



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 4

Final Determination Outer Continental Shelf Air Permit OCS-EPA-R4012 Statoil Gulf Services, LLC

On August 9, 2013, the Region 4 office of the United States Environmental Protection Agency (EPA) requested public comment on a draft Outer Continental Shelf (OCS) air permit for Statoil Gulf Services (Statoil). No requests for a public hearing were received. Therefore, the planned public hearing was canceled due to insufficient interest. No comments were received during the public comment period, which commenced on August 9, 2013, and ended on September 9, 2013.

The permit will regulate air pollutant emissions from either the Transocean *Discoverer Americas* drillship or the Maersk *Developer* drill rig and support vessels, which Statoil intends to operate within its DeSoto Canyon area lease locations on the OCS in the Gulf of Mexico, approximately 160 miles southeast of the mouth of the Mississippi River and greater than 200 miles southwest of Panama City, Florida. The exploratory drilling operation will last up to 180 days per year at multiple locations within the lease blocks for approximately 5 to 10 years.

EPA also prepared a preliminary determination and statement of basis document that explains the permit conditions. The preliminary determination and the draft permit are available on EPA Region 4's website at: <http://www.epa.gov/region4/air/permits/ocspermits/ocspermits.html>, and were available for public comment. The permit incorporates applicable requirements from the federal Prevention of Significant Deterioration preconstruction and title V operating permit programs, New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAP), as required by the OCS Air Quality Regulations at 40 Code of Federal Regulations (CFR) part 55.

On September 17, 2013, Statoil submitted a request to EPA for a minor revision to the permit to increase the hours of operation of the Maersk *Developer's* cementing engines (CMU-1 and CMU-2) from 60 hours per year for each engine, as presented in the original application, to 300 hours per year for the two engines combined. After careful consideration of this requested change and supporting analysis, EPA has determined that the increased cementing engine usage would not change any determination made as a result of EPA's review of the application, including BACT and regulatory applicability.

This Final Determination document summarizes the changes made to the draft permit. A copy of Statoil's requested change, including updated emissions calculations and supporting analysis, is included in the administrative record for the Statoil permit and is available at the website listed above. The administrative record is also available at www.regulations.gov (docket # EPA-R04-OAR-2013-0577).

After consideration of the expressed view of all interested persons, the pertinent federal statutes and regulations, the application and supplemental information submitted by the applicant, and additional material relevant to the application and contained in the administrative record, EPA has made a final determination in accordance with title 40 CFR part 55 to issue an air permit to construct and operate to Statoil for the proposed exploratory drilling operation in the DeSoto Canyon OCS lease blocks. The final permit does not differ significantly from the draft permit offered for public comment.

Summary of Permit Changes

Greenhouse Gas Emissions Estimates

Because Global Warming Potential (GWP) factors may be revised over time, the following statement was added to Section 4 of the final permit to clarify the GWP factors used to calculate greenhouse gas emissions from the project:

GHG emissions for this project were calculated based on GWP factors from the GHG Reporting Rule at 40 CFR Part 98, Subpart A, Table A-1 that were required as of the date of this permit. Current GWP factors for applicable GHG pollutants are:

<u>GHG Pollutant</u>	<u>GWP Factor</u>
CO ₂	1
CH ₄	21
N ₂ O	310
SF ₆	23,900

Maersk Developer Cementing Engine Operating Limits

In the draft permit, Condition 6.8.2 stipulates that each of the two cementing units on the *Developer* be limited to 60 hours of operations on a rolling 12 month average basis in accordance with the estimated operation time of these engines included in the application materials. Statoil now believes that this operating limit of 120 hours is not realistic to meet cementing needs during routine operations and proposed a revision of the draft permit condition as follows:

6.8.2 Operating Limit: These engines shall be operated no more than 300 hours per year combined on a rolling 12 month average basis

As a result of increased hours of operation for the cementing unit engines, Statoil has estimated that the total fuel usage on the *Developer* would increase by 4,598 gallons per year. Therefore, the corresponding condition in the draft permit has been revised in the final permit as follows:

6.11.1 The drill rig is limited to an annual consumption of 2,654,931 gallons of diesel fuel on a rolling 12-month total basis.

Statoil’s analysis of the revised emissions calculations and potential to emit (PTE) totals compared to those used for development of the draft permit were included with the revision request. The proposed revision would increase the annual PTE as listed below as well as the total annual fuel usage discussed above, but would not affect short-term limits or modeling.

Increases in TPY as a result of the additional cementing unit hours of operation are:

NOx	0.53,
CO	0.37,
PM (PM10/PM2.5)	0.01, and
CO _{2e}	51.53.

EPA has determined that the minimal increase in annual emissions does not change the applicability determination, BACT analysis, or air quality analysis review that EPA performed based on the

application materials included in the administrative record for this project, and that the revision remains consistent with all other limits established in the draft permit. EPA has therefore incorporated the above revisions into the final permit.

Error Corrections

The conditions listed below were changed to correct errors and to accurately reflect data and assumptions presented in the application materials. The revised conditions in the final permit are the following:

- 6.13.1.1 The permittee shall use an emergency generator engine with low NO_x engine design, including turbocharger, aftercooler, and high injection pressure.
- 6.14.1.1 The permittee shall use forklift engines with EPA rated interim Tier 4 or better engines,
- 6.19.1 The drill rig is limited to an annual consumption of 2,179,983 gallons of diesel fuel on a rolling 12-month total basis.

These changes are consistent with the permit application assumptions, have no impact on the emissions or the required monitoring, and do not change any other permit condition or determination made as a result of EPA's review of the application.

Typographical and Grammatical Errors

Other minor changes have been made to the permit to correct typographical or grammatical errors. These changes have no impact on the emissions or the required monitoring. All changes made to the draft permit can be found in the administrative record referenced above.