Kiana Water Treatment Plant Diesel Release

SITREP #: 3 and Final

SPILL #: 15389933501

TIME/DATE OF DISTRIBUTION: 2:00 PM, December 17, 2015

POTENTIAL RESPONSIBLE PARTY (PRP): City of Kiana and/or Alaska Village Electric Cooperative, Inc. (AVEC)

INCIDENT LOCATION: The spill occurred at a fuel supply tank for the water treatment plant located in Kiana, Alaska.

TIME/DATE OF SPILL: December 1, 2015

HOW/WHEN SPILL WAS DISCOVERED: At approximately 7:00 PM on December 1, 2015 it was discovered that the fuel supply tank was overflowing with diesel fuel.

TYPE/AMOUNT OF PRODUCT SPILLED: The City of Kiana is estimating approximately 2,400 gallons of diesel spilled onto the ground at the supply tank.

CAUSE OF SPILL: The cause of the spill is currently under investigation.

SOURCE CONTROL: Source control has been established. The fuel transfer was stopped and the tank is no longer spilling diesel.

RESPONSE ACTION: Water plant operators and city staff responded after the spill was discovered. The road that runs along the water treatment plant was blocked off and a dike was constructed to prevent the fuel from flowing downhill. City equipment was used for response actions. Six to eight local responders provided response support. An ADEC responder was on site until December 15, 2015 assisting with cleanup tactics, providing technical assistance, and overseeing response actions. ADEC departed Kiana after the contaminated snow removal was complete.

Approximately 800 gallons of pooled fuel has been recovered and returned to service for use. The spill area was delineated by ADEC and local responders. Responders separated “clean” snow from “contaminated” snow around the fuel tank, adjacent buildings, and aboveground utilities. Uncontaminated snow was removed from the hot zone and placed in piles that will not run off into the area during breakup.

Contaminated snow was hand shoveled near the building and moved to a common pile in the “hot zone” with tub sleds. Responders used a skid steer in the hot zone to load contaminated snow into the bucket of a front end loader, which was transported about 100 yards into the lined and bermed secondary containment area of
the city's old tank farm. Snow was dumped on a common pile where it was picked up by an excavator and loaded into two out-of-service fuel storage tanks for contaminated snow melting during the thaw season. Valves were added to the lower bung openings of the tanks for water treatment and fuel recovery after the snow melts. Two fish totes were also used to store the contaminated snow for melting. The resultant fuel/water mixture will be managed according to a waste management plan.

Barricades remain on the roads blocking traffic from the area affected by the release. Remaining contamination in frozen gravel and soil will be excavated and managed according to the work plan as the cleanup enters project management phase.

RESOURCES AFFECTED: There are two wells for the City of Kiana that are located approximately 800 feet indirectly downhill from the spill.

FUTURE PLANS AND RECOMMENDATIONS: The City of Kiana and AVEC project managers were requested to submit a water management plan that will address water diversion and passive collection of any remaining fuel that migrates during spring break-up. The plan will be reviewed for approval by ADEC and the USEPA. Removal or treatment of contaminated soils will be evaluated and completed during the summer months.


UNIFIED COMMAND AND PERSONNEL:
- City of Kiana Project Manager: Nelson Walker
- AVEC Project Manager: Bill Stamm
- SOSC: Tom DeRuyter, ADEC
- FOSC: Bob Whittier, EPA
- Field SOSC: John Ebel, ADEC

TIME/DATE OF THE NEXT REPORT DISTRIBUTION: This is the final situation report.

FOR ADDITIONAL INFORMATION CONTACT: Candice Bressler, PIO, ADEC, (907) 465-5009
Tom DeRuyter, ADEC, (907) 451-2145
[dec.alaska.gov/spar/ppr/response/sr_active.htm]
Figure 1. City tank is on right behind light plant; and the loader is moving contaminated snow from the “hot zone” to the vertical tank melting area. [Photo: ADEC/John Ebel]
Figure 2. Backhoe moving contaminated snow into two vertical storage tanks for melting. [Photo: ADEC/John Ebel]

AGENCY/STAKEHOLDER NOTIFICATION LIST: Please refer to the first situation report distributed December 3, 2015 for the agency/stakeholder notification list. The link to the first situation report can be found in the Additional Information box above.