



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUN - 1 2011

OFFICE OF
AIR AND RADIATION

The Honorable Henry A. Waxman
House of Representatives
Washington, DC 20515

Dear Congressman Waxman:

Thank you for your letter of May 19, 2011, requesting information about the Environmental Protection Agency's implementation of Section 328 of the Clean Air Act. Attached are responses to the two questions posed in your letter.

If you have further questions, please contact me or have your staff contact Cheryl Mackay of our Office of Congressional and Intergovernmental Affairs at (202) 564-2023.

Sincerely,

A handwritten signature in black ink, appearing to read "Gina McCarthy".

Gina McCarthy
Assistant Administrator

Attachment

Attachment

1. During your testimony, you stated that EPA has not taken five years to process Shell's Clean Air Act permits for its proposed Arctic drilling operations and in fact had issued each permit "within three to six months of that permit application being complete." In response to a question asked by Rep. Sullivan, you also noted: "Shell has consistently revised the request, changed the project, changed what sea they want to drill in." Please provide the Committee with a timeline for the Shell permit applications that includes events external to EPA that affected the agency's processing of the permits, such as changes in Shell's proposed operations, actions by the Department of the Interior, and court decisions pertaining to Shell's exploration plan.

There are currently two permits for Shell activities in the Arctic that are at issue; both are for the Discoverer Drill Rig, one for the Chuckchi Sea, one for the Beaufort Sea. Both went from complete application to decision by the Environmental Appeals Board (EAB) in approximately 12 months. In describing how long it has taken Shell to get these permits, some people inaccurately include earlier permitting activity for projects significantly different than the current ones, as this brief timetable highlights. In 2007, Shell wanted permits for two ships, the Discoverer and the Kulluk, in the Beaufort Sea. Then in 2008, they dropped the Discoverer permit activities and focused on the Kulluk in the Beaufort Sea. Then in 2009, they dropped work on the Kulluk and focused on the Discoverer in the Chukchi Sea, but changed the controls on the Discoverer and supporting fleet significantly in the fall of 2009 when new data showed that their emissions would violate the PM2.5 health-based air quality standards. These changes, and the modeling analysis upon which they were based, required EPA to issue a revised proposed permit for public comment. Then in 2010, they again sought a permit for the Discoverer Drill Rig in the Beaufort Sea. Now Shell is in the process of submitting a new application for the Kulluk in the Beaufort Sea.

The major source permit for the Discoverer Drill Ship to operate in the Beaufort Sea went from complete application to final decision from the EAB in less than 12 months. It was originally filed on January 18, 2010. The permit was proposed on February 17 and finalized on April 9, less than 3 months after a complete application was filed. This permit was appealed to the Environmental Appeals Board, which remanded the permit back to Region 10 on December 30. The Region is now in the process of revising the permit consistent with the EAB decision and intends to issue the revised permit in September, 2011.

The major source permit for the Discoverer Drill Ship to operate in the Chukchi Sea also went from complete application to final decision from the EAB in 12 months. (The EAB decision was issued concurrently with the Discoverer Beaufort Sea decision.) Although Shell initially filed an application for this permit on December 11, 2008, Shell delayed the process significantly by submitting a revised incomplete permit application on September 17, 2009, which was not completed until December 22, 2009. This application not only included additional emission controls, but also requested numerous changes to EPA's proposed emission limitations and operational restrictions to reflect changes in how Shell intended to operate equipment on the

Discoverer as well as the support fleet. EPA had to issue a revised proposed permit and put it out for public comment, which it did on January 8, 2010. EPA had to follow this step even though EPA had issued a proposed permit for public comment on August 20, 2009 based on the December 11, 2008, permit application. EPA issued a final permit on March 31, 2010, just over 3 months after Shell submitted the revised, completed application. This permit was appealed to the Environmental Appeals Board, which remanded the permit back to Region 10 on December 30. The Region is now in the process of revising the permit consistent with the EAB decision and intends to issue the revised permit in September, 2011.

When people incorrectly say that Shell has been trying to get these permits for five years, they are starting the clock with two applications for minor source permits that were filed in December, 2006, but were not complete until early 2007. One of these was for the Kulluk Floating Drill Rig, for which Shell is only now working on re-submitting a complete permit application. The other was for the Discoverer Drill Rig to operate in the Beaufort Sea, but Shell asked EPA to defer action on this application in late 2007 (after the EAB had remanded it to the Region) and did not file a new permit application for the Discoverer Drill Rig in the Beaufort Sea until January, 2010.

It is inaccurate to start the permit clock from the date of the first two applications for a variety of reasons, not the least of which is that one application was for a different Drill Rig, neither was for the Chuckchi Sea, and, while one was for the same drill rig/sea combination now at issue, Shell dropped its request for action on this drill rig/sea combination from late 2007 until January, 2010 and is only now working on an application for the other drill rig.

2. Information pertaining to regulation under Title II of the Clean Air Act for vessels that are part of the OCS source's "associated fleet."

During the hearing, Committee members and one of the witnesses, Robert Meyers, noted that vessels servicing the OCS source—such as supply ships and ice breakers—are regulated under Title II of the Clean Air Act. To clarify how Title II applies to the associated fleet in general and associated vessels that are part of the Shell permits in particular, please answer the following questions:

- a. What ocean-going sources does EPA regulate under Title II of the Clean Air Act?**
- b. Does Title II apply to foreign flagged vessels?**
- c. When regulations are promulgated pursuant to Title II for ocean-going vessels, how are engines built before the effective date of those regulations addressed? Are retrofits required?**
- d. What are the applicable EPA and international fuel requirements for ocean-going vessels?**

e. How do regulations under Title II apply to the ice breakers identified in the Shell permit application for the Beaufort and Chukchi Seas?

While it is true that Title II regulations apply to certain vessels which may be used in OCS activities, it is not an accurate representation to say that, in the absence of the OCS permitting process, these vessels would still be regulated under the Clean Air Act. The OCS permitting process for Shell's operations has resulted in permit requirements for the support and service vessels that are, in some instances, more protective of public health than EPA can require under Title II of the Clean Air Act.

Shell's operations include support and service vessels, such as icebreakers, that have not been regulated under Title II of the Clean Air Act. Many of the large vessels, such as icebreakers, are foreign-flagged vessels. Title II engine requirements/regulations do not apply to foreign-flagged vessels. Instead, as part of our comprehensive marine program, we have relied on similar MarPol Annex VI engine standards through the International Maritime Organization (IMO). Those standards, like our Title II CAA standards, apply primarily to new vessels.

Many (if not all) of the vessels that are part of Shell's operations are older, having been built before the effective date of the most stringent marine engine standards. Our Title II regulations and the analogous MarPol Annex VI regulations apply only to new engines, and do not require retrofits of existing engines. Some minor reductions may be required from an existing engine, however, when that engine is undergoing a major engine remanufacturing event or ship survey. The CAA Title II and MarPol Annex VI do not require the installation of controls to achieve significant emission reductions from the existing legacy fleet of vessels, such as those operated by Shell.

Shell's actions in response to the EAB's remand of the Discoverer permits are illustrative of the additional environmental protection provided by the OCS permit process compared to Title II. Since the remand, Shell has agreed to add controls to one icebreaker to reduce both NO_x and PM_{2.5} emissions. These additional controls will reduce NO_x emissions from the icebreaker by 96% and PM_{2.5} emissions by 82%. Additional restrictions requested by Shell for emissions from the Discoverer and other support vessels will further reduce all emissions from the project (for example, total NO_x emissions will be reduced by 72%).

As a result of the OCS permit process, Shell is using cleaner fuel than is required under Title II of the Clean Air Act or international law. When the Discoverer drill ship is an OCS source, the permit requires all of the engines on the Discoverer and all of the engines on the service and support vessels to use diesel fuel that contains no more than 15 ppm sulfur. Absent the OCS permit process, vessels in the Arctic using diesel fuel bought outside the United States legally

could have fuel sulfur levels as high as 35,000 ppm until 2020 and 5,000 ppm thereafter under international law. Absent the OCS process, for vessels that buy diesel in the United States, the fuel could contain up to 500 ppm sulfur until 2014, at which time it can contain no more than 15 ppm.