

## Arctic Oil and Gas Exploration Air Permits

Seattle, WA

August 2011

Two *revised* draft Outer Continental Shelf (OCS) Prevention of Significant Deterioration Clean Air Act permits are proposed for public comment: July 6 to August 5, 2011

- Shell Gulf of Mexico Inc. oil and gas exploration drilling, Beaufort Sea and Chukchi Sea, Alaska (*Discoverer* drill ship)

Two *new* draft OCS Title V Clean Air Act permits are proposed for public comment: July 22 to September 6, 2011

- Shell Offshore Inc. oil and gas exploration drilling, Beaufort Sea, Alaska (*Kulluk* drill rig)
- ConocoPhillips Co. oil and gas exploration drilling, Chukchi Sea, Alaska (jackup drill rig)

### Public Meetings

#### August 3: INFORMATION MEETING

Arctic oil/gas exploration air permits  
5:00 p.m. - 9:00 p.m.

#### August 4: PUBLIC HEARING

Shell *Discoverer* revised air permits  
Presentation 5:00 p.m. - 6:30 p.m.  
Public Comment 7:00 p.m. - 9:00 p.m.

#### August 23: PUBLIC HEARING

Shell *Kulluk* air permit  
Presentation 5:00 p.m. - 6:30 p.m.  
Public Comment 7:00 p.m. - 9:00 p.m.

↑All at Inupiat Heritage Center, Barrow ↑

#### August 24: PUBLIC HEARING

ConocoPhillips air permit  
Presentation 5:00 p.m. - 6:30 p.m.  
Public Comment 7:00 p.m. - 9:00 p.m.  
**Ilisagvik College, Barrow**

#### August 26: PUBLIC HEARINGS

Shell *Kulluk* Air Permit 6:00 p.m. to 7:30 p.m.  
ConocoPhillips Air Permit 8:00 p.m. to 9:30 p.m.  
**Loussac Public Library, Anchorage**

☎ Telephone participation for all Barrow meetings available at NS Borough teleconference centers.

### Public Comments

#### Shell Discoverer Air Permits

COMMENT BY AUGUST 5

☎ **Email:** [r10ocsairpermits@epa.gov](mailto:r10ocsairpermits@epa.gov)

✉ **Mail:** Shell Discoverer Air Permits  
EPA Region 10  
1200 6th Ave, Ste. 900, AWT-107  
Seattle, WA 98101  
Fax: 206-553-0110

#### Shell Kulluk and ConocoPhillips Air Permits

COMMENT BY SEPTEMBER 6

☎ **Email:** [r10ocsairpermits@epa.gov](mailto:r10ocsairpermits@epa.gov)

Re: Shell Kulluk \*or\* ConocoPhillips  
✉ **Mail:** Shell Kulluk Air Permit \*or\*  
ConocoPhillips Air Permit  
EPA Region 10, 1200 6th Ave, Ste. 900, AWT107  
Seattle, WA 98101  
Fax: 206-553-0110

More information about the air permits can be found at <http://go.usa.gov/Krk>

### Contact:

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## Shell Discoverer air permit

Shell plans to operate the *Discoverer* drillship and supporting fleet of icebreakers, oil spill response vessels, and supply ships in the Chukchi Sea and Beaufort Sea beginning in 2012. Shell's operations would emit more than 250 tons of air pollutants a year and must have federal Clean Air Act Prevention of Significant Deterioration (PSD) permits. PSD permits must comply with National Ambient Air Quality Standards, PSD increments and visibility requirements, and install Best Available Control Technologies. EPA issued the permits to Shell in 2010 but they were appealed to the EPA Environmental Appeals Board, which overturned them in December 2010. EPA Region 10 revised the draft permits to address the issues raised by the Board. Among other changes, the revised permits have reduced emissions of most key air pollutants by more than 50 percent from the 2010 permits.

## Shell Kulluk air permit

Shell plans to operate the *Kulluk* drill rig and support fleet of icebreakers, oil spill response vessels, and supply ships beginning in 2012 only on the Beaufort Sea (Camden Bay) OCS. The draft permit for the *Kulluk* drill rig prohibits Shell from using both the *Discoverer* drill ship and the *Kulluk* at the same time in the Beaufort in any drilling season in any year. Shell requested a Title V air permit with enforceable restrictions to limit their air pollutant emissions to less than 100 tons per year and avoid the need for a PSD permit.

Shell proposes to limit emissions using ultra-low-sulfur diesel fuel and selective catalytic reduction control technology on the largest engines on the *Kulluk* and its main vessels as well as oxidation catalyst control technology to reduce particulate matter emissions on some engines. Avoiding PSD permits means

Shell can apply targeted pollution emission controls to their fleet's worst emitters, to meet the NAAQS. PSD permits would require the companies to apply emission controls to every emission source on every piece of equipment on every vessel in their fleet (which is what Shell must do for the *Discoverer* fleet under its PSD permits).

Most reductions are due to the new 1-hour nitrogen dioxide (NO<sub>2</sub>) standard that went into effect after the 2010 permits were issued. Nitrogen dioxide (NO<sub>x</sub>) emissions have been reduced by more than 65 percent to address environmental justice concerns and meet the new 1-hour NO<sub>2</sub> standard. Other major changes to the permits:

- A reduction in the total days of operation under each permit from 168 days to 120 days (in hours) during the drilling season, with new restrictions on the time spent drilling mud line cellars and wells.
- A limit on emissions of Greenhouse Gases (GHGs) to ensure such emissions from the *Discoverer* and the fleet remain below the major source thresholds for GHGs and that the *Discoverer* does not trigger PSD permitting requirements for that pollutant.

## ConocoPhillips air permit

ConocoPhillips plans to operate a jackup drill rig and supporting fleet of icebreakers, oil spill response vessels, and supply ships beginning in 2013 only on the Chukchi Sea OCS. ConocoPhillips requested a Title V air permit with enforceable restrictions to limit their air pollutant emission to less than 100 tons per year and avoid the need for a PSD air permit.

ConocoPhillips proposes to limit emissions using ultra-low-sulfur diesel fuel and selective catalytic reduction control technology on the largest engines on the jackup rig and its main vessels. Avoiding PSD permits means ConocoPhillips can apply targeted pollution emission controls to their fleet's worst emitters, to meet the NAAQS.

## Water permits for arctic oil and gas exploration

EPA is preparing to reissue the National Pollutant Discharge Elimination System (NPDES) general permits for oil and gas exploration wastewater discharges in the Beaufort Sea and Chukchi Sea. EPA plans to reissue the draft Chukchi Sea and Beaufort Sea exploration general permits for public comment beginning this fall.