## EXHIBIT 13

### Marcel Moreau Site Specific Report (Tulare Exxon) Excerpts

• Excerpt from the Expert Site Specific Report of Marcel Moreau (Nov. 2, 2011), submitted on behalf of Plaintiff City of Fresno, pertaining to Tulare Exxon.

# Exxon, Tulare Ave.

4594 East Tulare Avenue, Fresno

**Note:** Site is also known as Beacon #620, Arco #620, Circle 6 Food & Go, Circle 6 Valero.

#### **MAJOR MILESTONES**

March 1985	Arco 620 had been operating for nine months at the site and had four USTs containing unleaded, leaded and premium gasoline, and diesel. A soil boring investigation concluded that no contamination due to gasoline or diesel leakage existed around the USTs. There was another station at the site prior to this one, and it was not known if the existing tanks had been used at that station. [Later documents [12 15 1998] indicated the USTs dated from 1978.]
Nov 12, 1992	The USTs at the site were described as four 10,000-gallon single- walled (SW) bare steel, unlined USTs. The tanks had no corrosion protection (CP), spill containment or overfill prevention. The piping was SW galvanized steel.
March 16, 1993	An existing 10,000-gallon diesel tank was converted to a gasoline tank.
Jan 19, 1999	Four 10,000-gallon USTs, 20 years in age, and eight fuel dispensers were removed from the site. Soil samples indicated a release of petroleum product constituents into the subsurface had occurred. MtBE was detected in soil samples.
Feb 9-10, 1999	Approximately 250 cubic yards of soil was excavated from the former UST area and stockpiled on site.
March 1999	Two USTs, one 12,000-gallon and one 6,000-gallon/6,000-gallon split tank, were installed.
Nov 1, 2004	Monitoring wells were installed, MtBE was detected in groundwater samples, and quarterly groundwater monitoring was initiated.
Oct 17, 2007	Diesel piping was removed; soil samples were collected.

May 4, 2009	Results of the First Quarter 2009 Groundwater Monitoring Event. There were no constituents detected in groundwater during this quarter, and none detected throughout 2008.
Aug 5, 2010	SVE system was put into operation. [4/6/2011]
Sept 21, 2010	Results of the Second Semi-Annual Groundwater Monitoring Event. From Aug 2010 through Sept 2010, the SVES operated at an average flow rate of approximately 74 cubic feet per minute (cfm). The SVES removed approximately 499.37 lbs of VOCs from the soil. Given that one gallon of product weighs 6.18 pounds, 81 gallons of product had been removed as soil vapor since start up of the SVES.
May 16, 2011	From CRWQCB following review of Results of the First Semi-Annual Groundwater Monitoring Event and Compliance Air Quality Monitoring Report, dated 4/6/2011. No free phase petroleum product was detected in any of the wells. Groundwater samples contained no constituents above the laboratory detection limits. The SVE system was estimated to have removed approximately 2,400 lbs (approximately 400 gallons) of TPHg during the period.

#### **IDENTIFICATION OF MTBE RELEASES**

#### Tank Area Releases

During removal of the storage tanks in January of 1999, MtBE was detected in five of eight soil samples from beneath the storage tanks. After over-excavation of the tank field in February of 1999, MtBE contamination was still present in soils at depths ranging from 20 to 29 feet. Releases from storage tanks are common, often originating from spills during deliveries and leaks from submersible pumping systems. The timing of the releases is not known, but the releases likely occurred between the fall of 1992 when MtBE was required to be in Fresno County gasoline<sup>1</sup> and the time when the tanks were removed in 1999. The volume released is not known.

In July of 2004, MtBE was detected in soil boring B-8 adjacent to the UST field in all the samples taken from 20 to 65 feet except one. Releases associated with storage tanks are common. Because secondary containment was part of the new storage systems installed in 1999, it is likely that this contamination was associated with releases from the pre-1999 storage tanks. The volume released is not known.

<sup>&</sup>lt;sup>1</sup> "Areas Participating in the Oxygenated Gasoline Program," Energy Information Administration, Department of Energy, <u>http://www.eia.gov/steo/special/oxy2.html#Original</u>, accessed on 9/15/2011.

#### Piping and Dispenser Area Releases

During removal of the storage systems in January of 1999, MtBE was detected in three of ten soil samples from beneath the dispensers. One of two soil borings advanced to 20 feet in the area of the former western dispenser island in February of 1999 detected MtBE at 20 ft depth. Releases from dispensers are common (see general report in this case). The releases were intermittent, and likely occurred between the fall of 1992 when MtBE was required to be in Fresno County gasoline<sup>2</sup> and the time when the tanks were removed in 1999. The volume released is not known.

In January of 2001, a piping leak was identified in dispenser #2. When the release started is not known. The volume released is not known. MtBE was likely present in gasoline in 2001. Under dispenser containment was present at this time, and it was determined to be tight on May 26, 2004, so it is not likely that this release contributed to the MtBE contamination at this facility.

In July of 2004, MtBE was detected in soil boring B-7 adjacent to a dispenser at all depths sampled from 20 to 55 feet. Releases from dispensers are common. Because under dispenser containment was present beneath the dispensers installed in 1999, it is likely that this contamination was associated with releases from the pre-1999 dispensers. The volume released is not known.

#### Tank and/or Dispenser Releases

Between July 2004 and April 2007, 16 borings, 3 monitoring wells, and one vapor recovery well were installed near the eastern edge of the facility. MtBE contamination was detected in many of the soil samples taken in the course of these investigations. Whether the releases that produced this contamination originated from the dispensers or the tank area could not be determined. Both dispensers and tanks are common sources of releases, and both dispensers and tanks are about equidistant from the contaminated area. The timing of the releases is not known, but they probably occurred between the fall of 1992 when MtBE was required to be in Fresno County gasoline<sup>3</sup> and the end of 2003 when MtBE was removed from California gasoline. The total volume released is not known, but approximately 400 gallons were recovered through soil vapor extraction.

#### Customer Spills

Small spills are common during vehicle fueling activities and no doubt occurred throughout the time this facility was in operation. Fueling spills may have contributed to the MtBE contamination present in the dispenser area at this facility.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> Ibid.