Appendix A: Comprehensive list of all mobile monitoring comparison values developed by TCEQ

Chemical(s)	CAS No.	BASELINE - DUVAS (ppb)	BASELINE - SIFT (ppb)	iBDIL - DUVAS (ppb)	iBDIL - SIFT (ppb)	iHPIL (ppb)	iHBAL (ppb)	$^{EM}HBAL_{10MIN}$ (ppb)	$^{EM}HBAL_{1HR}$ (ppb)	$^{EM}HBAL_{1SEC}$ (ppb)
COLOR		GREEN	GREEN	ORANGE	ORANGE	RED	PURPLE	N/A	N/A	N/A
Acetylene	74-86-2	--	8	--	80	25,000	75,000	75,000	50,000	150,000
Ammonia	7664-41-7	--	--	--	--	850	2,550	2,550	1,700	5,100
Benzene	71-43-2	14	8	80 [a]	80	180	540	500 [b]	360	1,080
1,3-Butadiene	106-99-0	6	4	40 [a]	40	1,700	5,100	2,500 [b]	3,400	10,200
Butane	106-97-8	--	ND	--	--	92,000	276,000	276,000	184,000	552,000
1-Butene	106-98-9	--	11	--	110	27,000	81,000	81,000	54,000	162,000
C3-C4 Saturated	--	--	96	--	960	--	--	--	--	--
Chlorine	7782-50-5	--	--	--	--	70	210	200 [b]	140	420
Cyclohexane	110-82-7	--	12	--	120	1,000	3,000	3,000	2,000	6,000
Ethylbenzene	100-41-4	35	--	350	--	20,000	60,000	60,000	40,000	120,000
Ethylene Dichloride	107-06-2	--	--	--	--	540	1,620	1,000 [b]	1,080	3,240
Ethylene Glycol	107-21-1	--	--	--	--	1,900	5,700	5,700	3,800	11,400

Chemical(s)	CAS No.	BASELINE - DUVAS (ppb)	BASELINE - SIFT (ppb)	iBDIL - DUVAS (ppb)	iBDIL - SIFT (ppb)	iHPIL (ppb)	iHBAL (ppb)	$^{EM}HBAL_{10MIN}$ (ppb)	$^{EM}HBAL_{1HR}$ (ppb)	$^{EM}HBAL_{1SEC}$ (ppb)
Ethylene Oxide	75-21-8	--	3	--	30	910	2,730	2,500 [b]	1,820	5,460
Formaldehyde	50-00-0	ND	--	--	--	44	132	132	88	264
n-Hexane	110-54-3	--	34	--	340	5,400	16,200	16,200	10,800	32,400
Hydrochloric Acid	7647-01-0	--	--	--	--	440	1,320	1,000 [d]	880	2,640
Hydrogen Sulfide	7783-06-4	--	--	--	-- [f]	70	210	210	140	420
Isobutane	75-28-5	--	28	--	280	33,000	99,000	99,000	66,000	198,000
n-Octane	111-65-9	--	16	--	160	4,100	12,300	12,300	8,200	24,600
$PM_{2.5}$	N/A	--	--	--	--	105 $\mu g/m^3$	--	--	--	--
PM_{10}	N/A	--	--	--	--	450 $\mu g/m^3$	--	--	--	--
Propane [g]	74-98-6	--	54	--	540	--	--	--	--	--
Propylene [g]	115-07-1	--	ND	--	--	--	--	--	--	--
Sodium Hydroxide	1310-73-2	--	--	--	--	5	15	15	10	30
Styrene	100-42-5	8	6	60 [a]	60	5,100	15,300	10,000 [b]	10,200	30,600
Sulfur Dioxide	7446-09-5	7	--	70	--	125	375	375 [c]	250	750

Chemical(s)	CAS No.	BASELINE - DUVAS (ppb)	BASELINE - SIFT (ppb)	iBDIL - DUVAS (ppb)	iBDIL - SIFT (ppb)	iHPIL (ppb)	iHBAL (ppb)	$^{EM}HBAL_{10MIN}$ (ppb)	$^{EM}HBAL_{1HR}$ (ppb)	$^{EM}HBAL_{1SEC}$ (ppb)
Sulfuric Acid	7664-93-9	--	--	--	--	30	90	90	60	180
Toluene	108-88-3	40	7	70 [a]	70	4,000	12,000	12,000	8,000	24,000
Vinyl Chloride	75-01-4	--	--	--	--	72,000	216,000	216,000	144,000	432,000
Xylenes + Ethylbenzene	1330-20-7 + 100-41-4	--	6	--	60	5,000 [e]	15,000 [e]	15,000 [e]	10,000 [e]	30,000 [e]
Xylenes	1330-20-7	35	--	350	--	5,000	15,000	15,000	10,000	30,000

[a] DUVAS iBDIL based on SIFT; [b] Based on ½ STEL; [c] ½ STEL not used for sulfur dioxide because the basis of the STEL is the same as the $HBAL_{10\text{-}min}$; [d] Based on ½ C; [e] Values are based on AHBCV for xylenes; [f] no iBDIL was derived for H2S monitored via Picarro – see Appendix B; [g] Simple asphyxiant, non-toxic in ambient air; DUVAS - Differential Ultra-Violet Absorption Spectrometer; $^{EM}HBAL_{1hr}$ – 1-hour exposure mitigation health-based action level; $^{EM}HBAL_{10min}$ – 10-minute exposure mitigation health-based action level; $^{EM}HBAL_{1sec}$ – 1-second exposure mitigation health-based action level; iBDIL – instantaneous baseline-derived investigation level; iHBAL – instantaneous health-based action level; iHPIL – instantaneous health-protective investigation level; N/A – not applicable; ND – not determined; ppb – parts per billion; SIFT- Selected Ion Flow Tube-Mass Spectrometer; and "--"no value available