

BRAD HENRY  
GOVERNOR  
  
JARI ASKINS  
LIEUTENANT GOVERNOR



MIKE THRALLS  
EXECUTIVE DIRECTOR  
  
BEN POLLARD  
ASSISTANT DIRECTOR

Responsible Care For Oklahoma's Natural Resources

May 27, 2008

## EXECUTIVE SUMMARY

### Carbon Sequestration Certification Program – Emergency Rules

#### **Overview of Emissions Trading**

Greenhouse gas emissions offset trading is occurring internationally in both on-market and off-market, or “over the counter,” transactions. An emission “offset” occurs when some activity, such as planting trees, converting to no-till, or injecting gases into the ground, negates the emission of a greenhouse gas.

Emissions trading occurs when an emitter wants to voluntarily reduce its emissions or is forced to reduce emissions as a result of a mandatory cap-and-trade system, which places maximum limits on the amount of greenhouse gases an emitter or business sector may emit. Cap-and-trade systems force emitters to purchase additional offsets from an emitter that is not emitting its maximum allocation of gases, or to mitigate its excess emissions by buying or generating greenhouse gas offsets through some activity, such as agriculture, forestry, or downhole injection of carbon dioxide into underground geologic formations. The excess supply of greenhouse gas emissions and demand for offsets to mitigate the emissions has resulted in regulated and voluntary trading markets. Meanwhile, those creating the offsets, such as agricultural producers, forest owners, and carbon capturing industries, stand to earn money for the amount of greenhouse gas they sequester. Today a metric ton of carbon dioxide traded at \$7.30, up from \$3.35 in September 2007. On the European Climate Exchange carbon dioxide traded today at over \$40.

#### **Purpose and Authority**

Emergency rules have been written for the purpose of establishing and administrating the Oklahoma Carbon Sequestration Certification Program, pursuant to the Oklahoma Carbon Sequestration Enhancement Act. These rules describe and establish the requirements for voluntary participation in the Program. The rules define carbon dioxide and state verified carbon offset, and describe the interaction between offset buyers, offset aggregators, offset verifiers, project owners, and the state carbon offset registry. Additionally, the rules describe the criteria to become recognized as an approved offset aggregator or verifier. These rules are to ensure that each tradable state verified offset is a true representation of the quantity of stored greenhouse gas that it is claimed to represent. Such assurance is fundamental in a program where greenhouse gas offsets are tradable commodities with monetary value.

### **Process Established by the Rules**

Offset trading is already occurring in Oklahoma, and will likely increase as the value of carbon dioxide continues to increase. These emergency rules establish a framework for a voluntary Program that sets **standards of quality** for buyers, sellers, brokers, and verifiers of carbon offsets generated in Oklahoma. Where the rules say “according to Commission standards” or “according to Commission criteria,” the standards and criteria are under development and will appear in the permanent rules. The Commission makes no warrantee as to the marketability or market value of a state verified offset.

According to the emergency rules, applicants to the Oklahoma Carbon Sequestration Certification Program shall adhere to the following process:

#### 1. Develop a resource management plan (RMP)

All applicants must submit a resource management plan (RMP) with their application. Also known as a conservation plan or a forestry management plan, RMPs are a required exhibit to all applications as they are an integral part of responsible land management and carbon sequestration project planning.

- For soil carbon sequestration projects, the RMP will describe the activities planned that will increase or maintain sequestered carbon; provide the legal location of each land area that is to be certified as a carbon sink; include the start date of the conservation practice and an aerial photo clearly showing the area of land that is to be managed for carbon sequestration.
- For forestry sequestration projects, the RMP will also include a statement that defines the future forest condition and the activities that will be undertaken to reach the desired forest condition, and a timeline of those activities.
- For geologic sequestration projects, the RMP will include:
  - Description of the project including the estimated total volume of carbon dioxide to be sequestered by the project during the year for which an offset will be requested;
  - Capacity and integrity of the geologic confinement system indicating what percentage of the amount injected can reasonably be expected to remain out of the atmosphere for a specified period of time;
  - Expert opinion (e.g., geologic, geophysical, or petroleum geology expert opinion) that the project will not degrade water supplies or generate project-negating emissions;
  - Legal location of the individual injection areas;
  - Start date of the project;
  - Estimated dates and amounts of each injection;
  - Aerial photo of the land area overlaying the geologic confinement area;
  - Proof or written assurances of the obtainment of any required permits, licenses, exemptions, rights, or registrations required by law that must be acquired from any person or governmental entity other than the Commission.

## 2. Contact a state approved aggregator

Soil carbon and forestry applicants will need to obtain a state approved aggregator in order to participate in the Program. Aggregators are brokers between landowners and offset buyers. A “state approved aggregator” will meet set standards, which include a bond of at least \$10,000, a physical office, and proof of the resources and ability to market and track carbon sequestration projects. An aggregator must also have safeguards and insurance in place to compensate the offset buyer in the event that the sequestered carbon is reversed by an act of nature or by contract non-compliance. For example, if a landowner tears out their pasture and plants corn, the carbon sequestered in the pasture is released and that land no longer qualifies as an offset. This would be contract non-compliance and would be dealt with between the aggregator and the landowner. Aggregators will track and report contracted projects according to criteria established by the Commission for the purposes of verification and reporting to the state carbon offset registry, which are discussed later in this summary.

## 3. Submit an application with fee

Participants will submit an application for certification of their carbon sink. A “carbon sink” is a geographical area that can be developed with forestation through reforestation or afforestation, managed forests, growing agricultural crops, or any existing vegetated area or marginally producing and or abandoned oil and or gas well area or other geological formation in which carbon is or could be sequestered or injected for long-term storage.

- For soil carbon and forestry applicants, state approved aggregators will submit applications to the Commission on behalf of landowners.
- For geologic sequestration applicants, an aggregator will not be necessary and direct applications to the Commission will be accepted.

## 4. Receive approval of application / certification of carbon sink

Commission staff will review applications to determine if a carbon sink is eligible to be designated a state certified carbon sink according to Commission criteria.

- For eligible soil carbon and forestry applicants, the Commission will review applications and make a site visit for visual confirmation that the carbon sink exists as stated in the application. If the carbon sink meets Commission criteria, it is designated a “state certified carbon sink” and may be entered into contract with a state approved aggregator.

The soil carbon and forestry sinks below are eligible only if they meet criteria established by the Commission:

- Conservation tillage
- Grassland or pastureland establishment
- Rangeland management
- Afforestation
- Reforestation
- Managed forests

- For geologic sequestration applicants, the Commission will review applications to determine if a carbon sink is eligible for certification according to Commission criteria. An underground injection control (UIC) permit from the permitting agency and RMP will be sufficient confirmation that the carbon sink exists. If the carbon sink meets Commission criteria, it is designated a “state certified carbon sink” and carbon dioxide sequestered as a result of activities associated with the UIC permit will be verified the following calendar year.

#### 5. Contract with a state approved aggregator

For soil carbon and forestry offsets only, the landowner and state approved aggregator enter into a contract whereby the aggregator agrees to pay the landowner annually, or at the end of contract, for the carbon that is projected to be sequestered during the life of the contract. The landowner agrees to maintain the certified carbon sink for at least the duration of the contract. The contract will include the price to be paid for the carbon, which may be based on the current value of carbon, or other agreed upon amount, and the rate at which the particular sink sequesters carbon in metric tons carbon dioxide per acre per year. For example, in the North Canadian River watershed, it is estimated that no-till sequesters carbon at 0.4 metric tons/acre/year—a conservative value.

- For soil carbon and forestry offsets, aggregator fees are typically taken off the top of the carbon offset purchase price in an amount between 5-15%. The aggregator will pay a percentage to the Commission for verification services, and the agreed upon amount to landowners. With this plan, landowners have minimal out of pocket up-front expense.
- For geologic sequestration, the verification fee will likely be charged with the application fee.

#### 6. Appear on the Oklahoma Carbon Offset Registry

Information pertaining to certified carbon sinks and state verified offsets will be posted on the Oklahoma Carbon Offset Registry by Commission staff. The registry is a repository of records of carbon offsets and carbon sequestration projects. It will be a web-based registry updated by the Commission for the purposes of public disclosure of carbon offset transactions. The registry is necessary to assure that each offset is unique, meaning offsets shall not be claimed more than once on a regulatory, voluntary, or off market venue for the purposes of mitigating greenhouse gas emissions. The exact information that will be included in the registry and the methods for tracking the information are not standardized yet.

- For soil carbon and forestry, once a landowner has contracted their state certified carbon sink with a state approved aggregator the aggregator will notify the Commission. The information contained in the initial application will then be serialized and posted to the registry.
- For geologic offsets, once a sink is certified the Commission will post the information on the state carbon offset registry.

### 7. Receive verification by a state approved verifier

State certified carbon sinks are subject to annual on-site verification by the Commission or other state approved verifier.

“Verification” is the process of determining that the state approved carbon sink is sequestering carbon dioxide according to criteria established by this Program. Final verification at the end of the contract between landowner and aggregator will determine if the state certified carbon sink meets guidelines sufficient to qualify as a state verified offset qualifying for compensation under an offset trade or purchase.

"Verifier" means a person, approved by the Commission that confirms the accuracy of reported data. This includes confirmation visually or through direct measurement, and by review of applicable records, that the expected sequestration of carbon dioxide or its equivalent has occurred as a result of a certified offset project. Verifiers shall have expertise and experience in the specifications and methods used to develop and assess carbon sinks associated with agriculture, forestry, downhole injection, or geological sequestration. For example, the Commission will have an agreement with the Forestry Division to verify forestry projects, which will be verified a minimum of once every five years.

A “state approved verifier” must meet the following criteria:

- Have no financial or pecuniary interest in the offsets they verify.
- Be approved and contracted with the Commission.
- Only perform work on project scopes and geographies that they are qualified for and authorized to conduct by the Commission.
- Maintain sufficiently transparent records on the methods and assumptions used to develop, calculate, and conduct verification of projects to the degree that the methods and assumptions are independently verifiable to other interested persons.
- Provide copies of all required verification reports and supporting documentation or materials in accordance with Commission established and approved verification criteria.
- Provide information that demonstrates they are qualified and capable of conducting verification of projects in accordance with Commission established and approved verification criteria.
- Certify on forms prescribed by the Commission that contracted carbon sequestration practices are in place and functioning as planned.
- Evaluate from individual projects within pooled projects the required project reports, documentation, and summary reports.
- Establish and implement protocols acceptable to the Commission for carrying out the required evaluations and reporting the results.

### 8. Receive a certificate of state verified offsets

Final verification of carbon sinks will be conducted to determine if the carbon sink meets all Commission criteria under the Program to be designated a “state verified offset.” Once a sink is so designated a certificate will be issued showing the amount of carbon dioxide sequestered in metric tons and the first year that the offset was eligible to be claimed as an offset. The Commission will not determine the market dollar value of the offset.

- For soil carbon and forestry, aggregators will notify the Commission when the time is nearing for the final verification of a carbon sink. Verification will be conducted near the end of the contract between the landowner and aggregator. The verification will include calculating the offset tonnage of sequestered carbon dioxide and will be done by the Commission or other authorized verifier using visual confirmation paired with values from carbon accumulation tables, standard values for each type of carbon sink, and or direct measurement or other verification documents.
- For geologic sequestration, the project operator requests verification of the carbon sink and a request for a state verified offset shall only include offsets that have occurred during a single calendar year. Prior to receiving a certificate for state verified offsets the applicant shall submit a summary report from an approved third-party verifier. The report and the report’s supporting documents shall include the total amount of carbon dioxide sequestered and the following information, which is gathered as part of the UIC Program reporting:
  - Volumes and Pressures. An applicant shall measure the carbon dioxide volumes and pressures associated with operation of the project for the relevant time period. For verification purposes the volumes and pressures shall be reported to the Commission in the form and at intervals required by the Commission, and the Commission may accept certified copies of reports filed by the operator with the UIC agency with respect to the project.
  - Mechanical Integrity. An applicant must demonstrate that the injection wells associated with the project have sufficient mechanical integrity. Submission of the most recent acceptable Mechanical Integrity Test (MIT) report, performed before or during the calendar year for which offsets are requested, shall be deemed sufficient demonstration of mechanical integrity for the injection well. The Commission at its discretion may conduct additional testing or request additional information before approving an application.
  - Monitoring. Applicants shall provide proof of adequate monitoring of the project operation so as to demonstrate actual storage of carbon dioxide under the surface of the ground. Proof shall be provided in the manner and at intervals determined by the Commission.

This Program will be developed further as part of the final rules drafting and review process.