



NRC 1158584, Pelham Pipeline Spill Pelham, Shelby County, Alabama

SITUATION REPORT #14

1800 CDT, September 23, 2016

INCIDENT SUMMARY

On September 9, 2016, at 1359 hours CDT, Colonial Pipeline Company (CPC) reported a gasoline spill from a 36" below ground pipeline to the National Response Center. The gasoline traveled overland for approximately 500 feet to a pond that feeds into Peel Creek (which is a tributary of the Cahaba River).

CPC initially reported to the responding OSC that between 1,000 and 2,000 gallons of gasoline entered the pond, but they were unsure of a total release volume. The spill volume has since been estimated to between 6,000 barrels (bbls) and 8,000 bbls (252,000 gallons – 336,000 gallons).

Alabama Department of Environmental Management (ADEM) and Environmental Protection Agency (EPA) are integrated into Unified Command and are coordinating with State and County Agencies. An Incident Command Post is being operated out of Hoover, Alabama.

PUBLIC AFFAIRS

PIO Pinkney continued to operate within the Joint Information Center.

INCIDENT MANAGEMENT AND STAFFING

OSC Chuck Berry remains integrated in Unified Command (UC).

OSCs Huyser and Swanson remain integrated in the EPA position within Operations. OSC Franco demobilized from the site today.

PIO James Pinkney coordinated information requests in the Joint Information Center (JIC)

OSCs, the United States Coast Guard (USCG) Gulf Strike Team (GST) remain embedded in the Operations Sections.

Superfund Technical Assessment and Response Team (START) remains embedded in the Environmental Unit.

Current number of EPA Personnel Assigned: 4

Current number of United States Coast Guard Gulf Strike Team (USCG GST) Members: 4

Current number START Personnel: 1

Total number of response Personnel: 712

CURRENT RELEASE AND RECOVERY ESTIMATES

Current Release Estimate – 6,000 bbl to 8,000 bbls

Recovery/Loss to the Environment Volumes:

| Fuel/Waste Recovery | Volume Since Last SITREP | Total Volume to Date |
|--------------------------------------------|---------------------------------|-----------------------------|
| Recovered from Pond #2 | 0 gallons | 85,493 gallons ¹ |
| Loss to the Environment due to Evaporation | 0 gallons | 276,265 gallons |
| Bound in the Soil | TBD | TBD |
| Petroleum Contact Water | | 321,384 gallons |
| Petroleum Contaminated Soil | | 40 tons |

Notes:

¹ Operations reduced product recovery estimates by 1,362 gallons on September 19, 2016 and 1,667 on September 21, 2016. CPC implemented a more accurate way of tracking recovered product by measuring product thickness in the storage tank after allowing it to settle for 3-hours. CPC allowed the storage tank to settle for 12-hrs on September 21, 2016 which caused the additional reduction. Product measurements will be recorded once per day, in the morning.

CURRENT OPERATIONS

1) Product Recovery and Removal

- UC has ended night operations. However, CTEH continues 24-hour air monitoring operations, and the security patrol will continue indefinitely.
- PHMSA has requested to review the pipeline excavation plan, stormwater management plan, and pipeline bypass monitoring checklist (i.e. to be performed while bypass is in operation).
- Crews continued product recovery activities from three collection points. Crews are currently using boom to corral fuel into smaller areas, making the fuel thicker and thus easier to recover. Crews managed booms and used air movers to channel materials to recovery point 2a.
- The Planning Section, in conjunction with Operations, is working to develop a plan to address the culvert between Pond 2 and Pond 3. EPA and ADEM recommend sealing the culvert and installing an air sparge gate near the discharge point of Pond 3 to Peel Creek. EPA and ADEM continue to work closely with Operations and Planning to develop the most effective path forward that also supports the long-term remediation plan for the site.
- CPC began installing diffuser equipment (two strands installed to depth) near the discharge point of Pond 3 to begin remediation activities there. CPC continues to coordinate with ADEM regarding air, groundwater, and surface water permitting options. Analytical results for water column samples collected from Pond 3 are being used to further evaluate removal options.
- The ravine leading from the leak site to Pond 2 contains saturated soil, ponded product, and multiple seeps from rock fissures. Removal tactics are difficult to evaluate as repeated entries to assess the area have been forced to turn back due to elevated vapor levels. CPC began

spraying a vapor suppressant in the ravine to provide a pathway for personnel to clear vegetation and implement removal options there. CPC is considering the use of water flushing/rinse operations as a removal option, including the placement of additional boom in Pond 2 at the mouth of the ravine to assist recovery operations.

- Crews enhanced the access road to recovery point 2a, and continued product recovery.
- Crews enhanced the access road to recovery point 2b to provide for boat access to Pond 2. CPC is working to collect water column samples from Pond 2 which will be evaluated along with similar samples collected from Pond 3 to assess removal options.
- Crews continued flushing the pipeline along with stopple washing activities, which included the recovery of approximately 4,500 gallons of product; subsequently water with minimal sheen was recovered from the pipeline, possibly indicating the completion of gasoline recovery from the pipeline.
- ADEM representatives met with Planning and Operations to discuss the timing of the pipeline displacement plan (which will result in additional fuel discharged to the pond), the excavation of impacted soil from the leak site, the removal of oil from the ravine, and recovery on the pond. Also discussed was how each of these would impact the long-term remediation plan for the site. CPC will continue to coordinate with ADEM regarding air, groundwater, and surface water permitting options, including another meeting scheduled for Monday September 26, 2016.
- Planning continues to push updates to the mobile viewer application detailing product recovery progress and exclusion zones.
- The September 10 situation report inaccurately stated that the spill was reported by the property owner who had last visited the site two weeks prior. A more accurate statement is that the spill was discovered by an Alabama Surface Mining Commission inspector as part of the regular inspection schedule. It is unknown what that schedule is at this time.

2) Environmental Sampling and Impacts

a. Air Monitoring

- Work interruptions due to excessive benzene and LEL readings were minimal during this operational period. Today's VOC's peaked at 189.9 parts per million (ppm) at the release site; benzene peaked at 3.1 ppm at Stopple 2; and LEL peaked at 52% at the main staging area frac tanks.

b. Surface Water

- Water column samples collected from Pond 3 continue to indicate concentrations of BTEX and GRO.

c. Wildlife Impacts

- The CPC environmental consultant is responsible for identifying and documenting impacted wildlife. During this operation period, teams did not identify any additional impacts to wildlife.
- To date, seven mammals including a rabbit, two raccoons, one fox, one coyote, one otter, and one armadillo have been impacted; four reptiles (turtle) have been impacted; and two birds including a hen wood duck and a white bird have been impacted. The white bird remains in a restricted area and teams have not been able to collect it; however, it is assumed to be an egret.

3) Health and Safety Oversight

- On September 20, 2016, the site health and safety officer re-evaluated current site conditions and determined flame retardant clothing (FRC) and air monitoring escorts are no longer required for activities in Peel Creek and the staging area. Air monitoring and FRC requirements remain unchanged for the remainder of the work area.
- USCG GST continued to provide health and safety oversight of both day and night operations. The initial USCG GST team members are overlapping with their replacements during this operation period.
- The Federal Aviation Administration (FAA) continues to maintain an aviation floor restriction of 2,500 feet, but the radius around the work site has been reduced to 1 mile. The restriction is in effect until September 28 at 1700. Helicopters and drone activity were causing hazardous conditions for the workers. The helicopters were pushing the gasoline vapors into the staging areas and into work zones. The drones were flying low over the gasoline on the pond and were a potential ignition source.

4) Restoration of Services

- Restoration of service was successfully restarted through Line 1 on September 21.

5) Remediation Planning

- Plans continue to be developed and will be reviewed by UC when ready.
- Operations completed staging of all necessary equipment (with the exception of personnel) on the Cahaba River in the event a catastrophic release occurs.
- Planning has developed two hydrogeological assessment plans - one to address the emergency phase and one to address the remediation phase. UC finalized the emergency phase plan on September 20, 2016. The emergency phase of the plan continues and expands assessments and identification of geologic preferential pathways to the Cahaba River.
- CPC is working in conjunction with ADEM to develop the remediation phase plan. EPA, CPC, and ADEM met today to discuss planning, identification of ADEM personnel, and necessary plans and permits which may be needed for remediation activities.
- CPC will continue to coordinate with ADEM regarding air, groundwater, and surface water permitting options, including another meeting scheduled with ADEM for Monday September 26, 2016.
- Planning continues to gather information and develop a plan for identifying and assessing private drinking water wells that were not on the County and State inventory list.

6) Emergency Fuel Waiver

- On September 14, EPA issued a [waiver](#) for federal low volatility requirement of 7.8 psi under the Clean Air Act for certain markets in the southeast in an effort to further mitigate potential supply disruptions. The high ozone season ends at 11:59, September 15, 2016, and this waiver allowed the use of gasoline above 7.8 psi in TN and GA before that period.

- On September 16, EPA issued a [second waiver](#) to allow for reformulated and conventional gasoline (commingling) to be sold in markets that may be impacted by the disruption in supply caused by the disruption in service to Colonial Pipeline Line 1.
- On September 21, CPC resumed service through the bypassed line, which will relieve shortages in most areas within a few days.

PLANNED RESPONSE ACTIVITIES

The following activities are planned during the next operation period:

- Continue to participate in UC.
- Monitor removal activities.
- Participate in the Joint Information Center.
- Prepare for and coordinate a transition to a removal phase.
- START will conduct data validation and provide data summary tables for surface water samples collected on September 22 from Pond 3, Peel Creek, Cahaba River, and the confluence of Cahaba River and Peel Creek on a daily basis.
- CPC will continue recovery of fuel from Pond 2.
- CPC will begin diffuser operations in Pond 3 to bring contaminant levels under ADEM discharge limits.
- CPC will implement an impacted-water boat operations plan to assist with efficient boom movement, access shoreline areas of Pond 2, and collect water samples at depth.
- Operations will rinse the bypassed line and charge with nitrogen.
- Develop and execute a ravine-removal plan.
- CPC will construct a pipeline from Pond 1 to Peel Creek in order to drain Pond 1 for retention capacity during a rain event. The intention is to eliminate the amount of water reaching Pond 2.
- Continue removal of fuel from the plugged pipeline (between the by-pass tie-in points).

SITUATIONAL REFERENCE MATERIAL



Crews corralled product on Pond 2 at recovery point 2a to better remove it via ray skimmers.



Drainage near the top of the ravine that received drainage from the damage pipeline.



Seep in the top of the ravine that received drainage from the damage pipeline.