



WR9 2017

2016 SPILL SUMMARY - Appendix E 2016 GAO Monitoring Report

January 2, 2016 – T-583 Ultra Low Sulfur Diesel

At 2040 hr on January 2, the offsites supervisor discovered the sandpiper pump for the distillate rundown line going to T-583 was leaking product to the ground surface. All liquid was contained within an earthen dike within the tank farm. The line was immediately blocked in. It was estimated that 34 bbls of Ultra Low Sulfur Diesel was spilled to the ground surface. The onsite vacuum truck began removing liquid from the spill area removing 30 to 32 bbls. Field screening was conducted and soil contamination was excavated and 139,188 pounds of non-hazardous soil was placed into lined roll-off boxes and shipped offsite for disposal.

January 7, 2016 – WWTP Carbon Canisters

At 2300 hr on January 7, wastewater operators were back washing the south carbon canister when wastewater was released from the rupture disk. A blocked valve downstream of the canister created pressure greater than 75 psi causing the rupture disk to rupture. The release duration was 20 minutes with an average flow of 96.6 gpm. Approximately 1,932 gallons (46 barrels) of wastewater was released. The wastewater filled the earthen dike containment and subsequently overflowed allowing the wastewater to travel downhill toward Pond EP-1 but not entering EP-1. A sample of the spilled liquid was collected and submitted to Westerns onsite lab which showed a benzene concentration of .45 mg/l. A vacuum truck was used to remove the treated wastewater from the affected area at the WWTP around the carbon canister containment area and the sloping downhill area. The vacuum truck removed 27 bbls from the containment area and an additional 5 to 7 bbl from the area downhill of the carbon canisters. On January 11, 2 to 3 inches of soil was removed from the area north of the containment structure and the lower level. Four cubic yards of soil was excavated and placed into a roll off box and sent offsite for disposal.

February 5, 2016 – T-714 FCC Feed Tank Overflow

At 0415 hr on February 5, the pumper gauger observed T-714 overflowing. Valves were blocked in and product was rerouted to T-701. The onsite fire department sprayed a blanket of foam and water over the entire affected area. A contract vacuum truck began removing liquids until further assessment could be determined. The cause of the release was failure of Pumper Technicians to identify and follow red zone procedures regarding safe fill height. The worst case volume released was 1,543 bbls of FCC feed. A contract company determined that in-situ solidification in roll off boxes would be required. The non-hazardous material (1,583.75 tons) was shipped offsite for disposal. Additional hot spot removal was conducted on August 10 and 31 and an additional 21.03 tons was disposed of offsite.

April 3, 2016 – Baker Tank – ASO Caustic Release

At 1145 hr on April 3, a load of caustic material from the API knock out drum was off loaded into a Baker Tank that was storing acid soluble oil. A chemical reaction occurred due to the mixing of incompatible wastes. The Baker Tank overflowed causing four barrels of the material to be spilled to the ground surface. The spilled material flowed south to the East Gate Road and then westward along the road. A vacuum truck removed the spill material from the ground and from within the Baker Tank plastic secondary containment. The remediation consisted of the initial remediation where six inches of soil was removed and placed into two roll-off bins and shipped offsite as a non-hazardous waste. Based on analytical results an additional excavation was required where an additional 6 inches of soil was removed and 19,480 pounds of soil was placed into a roll off box and disposed offsite.

June 1, 2016 – Alkylate Leak at Valve

At 1100 hr on June 1, Dexter was doing their valve and pump monitoring in the tank farm and found a small leak coming from a valve bonnet on the Pump Discharge to T-563 line. The line was depressured to T-563 and the leak stopped. One quarter gallon of alkylate reached the ground surface and was cleaned up by environmental.

June 12, 2016 – API Knock-out Drum Sump

At 1615 hr on June 12, hydrocarbon from the flare knock-out drum was being drained to the sump and one gallon leaked onto the ground and the remaining liquid was caught in a bucket. The small amount of stained soil was cleaned up by maintenance.

July 23, 2016 – T-106 Overfill Distillate Release

At 0900 hr to 0935 hr on July 23, during the KHT/DHT startup, T-228 was being transferred to T-106. In the process T-106 overfilled and 243 bbls of distillate spilled into the earthen containment. The containment also contained rainfall. A vacuum truck removed 286 bbls of distillate and water mixture which was recycled back to the WWTP. In late August soil cleanup was contracted out and a small bobcat was used with a vactor truck for the soils under the pipeline. Shovel work by hand was used for the tight spots. Some spill material got under the base of the tank and when the weather warmed up in September this material spread. This required an additional mobilization by the contractor who cleaned up the additional contaminated soil. Ten twenty cubic yard bins were filled with the soil (approximately 200 tons) and shipped offsite for disposal as a non-hazardous waste.

July 23, 2016 – PRV Oil/Water Release at GC Unit

The check valve on the 40# Steam to the Secondary Column failed, causing oil to back into the 40# steam header. The 40# steam PRV relieved causing a mixture of oil and steam that was released to atmosphere over the GAS CON unit, at 49 pounds for about 10 minutes. The total release was 13 bbl of which 1.5 bbl reached the ground surface while the rest stayed within the

unit on concrete and equipment. The maintenance department cleaned up the oil off the ground surface. Analytical indicates some soil removal will still be required in this area.

August 18, 2016 – Sewer Cup Overflow SWS Unit

At 0145 hr on August 18, an Operator discovered hydrocarbon and water mixture coming out of the sewer cups in the sour water stripper unit. St Run Water Wash level controller was found to be open possibly due to plugging in the bridle level controller, it was blocked in and eventually sewers stopped running over. AFFF foam was spread over the affected area to prevent fire danger. The release was estimated to be Straight Run/H₂O mixture of approximately 200 gallons. A WO was written for maintenance to clean up soil. Cleanup has not been completed and environmental will now take charge of cleanup using third party.

August 23, 2016 – CTI Truck Hydrocarbon Overflow

At 1000 hr on August 23, Approximately 5 gallon of hydrocarbon over flowed off CTI's truck through the air valve that is located on top of the truck. Approximately 5 gallons of hydrocarbon leaked from T-35 to the south side of the lab building. The CTI truck was stopped and the truck operator was notified. The hydrocarbon was cleaned up and the truck valve was checked.

September 30 – Silver Strip Additive Cooling Tower

At 1920 hr on September 30, the Off-Sites supervisor was picking up some silver strip additive at cooling tower after unit operator filled buckets. While picking up a 5 gallon bucket, the handle broke on bucket spilling contents on ground. The spill was cleaned up.

October 5, 2016 – GE SPECAID Tote Leak

At 1245 hr on October 5, a tote of GE SPECAID 8Q5352ULS had a faulty valve and 1/2 gallon of chemical released to the ground (asphalt) at the warehouse yard. The chemical was mixed with oil dry and placed into a drum for shipment offsite as a hazardous waste.