


TCEQ Interoffice Memorandum

To: Richard Garcia, Regional Director
Christine Bergren, Air Section Manager
Ramiro Garcia, Border and South Central Texas Area Director

From: Allison Jenkins, MPH 
Toxicology Division, Chief Engineer's Office

Date: February 16, 2011

Subject: Health Effects Review of 2009 Ambient Air Network Monitoring Data in Region 13, San Antonio

Conclusions

- Exposure to monitored levels of volatile organic compounds (VOCs) at the Community Air Toxics Monitoring Network (CATMN) site located at 911 Old Highway 90 West in San Antonio would not be expected to cause chronic adverse health or vegetative effects.

Background

The Toxicology Division (TD) reviewed ambient air sampling data collected in 2009 at the network monitoring site located at 911 Old Highway 90 in TCEQ Region 13, San Antonio. The data were evaluated from a long-term health perspective. Table 1 lists the sampling location and provides a link to more information on the site.

The TD reviewed air samples for 84 VOCs collected for 24 hours every six days. Because 24-hour air samples that are collected every six days are designed to provide representative long-term average concentrations, annual averages from 24-hour samples were evaluated for potential chronic health and vegetative concerns. For all VOCs, the annual average concentrations were compared to long-term air monitoring comparison values (AMCVs). The list of the 84 target analyte VOCs at the monitoring location is in List 1 in Attachment A. All VOC data evaluated from the monitoring site in San Antonio met TCEQ's 75 percent annual data completeness objective and were considered in this evaluation. More information about AMCVs is available online at: <http://www.tceq.state.tx.us/implementation/tox/AirToxics.html#amcv>.

Table 1. Monitoring Site Located in TCEQ Region 13

City and Site Location	County	EPA Site ID	Monitored Compounds
San Antonio , 911 Old Highway 90 West	Bexar	48-029-0677	VOCs (24-hour canister samples)

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Evaluation

The 2009 annual average concentrations of the 84 VOCs evaluated at the monitoring site were below their respective long-term AMCVs. Therefore, adverse health effects would not be expected to occur as a result of long-term exposure to the reported levels of these chemicals.

If you have any questions regarding the contents of this review, please do not hesitate to contact me at (512) 239-0656 or via email at allison.jenkins@tceq.texas.gov.

cc (via email):

Casso, Ruben- EPA Region 6, Dallas

Prosperie, Susan- Department of State Health Services

Attachment A

List 1. Target VOC Analytes in Canister Samples

1,1,1-Trichloroethane	3-Methylhexane	Methylcyclopentane
1,1,2,2-Tetrachloroethane	3-Methylpentane	Methylene Chloride
1,1,2-Trichloroethane	4-Methyl-1-Pentene	m-Ethyltoluene
1,1-Dichloroethane	Acetylene	n-Butane
1,1-Dichloroethylene	Benzene	n-Decane
1,2,3-Trimethylbenzene	Bromomethane	n-Heptane
1,2,4-Trimethylbenzene	c-1,3-Dichloropropylene	n-Hexane
1,2-Dibromoethane	c-2-Butene	n-Nonane
1,2-Dichloroethane	c-2-Hexene	n-Octane
1,2-Dichloropropane	c-2-Pentene	n-Pentane
1,3,5-Trimethylbenzene	Carbon Tetrachloride	n-Propylbenzene
1,3-Butadiene	Chlorobenzene	n-Undecane
1-Butene	Chloroform	o-Ethyltoluene
1-Hexene + 2-Methyl-1-Pentene	Cyclohexane	o-Xylene
1-Pentene	Cyclopentane	p-Diethylbenzene
2,2,4-Trimethylpentane	Cyclopentene	p-Ethyltoluene
2,2-Dimethylbutane - Neohexane	Dichlorodifluoromethane	Propane
2,3,4-Trimethylpentane	Ethane	Propylene
2,3-Dimethylbutane	Ethyl Benzene	Styrene
2,3-Dimethylpentane	Ethylene	t-1,3-Dichloropropylene
2,4-Dimethylpentane	Isobutane	t-2-Butene
2-Chloropentane	Isopentane	t-2-Hexene
2-Methyl-2-Butene	Isoprene	t-2-Pentene
2-Methylheptane	Isopropylbenzene	Tetrachloroethylene
2-Methylhexane	m & p-Xylene	Toluene
2-Methylpentane - Isohexane	m-Diethylbenzene	Trichloroethylene
3-Methyl-1-Butene	Methyl Chloride	Trichlorofluoromethane
3-Methylheptane	Methylcyclohexane	Vinyl Chloride