

Punxsutawney Hunt Club 36H Timeline

Wednesday – 1/13/10	
	Construction of Punxsutawney Hunt Club 36H initiated.
Saturday – 1/16/10	
	Punxsutawney Hunt Club 36H “spudded” (i.e., drilling began).
Wednesday – 3/17/10	
	Drilling and construction of Punxsutawney Hunt Club 36H completed.
Thursday – 4/22/10	
	Hydraulic fracturing set-up begins.
Sunday – 5/16/10	
	Hydraulic fracturing begins.
Thursday – 5/27/10	
	Hydraulic fracturing operations conclude.
	BOP testing.
Saturday – 5/29/10	
	Well completion operations begin.
Tuesday – 6/1/10	
	C.C. Forbes rig moved to site of EOG Resources well – Punxsutawney Hunt Club 36H – to assist with post-frac clean-out.
Thursday – 6/3/10 – Day of the incident	
6:35 pm	The stripper rubber began showing signs of wear and fluid was leaking around the tubing string.
6:40 pm	Pipe rams of the BOP were shut to isolate flow. Rams initially sealed and isolated all flow. Pipe was then pulled through the pipe rams to position for a stripper rubber change out. Pressurized fluid and gas began spraying around the pipe rams and stripper rubber onto the rig floor. At this point seal integrity was compromised on the pipe rams of the BOP.
6:45 pm	EOG notifies its Senior Completions Engineer.
6:50 pm	EOG began attempts to bleed off pressure through the choke manifold and pumping brine downhole to attempt to stop the flow and lower well pressure. Flow decreased but did not stop. Pressure then slowly began to increase.
7:10 pm	EOG Production Manager notified.
7:30 – 8:00 pm	Well control lost.
8:00 pm	EOG Safety and Environmental Manager notified.

Punxsutawney Hunt Club 36H Timeline

9:00 pm	EOG closes blind rams in the BOP to minimize flow to surface. Potential ignition sources shut down, including containment sump pumps and personnel moved off location until daylight. EOG initiates Crisis Management Plan by notifying the General Manager and Division Vice President.
9:33 pm	EOG left message with DEP SWRO Oil & Gas Inspector on office cell phone to let him know they had a potential well control situation. No call to DEP Emergency Response.
9:48 pm	EOG left 2nd message for DEP SWRO Oil & Gas Inspector on his personal cell phone. No call to DEP Emergency Response.
10:18 pm	EOG left message on office phone with DEP NCRO O&G Inspector of a potential well control issue. No call to DEP Emergency Response.
10:26 pm	EOG tried to notify County Sheriff of a potential well control issue.
10:44 pm	EOG tried a different number for County Sheriff (out of service). (In PA Sheriff not responsible for emergency response.)
10:48 pm	Clearfield County 911 received a call from EOG.
11:02 pm	Fire Department notified by 911.
11:03 pm	Clearfield County Emergency Management Agency (CEMA) notified. Coordinates. 911 dispatches only.
<i>Friday – 6/4/10 – 2nd day of incident</i>	
12:10 am	PEMA notified by Clearfield 911.
12:55 am	PEMA paged DEP NCRO.
1:04 am	DEP NCRO Emergency Response Coordinator returns call to PEMA.
1:04 – 1:30 am	DEP NCRO Emergency Response Coordinator makes multiple calls to County EMA, Len Ferguson (EOG), and Jeff Leitzel (EOG) to gain assessment of situation.
Between 1:30 and 2:00 am	Jeff Leitzel returns DEP NCRO Emergency Response Coordinator's call.
2:00 am	DEP NCRO Emergency Response Coordinator dispatches DEP's NCRO ER Team member/Sanitarian Supervisor to site.
2:10 am	DEP NCRO Emergency Response Coordinator notifies DEP Central Office Emergency Response Liaison Officer.
3:00 am	Well control 1st responder arrives from, Boots & Coots, the first well control specialty company.
3:05 am	DEP NCRO Emergency Response Coordinator notifies OGI Supervisor, DEP BOGM. OGI Supervisor heads to well site.
3:10 am	DEP NCRO Emergency Response Coordinator calls PEMA EOC to update them on the situation.
4:00 am	DEP NCRO ER Team member arrives at staging area.
4:04 am	Fire Department dispatched to the site.
4:05 am	PEMA holds a conference call on the incident with PEMA Western Area, PA F&BC, Clearfield CEMA and DEP's DEP NCRO Emergency Response Coordinator. DEP NCRO Emergency Response Coordinator briefed the others on the situation.

Punxsutawney Hunt Club 36H Timeline

4:40 am	OGI Supervisor arrives at staging area at site.
4:51 am	Clearfield CEMA dispatched to the site.
4:55 am	Call from DEP Central Office ER Duty Officer, to DEP Central Office Liaison Officer to inform DEP Central Office that there was a 1 mile evacuation zone in place and that a PEMA conference call took place.
5:05 am	County EMA and Deputy Fire Chief arrived on site. CEMA contacted DCNR because there are several camps in the area. DCNR Forestry notified any camps in the area.
5:30 am	Containment trenches and sump pumps were prepared at DEP direction.
5:30 am	NCRO Regional Director contacts Acting Deputy Secretary for Field Operation by phone.
6:00 am	PEMA conference call – multi-agency coordination, including DEP.
6:03 am	Electric Company notified to shut of the electricity in the area.
6:25 am	DEP Central Office Liaison Officer notified Acting Deputy Secretary for Field Operations of the incident.
6:30 am	Acting Deputy Secretary for Field Operations notifies Secretary by phone.
6:33 am	DEP Central Office Liaison Officer sent email notification to DEP Executive Staff.
6:45 am	DCNR notified because they would be shutting down the road into the site.
6:55 am	PEMA notifies DEP Central Office Liaison Officer of EOC Level 2 Activation.
7:00 – (8:00 am)	PADEP representative and EOG personnel evaluated the scene and utilize gas detectors to test lower explosive limit levels on the perimeter of location. The test indicated the perimeter was a non-flammable environment.
7:55 am	DEP Central Office Liaison Officer arrives at PEMA EOC for incident coordination/communication.
9:00 am	The full team (4 people) from the 2nd well control specialty company, Wild Well Control, arrives on site (5 am scheduled flight arrival was rerouted from Dubois to Johnstown because of fog, delaying arrival 4 hours).
9:00 am	PEMA agency coordination conference call, on-site staff from EOG, DEP; DEP NCRO; DEP RCSOB; other state agencies participate.
10:45 am	DEP Water Quality Specialist, NCRO Oil and Gas Inspector arrive on location. Did sampling at 2 locations along with field meter testing.
11:30 am	EOG personnel confirmed no gas present at site and safe to re-start workover rig.
12:00 pm	Workover rig was re-started and after approximately 15 minutes, the hydraulics had enough air to be functional and the BOP rams were opened. This caused the tubing to drop into the wellbore. The frac valve was then shut and the well was secured.
12:00 pm	PEMA agency coordination conference call, on-site staff from EOG, DEP; DEP NCRO; DEP RCSOB; other state agencies participate.
12:15 pm	Well was secured, location cleanup activities began immediately.
2:45 pm	DEP Water Quality Specialist sampling at Parker Dam.
3:15 pm	Secondary frac valve was installed for added security.

Punxsutawney Hunt Club 36H Timeline

4:00 pm	DEP's Bureau of Investigation and OG Inspector at site and interview EOG's Gary Smith, VP; Jeff Leitzell, Completions Engineer; and Charley Kendrick, Resources Supervisor Consultant.
	EOG agrees to suspend all plug drill-out operations in Pennsylvania pending the conclusion of the incident investigation.
<i>Sunday – 6/6/10</i>	
1:30 pm	NCRO Oil and Gas Inspector arrives on PHC-36H well pad.
2:30 pm	Inspected BOP and other equipment with Charley Kendrick, confirmed that BOP was not to be moved until the Department gave authorization.
3:30 pm	Oversight of Environmental cleanup. Vacuum truck on location pulling any laying water on the pad.
4:00 pm	DEP met with Greg Shaffer, and went over what was being done on location.
5:00 pm	Tested 3 sampling points with field meter, 2 sumps around location, and sump at spring down slope of PHC 36H well pad, next to the PHC 2H well pad.
5:30 pm	Left location. Inspection report: 1892792.
<i>Monday – 6/7/10</i>	
	DEP's Bureau of Investigation interviewed Clearfield County EMA and 911 Center, Greg Shaffer, EOG Production Foreman, and Cody Keith, C.C. Forbes Deck Hand. C.C. Forbes' Dan Luzier, Foreman and Nick Horchak, Deck Hand. Interviews terminated by C.C. Forbes.
8:00 am	DEP arrives on location.
10:00 am	Sampled water at spring. Other sumps have stopped pumping, no water draining any longer, but will be monitored and pumped as necessary.
10:30 am	Fish and Boat Commission on site, escorted to sumps and spring. Met with DEP Water Quality Specialist who was sampling.
12:30 pm	BOGM Director escorted around location.
1:00 pm	OGI Supervisors conducted Inspections of PHC 31H & 21V, where drilling rigs were shut down. Inspection reports 1892795, 1890200, 1889896.
1:00 pm	DEP Inspectors go to well sites for operational assessment – PHC 36H, 31H and 21V.
	DEP attempts to reach C.C. Forbes management.
	DEP conference call with EOG management.
	DEP Orders EOG to cease and desist Marcellus shale gas well development activities, including: drilling, hydraulic fracturing, post-hydraulic fracturing well clean-out completion procedures.
	Press conference with Governor Rendell announcing EOG Order.
<i>Tuesday – 6/8/10</i>	
	John Vittitow contacted to serve as DEP expert to investigate and prepare report with recommendations on incident.
	EOG management meets with NCRO Regional Director.

Punxsutawney Hunt Club 36H Timeline

<i>Wednesday – 6/9/10</i>	
	DEP orders C.C. Forbes to cease and desist all post-hydraulic fracturing procedures on any Marcellus wells in PA.
	DEP retains John Vittitow – travel to Harrisburg.
<i>Thursday – 6/10/10</i>	
10:00 am	DEP Water Quality Specialist sampling at spring.
	Vittitow meets with DEP in Harrisburg to discuss investigation and report.
1:00 pm	Vittitow meets with Oil and Gas inspectors and BOI investigators at DEP Moshannon office.
2:00 pm	Vittitow goes to Punxsutawney Hunting Club 36H with DEP inspectors and BOI.
2:10 pm	Vittitow goes with NCRO Oil and Gas Inspector, OGI Supervisor, and BOI Investigator to incident site and to two EOG sites to review drilling practices. (PHC 21V & PHC 31H)
11:10 pm	EOG granted permission to drill at PHC 31H and 21V.
<i>Friday – 6/11/10</i>	
7:00 am	Vittitow goes with DEP inspector to two other EOG sites to review drilling – Guinan 2H and Lee 2H.
	Interviews scheduled with EOG and Forbes.
<i>Saturday – 6/12/10</i>	
10:00 am	Vittitow interviews Forbes employees: Bill Ralston, Daniel Luzier and Brent Hrbochek in Moshannon DEP Office.
<i>Monday – 6/14/10</i>	
10:00 am	Vittitow interviews EOG employees: Gary Smith, Jeff Leitzell, Barry Rodkey and Charley Kendrick in Moshannon DEP Office.
	EOG granted permission to drill at Lee 2H and Guinan 2H.
	C.C. Forbes granted approval to engage in: Plugging of abandoned wells and attendant services; All work prior to and in anticipation of an actual fracturing procedure; General maintenance and repair work to wells.
<i>Tuesday – 6/15/10</i>	
	Vittitow meeting in Harrisburg with Secretary and DEP staff.
	DEP entered into follow up Consent Order and Agreement with EOG.
<i>Wednesday – 6/16/10</i>	
	DEP Conference call with PEMA and Labor & Industry re safety issues.

Punxsutawney Hunt Club 36H Timeline

	DEP Secretary John Hanger testified before the Senate Environmental Resources and Energy Committee regarding the EOG event, as well as Marcellus Shale safety concerns.
<i>Thursday – 6/17/10</i>	
2:00 pm	DEP Water Quality Specialist and NCRO Oil and Gas Inspector sampling spring.
<i>Monday – 6/21/10</i>	
	DEP Meeting with Labor & Industry to further discuss worker safety issues.
<i>Tuesday – 6/29/10</i>	
	DEP Secretary John Hanger testified before the Senate Veterans Affairs and Emergency Preparedness Committee regarding the EOG incident and emergency response relating to Marcellus Shale drilling.