



MEMORANDUM

DEPARTMENT OF GAME & FISH

TO: Alexa Sandoval

FROM: Eric Frey

DATE: April 28, 2017

RE: Cimarron River fuel spill situation synopsis

As per your request this memorandum summarizes the Cimarron River fuel spill situation including the Department's response.

On December 27, 2016 a Fronk Oil tanker truck carrying unleaded gasoline and diesel was involved in a crash near mile marker 290 on NM Highway 64 within the Colin Neblett State Wildlife Area. The tanker overturned into the Cimarron River and released approximately 1,100 gallons of unleaded gasoline and diesel into the river. Emergency services including the Colfax County HAZMAT Team responded immediately. Fronk Oil Company dispatched D&H United Fueling Solutions (contractor) which arrived on site the same date and initiated fuel containment and clean up. The contractor utilized a vacuum truck to siphon fuel on top of the water surface and deployed absorbent booms to contain the fuel. Field Operations staff was also on site the same date to monitor the situation.

Almost immediately the Department was communicating with the New Mexico Environment Department (NMED) in response to the spill. The NMED Hazardous Waste Bureau has lead clean-up oversight with support from the Department and New Mexico State Parks.

On December 29, 2017 Fisheries Management Division (FMD) and Wildlife Management Division staff conducted a site visit and observed dead fish, a heavy oil sheen, and a prevalent fuel odor from the crash site downstream about 400 yard to a large beaver pond.

On January 4, 2017 FMD staff conducted an onsite visit to investigate the extent of the fish kill and to monitor the situation. We observed 21 dead brown trout and 5 dead white suckers in a 200 yard reach just downstream of the crash site. We believed most of the dead fish washed downstream into the beaver ponds that were covered with ice. Also we did not find any live macroinvertebrates within this reach. It appeared the fuel spill caused a complete fish and macroinvertebrate kill for about 400 yards. Based on

our historic fish population surveys in the Cimarron River we estimated the fuel spill killed about 300-400 trout. We also observed heavy oil sheen on the water surface and on the river substrate. There was a very strong diesel fuel odor in this reach. On the same date we detected a prevalent fuel odor at Perryville Fishing Area (1.5 miles downstream) and only a slight fuel odor at the Clear Creek trailhead area (2 miles downstream). Based on our observations and with your authority and approval the Department enacted a temporary closure from mile marker 291 downstream to the Perryville Fishing Area. The closure included about 1.5 of the 8 river miles within the wildlife area. The purpose of the closure was for public safety concerns during clean-up efforts.

Clean-up efforts by the contractor continued from the day of the crash and are ongoing to date. The contractor has been on-site at least once a week replacing containment booms, conducting water quality monitoring, removing contaminated soils, and reclaiming the area. Department staff has conducted site visits 1 to 2 times per month to monitor clean-up efforts.

On March 6, 2017 staff from FMD and NMED Surface Water Quality Bureau conducted a fish population survey downstream of the large beaver pond. The survey site was located about 600 yards downstream of the spill site. During the survey we observed several live and healthy brown trout, rainbow trout, and white suckers. The fish population appeared normal for the time of year and available habitat. There was still a noticeable fuel odor at the spill site and at our survey site. We also collected fish muscle tissue at 4 sites to monitor for fuel containments. The 4 sites included:

- Control Site-located about 1.6 mi. upstream of spill site and immediately upstream of the Tolby Campground bridge
- Horseshoe Mine Site-located about 0.4 mi. downstream of spill site and downstream of beaver pond complex
- Perryville Site-located about 1.7 mi. downstream of spill site and adjacent to the Perryville Fishing Access Area parking lot
- Black Jack Site-located about 2.8 mi. downstream of spill site and adjacent to the Black Jack Fishing Access Area parking lot

NMED submitted the muscle tissue samples the same date to ALS Labs to be tested for Polycyclic aromatic hydrocarbons (PAHs). PAHs are compounds found in petroleum based fuels and can be accumulated into organisms. PAHs are the compounds typically monitored for fish consumption advisories associated with fuel spills.

On April 12, 2017 NMED received the fish tissue results which showed moderate to high contamination of PAHs. On April 17, 2017 FMD staff met with NMED and New Department of Health (DOH) to discuss the tissue results. DOH calculated a risk health assessment for fish consumption which showed consumption recommendations as low as one-half meal per month. The group agreed that another fish tissue testing should occur immediately. Based on these results and in the interest of public safety the Department decided to keep the closure in place until fish tissue testing could be updated.

On April 13, 2017 FMD staff conducted an on-site visit to inspect the clean-up efforts. The contractor finished most of the clean-up and reclamation earlier that week and requested a site visit by the Department. The area was in much better shape from our visit in early March. We could not detect any evidence of fuel or fuel odor. We did observe some trash (rubber gloves, rags, and absorbent pads) left by the contractor through the river reach. We contacted NMED and the contractor cleaned up the trash earlier the next week.

On April 19, 2017 FMD staff collected the second series of fish for tissue testing and transferred them to NMED. NMED submitted the fish tissue to ALS Labs the same date and results are pending. Due to the complexity associated with PAH testing it takes about 3 to 4 weeks before results are available. Results should be available in mid-May. As soon as results are available DOH will recalculate a health risk assessment and we will reconvene with DOH and NMED. Assuming the results are lower and based on recommendations from DOH and NMED we can retract the closure. We're hoping this occurs before Memorial Day weekend.

Lastly, the Department has commenced stocking in the Cimarron River on April 25, 2017. We stocked 2,425 catchable rainbow trout in the wildlife area and the Gravel Pit Lakes. We will refrain from stocking within the closure until it has been retracted.

Please let me know if you have any questions.