

# Texas Commission on Environmental Quality

## INTEROFFICE MEMORANDUM

**To:** Richard Garcia, Director, R13  
Rick Hite, Air Section Manager, R13  
Ramiro Garcia, Area Director

**Date:** August 18, 2008

**From:** Valerie Meyers, Ph.D.  
Toxicology Section, Chief Engineer's Office

**Subject:** Health Effects Review of 2007 Ambient Air Network Monitoring in Region 13–San Antonio

### Key Finding

Annual reported volatile organic compounds (VOCs) were monitored at levels below the long-term comparison values and would not be expected to cause adverse health effects.

### Background

This memorandum conveys the toxicological evaluation of ambient air sampling conducted at the network monitoring site in Region 13–San Antonio during 2007 (Figure 1). The Toxicology Section reviewed summary results for 95 monitored VOCs from 24-hour canister samples collected every sixth day from the Community Air Toxics Monitoring Network (CATMN). In December 2006, the CATMN site was moved from 254 Seale Road to 911 Old Highway 90 West. Information about this site is listed in Table 1. Table 2 is a list of the target analytes that were evaluated for this review. Air samples are collected for twenty-four-hours every six days and are designed to provide representative long-term average concentrations to evaluate potential chronic health concerns. For all VOCs, the annual average concentrations were compared to appropriate comparison values. All monitored chemicals met the TCEQ data completeness objective of 75 percent, or 45 valid samples per year.

**Table 1: Monitoring Site Information for TCEQ Region 13**

County	City and Site Location	EPA Site ID	Monitored Compounds
Bexar	<a href="#">San Antonio, 911 Old Highway 90 West</a>	48-029-0677	VOCs

### Evaluation

Of the 95 reported VOCs, 58 were not detected. Reported annual concentrations of the 37 detected VOCs were less than their respective long-term comparison values and are not a health concern. Overall, we do not anticipate any long-term health concerns from monitored levels of VOCs in Region 13-San Antonio.

If you have any questions regarding this review, please do not hesitate to contact me at (512) 239-1336 or email me at [vmeyers@tceq.state.tx.us](mailto:vmeyers@tceq.state.tx.us).

**Table 2: Target Analytes for Community Air Toxic Monitoring Network**

CATMN VOCs		
1,1,1-Trichloroethane	3-hexanone	Toluene
1,1,1,2-Tetrachloroethane	3-pentanone	Trichloroethylene
1,1,2-Trichloroethane	4-Methyl-1-Pentene	Trichlorofluoromethane
1,1-Dichloroethane	Acetylene	Vinyl Chloride
1,1-Dichloroethylene	Benzene	c-2-Butene
1,2,3-Trimethylbenzene	Bromomethane	c-2-Hexene
1,2,4-Trimethylbenzene	Butyl Acetate	c-2-Pentene
1,2-Dibromoethane	Cis-1,3-Dichloropropylene	Dichlorodifluoromethane
1,2-Dichloroethane	Carbon Tetrachloride	Isobutyraldehyde
1,2-Dichloropropane	Chlorobenzene	m-Diethylbenzene
1,3,5-Trimethylbenzene	Chloroform	m-Ethyltoluene
1,3-Butadiene	Cyclohexane	Methyl Chloride
1-Butene	Cyclopentane	n-Butane
1-Hexene+2-methyl-1-pentene	Cyclopentene	n-Decane
1-Pentene	Ethane	n-Heptane
2,2,4-Trimethylpentane	Ethyl Acetate	n-Hexane
2,2-Dimethylbutane - Neoheptane	Ethylbenzene	n-Nonane
2,3,4-Trimethylpentane	Ethylene	n-Octane
2,3-Dimethylbutane	Isobutane	n-Pentane
2,3-Dimethylpentane	Isopentane	n-Propyl Acetate
2,4-Dimethylpentane	Isoprene	n-Propylbenzene
2-Butanone	Isopropylbenzene	n-Undecane
2-Chloropentane	Methyl Butyl Ketone (MBK)	o-Ethyltoluene
2-Methyl-2-Butene	Methyl Isobutyl Ketone	o-Xylene
2-Methylheptane	Methyl t-Butyl ether (MTBE)	p-Diethylbenzene
2-Methylhexane	Methylcyclohexane	p-Ethyltoluene
2-Methylpentane - Isohexane	Methylcyclopentane	p-Xylene + m-Xylene
2-methyl-3-hexanone	Methylene Chloride	t-2-Butene
3-Methyl-1-Butene	Propane	t-2-Hexene
3-Methylheptane	Propylene	t-2-Pentene
3-Methylhexane	Styrene	trans-1,3-Dichloropropylene
3-Methylpentane	Tetrachloroethylene - Perchloroethylene	



Figure 1. Location of San Antonio-Old Hwy. 90 CATMN monitor

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cc (via e-mail):

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