# 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 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **Ethylene Oxide** | 75-21-8 | -- | -- | -- | -- | 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 [c] | 880 | 2,640 |
| **Hydrogen Sulfide** | 7783-06-4 | -- | -- | -- | -- [e] | 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 µg/m$^3$ | -- | -- | -- | -- |
| **$PM_{10}$** | N/A | -- | -- | -- | -- | 450 µg/m$^3$ | -- | -- | -- | -- |
| **Propane** [f] | 74-98-6 | -- | 54 | -- | 540 | -- | -- | -- | -- | -- |
| **Propylene** [f] | 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 | -- | -- | -- | -- | -- | -- |

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|---|---|---|---|---|---|---|---|---|---|---|
| **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 [d] | 15,000 [d] | 15,000 [d] | 10,000 [d] | 30,000 [d] |
| **Xylenes** | 1330-20-7 | -- | -- | -- | -- | 5,000 | 15,000 | 15,000 | 10,000 | 30,000 |

[a] DUVAS iBDIL based on SIFT; [b] Based on ½ STEL; [c] Based on ½ C; [d] Values are based on AHBCV for xylenes; [e] no iBDIL was derived for H2S monitored via Picarro – see Appendix B; [f] 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