



Date September 17, 2009

Mark E. Fesmire, P.E.  
Director  
Oil Conservation Division  
New Mexico Department of Energy,  
Minerals and Natural Resources  
1220 South Saint Francis Drive  
Santa Fe, New Mexico 87505

Re: Application of Chesapeake Operating, Inc., for Enhanced Oil Recovery Project Qualification  
for the Recovered Oil Tax Rate at the Carter-Shipp Strawn Unit, Lea County, New Mexico.

Dear Mr. Fesmire:

Chesapeake Operating, Inc. ("Chesapeake"), hereby makes application to qualify the Carter-Shipp Strawn Unit for the recovered oil tax rate as authorized by the Enhanced Oil Recovery Act. Chesapeake plans to commence waterflood operations in the project area during the 1<sup>st</sup> quarter of 2010. Chesapeake is making application pursuant to the rules promulgated by Oil Conservation Commission Order No. R-9708 entered on August 27, 1992.

In accordance with this Order, Chesapeake Energy Corporation provides the following information:

**A. Operator's name and address:**

Chesapeake Operating, Inc.  
6100 No. Western Ave.  
Oklahoma City, Oklahoma 73154

**B. Description of the project area:**

1. Exhibit "A" is a plat outlining the project area
2. The following acreage is located in the project area.

**TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM**

Section 21: SESE  
Section 27: NW4  
Section 28: NE4

The proposed project will impact 100% of the Unit area and is more accurately identified as the

injection patterns highlighted on Exhibit "A", which includes the wells listed on Exhibit "B".

3. Total acres:

The Carter-Shipp Strawn Unit contains a total of 239 acres or less.

Chesapeake is targeting 239 acres for this enhanced oil recovery project. All acreage in the Unit Area will be impacted by the initial phase of injection.

4. Subject pool and formation:

The Carter-Shipp Strawn Unit is within the Northeast Lovington Pennsylvanian Pool.

The unit includes the Strawn formation.

Exhibit "C" is the type-log identified in the Unit Agreement.

**C. Status of operations in the project area:**

1. The name of the unit is the Carter-Shipp Strawn Unit.
2. The wells in the proposed unit are producing on primary decline.

**D. Method of recovery to be used:**

**Secondary recovery by water injection.**

Identify fluids to be injected: Produced water from the unit wells and make-up water produced from Carter-Shipp producing wells.

**E. Description of the project:**

1. Producing wells:

There are plans to re-enter two well for production within the project area, the Carter 1 and Shipp 3.

2. Injection wells:

There are plans to re-enter two wells for injection within the project area, the Carter 2 and Shipp 2.

3. Capital costs of additional facilities:

<b>Description</b>	<b>Cost</b>
Re-enter Shipp ZI 3, fish 47' tbg, acidize, and equip as producer	\$404,800
Re-enter Shipp ZI 2, patch csg, acidize, and equip as injector	\$461,900
Re-enter Carter 1, acidize, and equip as producer	\$456,900
Re-enter Carter 2, acidize, and equip as injector	\$447,800
Injection facility	\$285,000
Water Supply System	\$500,000
Production facility	<u>\$250,000</u>
<b>Total Project Cost</b>	<b>\$2,806,400</b>

4. Total project costs, with capital: \$9,000,000
5. Estimated total value of the additional production that will be recovered as a result of this project:

Using an average price for the oil of \$75 and an equivalent barrel based price for the gas, the value of additional hydrocarbons to be produced from the proposed project (355 M STBO and 378 MMCF) is \$ 31.4 million (Total Sales) and approximately \$24 million net income to the working interest owners.

6. The anticipated date for the commencement of injection:

May 1, 2010

7. Identify the fluid to be injected and the anticipated volumes:

1,800 barrels of produced and make-up water as needed per well per day.

8. Production Data:

Exhibit "D" is a graph with supporting data attached thereto which shows the production and injection history for the project and a forecast of the enhanced recovery of oil, gas, casinghead gas, and water anticipated from this project.

Chesapeake Operating, Inc., requests that this application be set for hearing and, if no objections are received, that it be approved.

Very truly yours,  
CHESAPEAKE OPERATING, INC.

By:



- Exhibit A: Plat of Project Area
- Exhibit B: Table of Wells in the Project Area
- Exhibit C: Type Log
- Exhibit D: Historical Production Curve and Production Forecast