**U.S. ENVIRONMENTAL PROTECTION AGENCY**
**Region VI**

**West Fertilizer Plant Explosion**
**Summary of Mobile Air Monitoring Data**
**Reporting Period 04/20/2013**

EPA conducted mobile air monitoring in the residential neighbor hoods surrounding the incident location. EPA monitored for ammonia ($NH_3$) and volatile organic compounds (VOCs). A summary of the air monitoring data collected during this reporting period is provided below.

**Table 1 – Summary of Mobile Air Monitoring Locations**

| Collection Time | Parameter | Count of Readings | Count of Detects | Average Concentration | Maximum Detection | Units |
|---|---|---|---|---|---|---|
| **23:48 - 0:25** | NH3 | 8520 | 0 | 0.0 | 0.0 | ppm |
| | VOC | 8520 | 0 | 0.0 | 0.0 | ppm |
| **2:02-2:38** | NH3 | 7175 | 0 | 0.0 | 0.0 | ppm |
| | VOC | 7175 | 0 | 0.0 | 0.0 | ppm |
| **4:17-4:57** | NH3 | 13185 | 0 | 0.0 | 0.0 | ppm |
| | VOC | 13185 | 0 | 0.0 | 0.0 | ppm |
| **6:10-6:37** | NH3 | 6135 | 0 | 0.0 | 0.0 | ppm |
| | VOC | 6135 | 0 | 0.0 | 0.0 | ppm |
| **8:00-8:24** | NH3 | 5520 | 0 | 0.0 | 0.0 | ppm |
| | VOC | 5520 | 3 | 0.0 | 0.1 | ppm |
| **9:53-11:03** | NH3 | 21275 | 0 | 0.0 | 0.0 | ppm |
| | VOC | 21275 | 0 | 0.0 | 0.0 | ppm |
| **13:33-14:57** | NH3 | 26595 | 1901 | 0.0 | 0.3 | ppm |
| | VOC | 26595 | 301 | 0.0 | 0.4 | ppm |
| **17:46-18:48** | NH3 | 14490 | 1095 | 0.0 | 0.7 | ppm |
| | VOC | 14490 | 789 | 0.0 | 0.5 | ppm |

The screening level for ammonia is the ATSDR Minimum Risk Level (MRL) of 1.7 ppm. The Agency for Toxic Substances and Disease Registry (ATSDR) has an acute inhalation MRL for ammonia of 1.7 ppm based upon an exposure of 1 to 14 days. The MRL is an estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse, non-cancer health effects over a specified duration of exposure. The information in this MRL serves as a screening tool to help public health professionals decide where to look more closely to evaluate possible risk of adverse health effects from human exposure.

**Figure 1 – 23:48-0:25 Mobile Run Track and NH3 Results**

**Figure 2 – 2:02-2:38 Mobile Run Track and NH3 Results**

**Figure 3- 4:17-4:57 Mobile Run Track and NH3 Results**

**Figure 5 – 6:10-6:37 Mobile Run Track and NH3 Results**

**Figure 6 – 8:00-8:24 Mobile Run Track and NH3 Results**

**Figure 7 – 9:53-11:03 Mobile Run Track and NH3 Results**

**Figure 8 – 13:33-14:57 Mobile Run Track and NH3 Results**

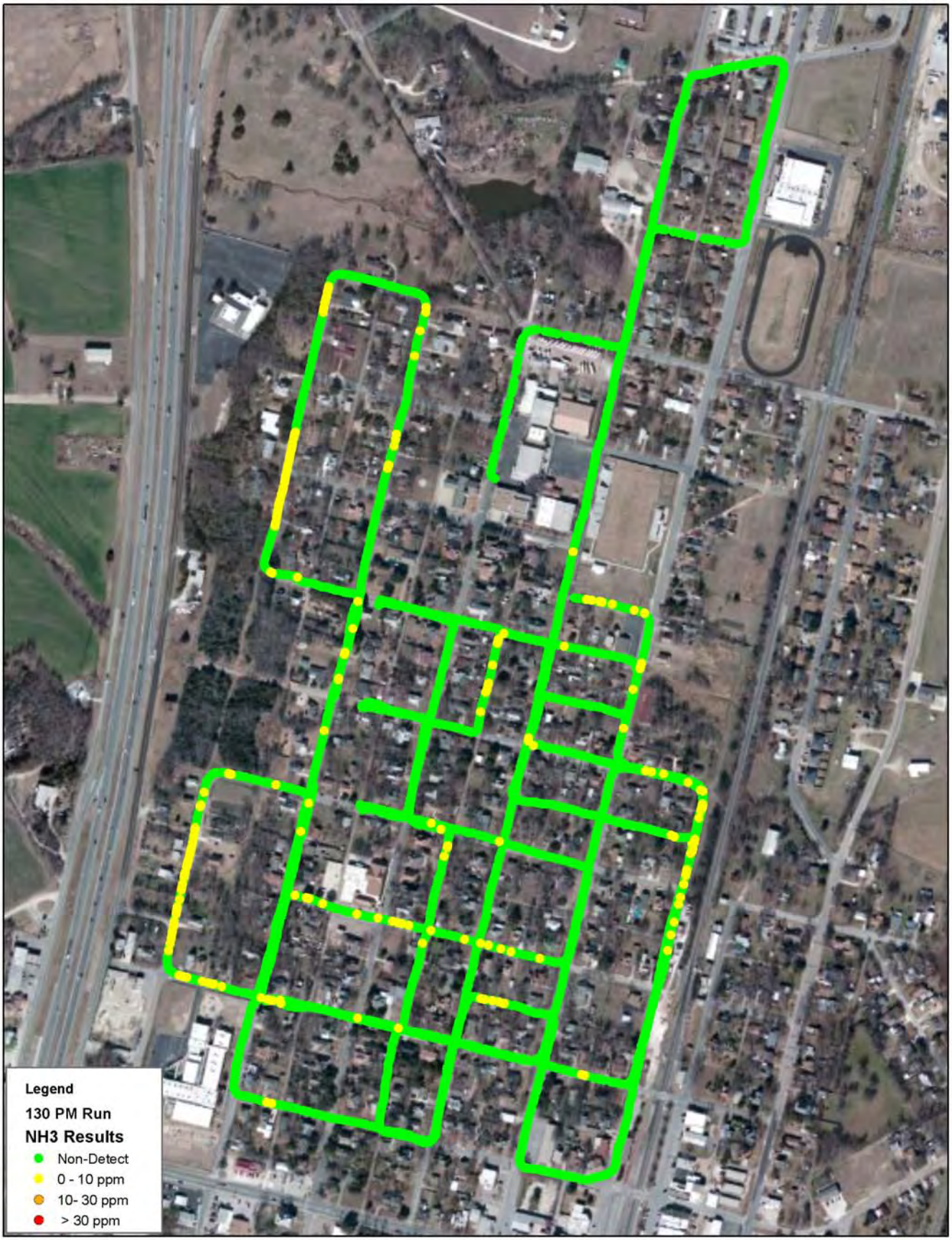

**Figure 9– 17:46-18:48 Mobile Run Track and NH3 Results**