene in Ambient Air

FROM: Kelly Rimer, Leader *Kelly Rimer*
Air Toxics Assessment Group, Health and Environmental Impacts Division

TO: Frances Verhalen, P.E., Chief
Air Monitoring/Grants Section, EPA Region 6

Under EPA's air toxics risk management framework, a cancer risk of 100-in-1 million is generally described as the upper limit of acceptability for purposes of risk-based decisions. Cancer risks at or below 1-in-1 million indicate little potential for cancer risk in the air toxics program. When existing source emissions are too high to achieve the 1-in-1 million level and controls are being considered, EPA is interested in controls that reduce off-site exposure concentrations associated with cancer risks to no higher than approximately 1-in-1 million for as much of the nearby population as feasible.

The 100-in-1 million cancer-risk-based comparison level and the 1-in-1 million cancer risk-based comparison levels for chloroprene are 0.2 ug/m^3 , and 0.002 ug/m^3 respectively. At a minimum, we recommend that this facility aims for emission reductions such that the maximum annual average chloroprene concentration is no higher than 0.2 ug/m^3 at the highest modeled off-site location. That being said, it is preferable to have the chloroprene concentration at the highest modeled census block as close to 0.002 ug/m^3 as reasonably achievable.

I am providing this interim recommendation until further information can be gathered. EPA OAQPS, in conjunction with EPA Region 6 and LDEQ, are planning to visit the facility to obtain more information about the process, emissions, and controls. Ambient monitoring is planned for community locations around the facility. With additional information, another value may be recommended.

cc: Wren Stenger
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