

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION Division of Spill Prevention and Response Prevention and Emergency Response Program

SITUATION REPORT

Repsol Q2 Pad Gas and Mud Release

SITREP # 22

SPILL NUMBER: 12399904601

TIME/DATE OF SPILL: Repsol reported the incident to ADEC at 10:29 a.m. on February 15, 2012.

TIME/DATE OF SITUATION REPORT: 3:30 p.m. on March 16, 2012

TYPE/AMOUNT OF PRODUCT SPILLED: Repsol estimates that approximately 42,000 gallons (1,000 barrels) of fresh-water-based drilling mud were released to the ice drilling pad and adjacent snow-covered tundra. An unknown amount of gas has been released. Drilling mud is used to lubricate the drill, control formation pressure, and remove cuttings from the bore. No oil was spilled during the release event.

INCIDENT LOCATION: Qugruk #2 pad (Q2 pad), on the Colville River Delta, approximately 18 miles northeast of Nuiqsut and approximately 150 miles southeast of Barrow (70° 27' 19" N, 150° 44' 52" W).

CAUSE OF SPILL: Repsol contractor Nabors Drilling was drilling an exploratory well when the drill penetrated a shallow gas pocket at a depth of 2,523 feet, resulting in a gas kick. The gas kick drove drilling mud out of the well and through the gas diverter onto the ice pad and adjacent snow-covered tundra. The gas diverter is a pipe that extends approximately 75 feet from the drilling rig toward the south edge of the pad. Additional mud was pumped into the well in an attempt to control it, but that mud was also forced out by the gas.

POTENTIAL RESPONSIBLE PARTY (PRP): Repsol E&P USA

RESPONSE ACTION: Two cement plugs have been set in the well and pressure tested. Although the well plug and abandonment efforts are ongoing, it has been determined that it is safe to begin the cleanup activities. Field crews are ready to begin the site delineation, which will give information critical for decision making on appropriate removal actions. The information gained during the delineation operation will be used to finalize the cleanup plan. The temperature on site this morning was -50°F. Field crews are on a weather hold until the temperature moderates to -45°F at which point they will begin the delineation operation.

Repsol reports that a total of 2,189 barrels (91,938 gallons) of liquids (thawed drilling mud and water) have been manifested and shipped offsite to date. Much of the liquid collected is condensed water from the steam used to thaw and clean the rig. A total to 2,363 cubic yards of solid waste (frozen drilling mud and downhole materials) have been manifested and shipped offsite to date.

SOURCE CONTROL: The well ceased flowing at about 9:00 p.m. on February 16. Two cement plugs have been set to date and additional plugs are planned. AOGCC considers the well to be controlled enough to allow field crews to work in the plume area.



RESOURCES AFFECTED: Snow-covered tundra and ice pad. Drilling mud can affect tundra plants by changing soil pH and salinity. Brackish water produced by the well may also increase soil salinity.

FUTURE PLANS AND RECOMMENDATIONS: Information from the delineation operation will be used to finalize the cleanup plan. ADEC will monitor the site delineation and cleanup operations.

UNIFIED COMMAND AND PERSONNEL:

Incident Commander: Jeremy Michels, O'Brien's Response Management

- S.O.S.C.: Tom DeRuyter, ADEC F.O.S.C.: Matt Carr, EPA L.O.S.C.: Gordon Brower, North Slope Borough Field SOSC: Wes Ghormley, ADEC
- WEATHER FORCAST:Tonight: Mostly cloudy with occasional flurries and patchy fog. Lows 37 to 47 below.
Southwest winds to 10 mph.
Tomorrow: Mostly cloudy. Highs 27 to 32 below. Southwest winds to 10 mph.

TIME/DATE OF THE NEXT SITUATION REPORT: As the situation warrants.

FOR ADDITIONAL INFORMATION CONTACT: Ty Keltner, Public Information Officer, ADEC (907) 465-5009

Photographs and other spill information will be available for viewing at: <u>http://www.state.ak.us/dec/spar/perp/index.htm</u>

AGENCY/STAKEHOLDER NOTIFICATION LIST: See previous sitrep.



Piping used for moving mud and cement to the well for the well control operation. ADEC Photo.