

**Petitioner's Exhibit 25**

The Department of Environmental Conservation Air Quality Division has reviewed Shell Offshore, Inc.'s exploration plan, as well as the Shell Offshore, Inc. application to the Environmental Protection Agency (EPA) and the resultant EPA generated minor source permit R100CS-AK-07-01 and R100CS-AK-07-02.

The Division of Air Quality finds that the Shell Offshore, Inc. exploration plan will be consistent with Alaska Air Quality Statutes and Regulations if certain alternate measures are added.

### **Minor Permit Requirements**

By virtue of limiting the volume of emissions, by the owner or operator obtaining an owner requested limit (ORL) under 18 AAC 50.508(5), for the activities associated with Shell Offshore, Inc.'s exploration plan, their Outer Continental Shelf (OCS) operations would be regulated specifically, under 18 AAC 50.502(c)(2). This requires the owner or operator to obtain a minor permit under this section before commencing construction or, if not already authorized in a permit under this chapter, relocation on or after December 3, 2005 of a portable oil and gas operations for each OCS source prior to beginning the drilling operation.

In addition, the owner or operator by requesting a minor permit from the department for establishing an ORL for a stationary source may avoid a permit classification under AS 46.14.130, as a major stationary source, regulated by 18 AAC 50.306, a Prevention of Significant Deterioration (PSD) permit. If the department approves an owner requested limit on the source's ability to emit air pollutants; the limitation approved under the ORL is an enforceable limitation for the purposes of determining the stationary source's potential to emit (PTE), thus possibly precluding the requirement to obtain a PSD permit under 18 AAC 50.306.

### **Minor Permit Application Requirements**

The minor permit application process includes the requirements of 18 AAC 50.540(j), Owner Requested Limits, which requires the permittee to include the information and materials required under 18 AAC 50.225(b)(2) – (7):

- (2) A list of all emission units at the stationary source;
- (3) A calculation of the stationary source's actual emissions and potential to emit (PTE) air pollutants;
- (4) A description of the proposed limit, including for each air pollutant a calculation of the effect the limit will have on the stationary source's potential to emit (PTE) and the allowable emissions;
- (5) A description of the verifiable method to attain and maintain the limit, including monitoring and recordkeeping;
- (6) Citation to the requirements that the person seeks to avoid, including an explanation of why the requirement would apply in the absence of the limit and how the limit allows the person to avoid the requirement.
- (7) A statement that that owner or operator of the stationary source will be able to comply with the limit.

## **DEC Consistency Review**

Shell Offshore's exploration plan is consistent with the standards outlined above if the following alternate measures are undertaken:

### **Alternate Measure 1**

As part of Shell Offshore, Inc.'s pre-construction air permit application to the Environmental Protection Agency (EPA), Appendix C contains DEC's Owner Requested Limit Application form. This application form list "fuel use limitations" and "fuel sulfur content limitation" as attachments included, but there are no attachments included with Appendix C. The application should contain these attachments.

As part of ORL requirements, the stationary source's full PTE must be calculated. To be consistent with Alaska Statutes and Regulations, the applications and permits need to include all emission units, and their associated emissions. The owner or operator's certification of the permit application includes that all emission units were included and used to calculate the stationary source's PTE. The emission units noted must include, but are not limited to crude oil flares, gas flares, crude vents, gas vents or from liquid fuel storage tanks. These items did not appear to be included in the application, therefore the full PTE for all emission units for all pollutants, was possibly not calculated.

### **Alternate Measure 2**

As part of the PSD avoidance requirements, the owner or operator needs to present a verifiable way to attain and maintain the PSD avoidance limit for oxides of nitrogen (NO<sub>x</sub>). The Shell Offshore, Inc. application and the EPA permits do not contain methods or an applicable accuracy for fuel monitoring equipment to protect the PSD avoidance limit. A 5% error in fuel flow measurement could allow the NO<sub>x</sub> to exceed the PSD threshold of 250 tons per year. A 5%, below the actual flow rate, error in fuel flow measurement with an ORL of 245 tons per year would allow the emission units to generate 257.25 tons per year of NO<sub>x</sub> if the fuel flow limit is achieved. To be consistent with Alaska standards and regulations a verifiable, accurate, protective and defined methodology for measuring fuel consumption should be employed. To be consistent with 18 AAC 50.542(f)(8) the application should contain verifiable methods and appropriate accuracy for measuring fuel consumption. To support this, verifiable calculations are required to prove that under worst case conditions, with the methods and accuracy being implemented, the owner or operator will comply with the limit that has been requested.

### **Alternate Measure 3**

Alaska Statutes and Regulations at 18 AAC 50.544(c)(3) contain language regarding maintenance on the stationary source's equipment meeting the manufacturer's or operator's maintenance procedure standards. In order to be consistent with Alaska Statutes and Regulations, the federal approvals need to include the condition required by 18 AAC 50.544(c)(3).

### **Alternate Measure 4**

The federal approval should contain a condition that the owner or operator will not cause or contribute to a violation of an ambient air quality standard or the standards of 18 AAC 50.110 (Air Pollution Prohibited).

#### Alternate Measure 5

Alaska Statutes and Regulations at 18 AAC 50.205 contain requirements for certification of any permit application, report, affirmation or compliance certification. The certification must include the signature of a responsible official for the permitted source following the statement “*Based on the information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete*”. Binding legal certification is important for both state and federal regulators to be able to prosecute fraudulent reporting. In order to be consistent with Alaska standards and regulations, the federal approvals need to contain statements of binding legal certification for the applicant to sign.

#### Alternate Measure 6

Alaska Statutes require that fuel-burning equipment are subject to 18 AAC 50.055(a) for visible emissions, 18 AAC 50.055(b) for grain loading, and 18 AAC 50.055(c) for sulfur emissions. The demonstrations provided by the applicant, were not at the worst case conditions. The permit does not restrict the fuel burning equipment from extended operation at worst case conditions. The applicant should demonstrate to the permitting authority that all the requested fuel burning equipment shall meet these standards for the worst case operating conditions.