

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 # 9

SPILL NUMBER: 12399904601

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

TIME/DATE OF SITUATION REPORT: 5:00 PM on February 22, 2012

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

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 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: Response crews continue twenty-four hour operations. Two large heaters pump hot air into the drilling rig for thawing necessary equipment. Steam thawing and removal of drilling mud is focused on spilled material that blocks access to drilling rig components needed for the well-kill operations. Complete rig cleanup will occur after the well has been successfully killed and secured.

Four supersucker trucks are being used to remove thawed materials. A total of 117 bbls of thawed drilling mud and water have been removed from the site for offsite disposal.

Crews are inspecting drill pipe and effecting repairs where needed. An inspection camera was mobilized to the site to facilitate additional drill pipe inspection. Repsol reported that 200 gallons of hydraulic fluid was lost out of the hydraulic system on the drill rig. The fluid drained to the sump on the rig and will be removed with the drilling mud. Crews continue to make repairs to the hydraulic system.

Construction of the 200-foot-by-200-foot ice pad extension is complete, and two ten-man berthing camps will be relocated to this temporary ice pad.

Repsol staff delivered a draft well-kill plan to the Alaska Oil and Gas Conservation Commission (AOGCC) for review. Once comments are received from AOGCC the plan will be provided to the Unified Command for review. The AOGCC must approve the well-kill plan before it can be implemented.

SOURCE CONTROL: The well ceased flowing at about 9:00 PM on February 16. Preparations for a well-control operation are ongoing.

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: Cleanup cannot safely begin until the well is under control. The well-control team will give cleanup personnel approximately 24-hours notice in advance of completion of the well-control operation. Plans are in place for delineating and cleaning up the spill and necessary personnel crews and equipment are on standby. A reduced incident management team will continue to monitor the operation from Anchorage, as well as two ADEC responders who will make regular well site visits. When cleanup operations are imminent, additional staff will be recalled.

UNIFIED COMMAND AND PERSONNEL:

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

F.O.S.C.: Matt Carr, EPA S.O.S.C.: Tom DeRuyter, ADEC L.O.S.C.: Gordon Brower, North Slope Borough Field SOSC: Wes Ghormley, ADEC

WEATHER: Tonight: Cloudy, scattered snow showers in the evening, flurries after midnight; areas of fog; lows around 18 below; light winds.

Thursday: mostly cloudy with flurries; areas of fog; highs 11 below to 16 below; southwest winds around 10 mph.

TIME/DATE OF THE NEXT SITUATION REPORT: 4:00 PM on February 23, 2012

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: This situation report was distributed to the agencies listed on the standard distribution list, which includes the governor's office, Senator Begich's office, the State Emergency Operatioons Center, and the federal agencies DOI, NMFS, and USFWS. This situation report was also distributed to the following agencies and stakeholders:

AGENCY /	NAME	SENT VIA	ADDITIONAL	TELEPHONE	FAX
STAKEHOLDER			INFORMATION		
Repsol	Jan Sieving	email			
Nabors Drilling	Denny Smith	email			
AOGCC		Fax			276-7542
ADNR	Melissa Head/	Fax	melissa.head@alaska.gov	451-2719/	451-2751
	Brian Jackson/		brian.jackson@alaska.gov	451-2732/	or
	Sean Willison		sean.willison@alaska.gov	451-2724	659-2965
ADNR Div of Oil & Gas	Bill Barron		bill.barron@alaska.gov		
ADF&G	Jack Winters	Fax	jack.winters@alaska.gov	459-7285 or	459-7303
	Todd Nichols		todd.nichols@alaska.gov	459-7279	
EPA	Matt Carr/Robert Whittier	Fax	Carr.matthew@epa.gov or	271-5083 or	271-6340
			whittier.robert@epa.gov	271-3247	
Attorney General Office	Cam Leonard/	Fax	Cam.leonard@alaska.gov	451-2811 or	451-2985/
-	Steve Mulder		Steve.mulder@alaska.gov	269-5100	278-7022
Governor's Office	Parnell/Treadwell	Fax	Sean.parnell@alaska.gov	451-2920	451-2858
(Fairbanks)			Mead.treadwell@alaska.gov		
Lt. Governor's Office	Parnell/Treadwell	Fax	Sean.parnell@alaska.gov		465-5400
(Juneau)			Mead.treadwell@alaska.gov		
Senator Murkowski's	Chief of Staff	Fax	North Slope only	(202) 224-6665	(202) 224-
Washington DC Office					5301
Senator Murkowski's Office		Fax	North Slope only	456-0233	451-7146
in Fairbanks					
North Slope Borough	Charlotte Brower	Fax	Mayor	852-0200	852-0337
North Slope Borough	Rhoda Ahmaogak	Fax	Planning Director	852-0440	852-5991
Senate T/ Nome	Donnie Olson	Fax	Nome 5/16-1/09	465-3707	465-4821
			Juneau 1/10-5/15		
House 40/ Kotzebue	Reggie Joule	Fax	Kotzebue 5/16-1/09	465-4833 or	465-4586
			Juneau 1/10-5/15	(800) 782-4833	



Overflight photo from February 18 shot from the North Slope Borough helicopter showing the dark plume deposited on the tundra from the well blowout at Repsols Qugruk 2 well site. The plume consists of drilling muds and down-hole sediments.



Large heaters, in red trailers, pump hot air into the drilling rig to assist in unthawing the hydraulic system. Heavy slabs of released drilling muds lay in the foreground.