U.S. ENVIRONMENTAL PROTECTION AGENCY
Region VI

West Fertilizer Plant Explosion
Summary of Mobile Air Monitoring Data
Reporting Period 04/18/2013

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
***11:50 - 12:30**	NH3	3960	15	0.0	1.0	ppm
	VOC	3960	15	0.0	0.1	ppm
***15:17 – 16:05**	NH3	13935	27	0.0	1.0	ppm
	VOC	13935	27	0.0	0.1	ppm
***18:00 - 19:16**	NH3	16075	2	0.0	1.0	ppm
	VOC	16075	2	0.0	0.1	ppm
20:26 - 21:19	NH3	16485	0	0.0	0.0	ppm
	VOC	16485	61	0.0	0.2	ppm

* Ammonia Sensor was not on instrumentation for these mobile runs. The Ammonia concentration was calculated using the VOC sensor with a response factor of 9.7.

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 – 11:50 – 12:30 Mobile Run Track and NH3 Results

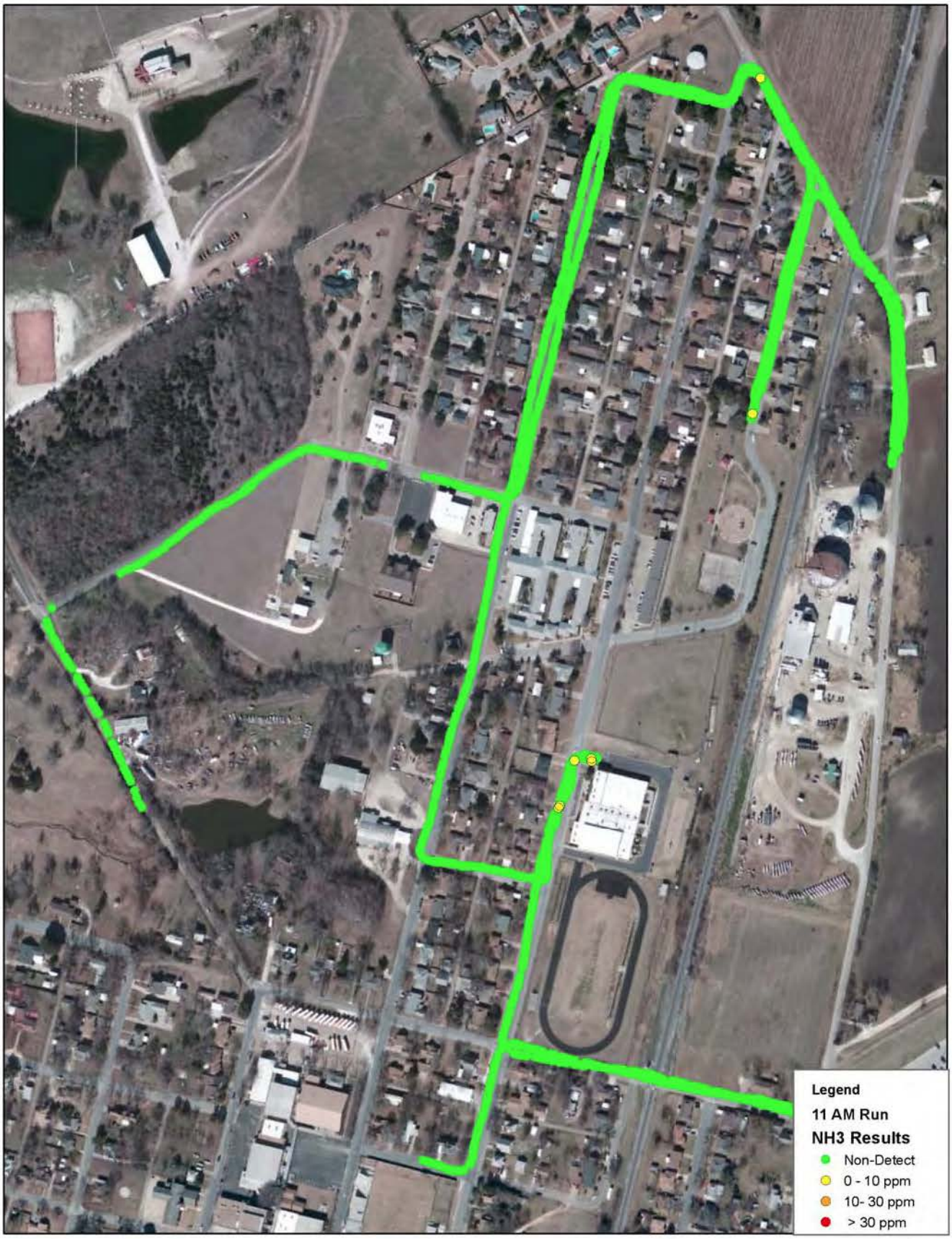

Figure 2 15:17-16:05 Mobile Run Track and NH3 Results

Figure 3 18:00-19:16 Mobile Run Track and NH3 Results

Figure 3 20:26-21:19 Mobile Run Track and NH3 Results