

TOP KILL DISCUSSION THREAD

✘ Okay, for any Firedogs and Wheelheads following the big Top Kill moonshot (link is to a great Oil Drum explanation) going on, this is an open discussion thread. If you need a link, CNN has a live feed linked on their front page, here is the NPR feed. If folks have better ones, put them in comments.

The US Coast Guard has given final approval for the Top Kill attempt, so away we go I guess.

Here is a synopsis from Amina Khan at the LATimes:

To make up the pressure difference, technicians plan to pump mud into the blowout preventer, a kind of surge protector that sits on top of the wellhead. The device had failed to cut off the flow of oil when the pressure surged too high.

The mud that will be used, drilling mud, is a dense mixture of water and minerals such as bentonite clay. It can be made even denser by adding heavier minerals such as barite and galena.

The heavier the mud, the more it will suppress the flow – but on the flip side, the harder it will be to pump in.

The mud will be pumped from surface vessels with a combined 50,000-horsepower pumping capacity into the internal cavity of the blowout preventer. BP officials said they planned to pump the mud at a rate of up to 40 barrels per minute.

It's unclear how much mud will be needed to stop the flow of oil, BP spokesman Bryan Ferguson said. It's possible, he said, that the entire cavity of the blowout preventer will have to be

filled.

Once the oil flow has been contained, the hole will be covered with cement to permanently close the well.

If it looks like the procedure isn't working, perhaps because too much mud is leaking from the top of the blowout preventer, technicians plan to implement the junk shot – shooting in material to keep the mud from escaping.

The clog would include odd objects such as rope knots, golf balls and shredded tires. These materials are picked for a reason – each odd shape serves a different function, and the more varied the shapes of the collected junk, the more effective the clog will be.

BP officials said they could shoot a clog into the system several times, if necessary.

Okay, to start the ball rolling, here is my first question: The newer CGI depictions of the process give me more hope than the early ones in that it now appears the material is moving through a simpler path in and through the BOP than it first appeared. That is good. But my question is what is the status of these high pressure lines they have attached to pump the mud in through? As I read last night in a couple of different places, they had to actually cut off the old hose and fittings on the two key entry points, the kill line and the choke line, and then “clean up” which I take to essentially be grinding/filing to de-burr whatever flange is remaining and then clamp new feed lines for the mud on. Is that right? And, if so, are clamp fittings going to hold such high pressure? I have a pressure washer that only goes up to 3000 psi, and there is no way in hell you could use a clamp fitting on it; has to be threaded. So, is this gonna work on the BOP?

Here is the official BP Top Kill animation

video.

Here is the official BP graphic description of the Top Kill process:



[Lead graphic – BP: Broken Promises. Logo design by Foye 2010 submitted as part of the Art For Change BP Logo Redesign Contest and used with permission]