Oregon Department of Environmental Quality

Determination of a Carbon Capture and Sequestration Project's Risk Rating

Clean Fuels Program Reserve Account Contribution Determination

Version: September 2024

Long-term sequestration of carbon dioxide as part of a fuel pathway presents the risk that the storage of the CO_2 may fail at a future date resulting in higher emissions than is represented in the approved CI. To address this potential outcome, DEQ has established a reserve account to set aside credits that can be used in case there is a leak of CO_2 from the project from the lower CI associated with a CCS project. To determine the number of credits that should be placed in the reserve account, an applicant or fuel pathway holder must use the calculation method laid out below, subject to confirmation by DEQ or a third-party verifier.

The contribution to the reserve account shall be calculated using the following equation:

$$Risk-based\ contribution\ percentage = 105\% - [(100\% - Risk_{Financial})\ x\ (100\% - Risk_{Social})\ x\ (100\% - Risk_{Management})\ x\ (100\% - Risk_{Site})\ x\ (100\% - Risk_{Well\ Integrity})]$$

Where:

$Risk_{Financial}$ is: 0% if the CCS project operator(s) demonstrate that their company has a Moody's rating of A or better, or an equivalent rating from Standard and Poor's or Fitch; 1% if the operator(s) have a Moody's rating of B or better, or an equivalent rating from Standard and Poor's or Fitch; or 2% if the operator(s) cannot demonstrate a rating of B or better from any of the above.

$Risk_{Social}$ is: 0% if the CCS project is located in a country or region ranked among the top 20th percentile based on the World Justice Project Rule of Law Index; 1% if the CCS project is located in a country or region ranked between the 20th and 50th percentile in that same index; or 3% if the CCS project is located in a country or region that are in the bottom 50th percentile in that same index.

$Risk_{Management}$ is: 1% if the operator(s) demonstrate that the surface facility has good access control (e.g., the injection site is fenced and well protected); or 2% if there is poor or no surface facility access control (e.g., the injection site is open and not fenced or protected).

$Risk_{Site}$ is: 1% if the selected injection site has more than two good quality confining layers above the sequestration zone and a dissipation interval below the sequestration zone; or 2% if the site does not meet the above criteria.

$Risk_{Well\ Integrity}$ is: 1% if all the wells for the CCS project meet US EPA Class IV well requirements or their equivalent; or 3% if the CCS project has wells that do not meet the Class IV or equivalent well requirements.

Non-discrimination statement

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