



environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

C.1.1. Carbon Sequestration in the Carbon Tax Act

The Accounting Rulebook (Chapter B, Section B.3, equation B.1 of this document) defines the net sequestration by forest and forest products, S , as:

$$S = -S_{HWP} - \Delta C - S_{fire} - S_{fert}$$

Where:

- S_{HWP} = The amount of carbon located in harvested wood products (expressed in t CO₂eq). Note that it is an IPCC convention that a flux into the atmosphere (emissions) is denoted as a positive flux and sequestration (removals) as a negative flux;
- ΔC = Annual change in plantation carbon stocks, expressed in t CO₂eq. Note that it is an IPCC convention that a flux into the atmosphere (emissions) is denoted as a positive flux and sequestration (removals) as a negative flux;
- S_{fire} = Emissions from fire (N₂O and CH₄ expressed in t CO₂eq);
- S_{fert} = The fraction of emissions from applied fertiliser (N₂O expressed in t CO₂eq) growth of wood.

Note: Emissions from fires and fertilisation are to be reported, but not accounted. The reporting conversion for net sequestration is that it should be denoted as a negative value i.e. removal of CO₂eq, however, when entering S into the C Tax formulae [equation 1 main project report] it should have a positive sign.

In accordance to the Accounting Rulebook, the four activities to be reported are:

- 1) Forest Management;
- 2) Afforestation;
- 3) Deforestation; and
- 4) HWP production.

The emission pools or sources included under the various activities are outlined in the Accounting Rulebook (Table B.1).

C.1.2. Purpose of methodological guidelines

Greenhouse gas (GHG) emissions represented by the variable “E” in the C Tax formula are calculated in accordance with the methodology set out in the Technical Guidelines for Monitoring, Reporting and Verification of Greenhouse Gas Emissions by Industry (DEA, 2017). The purpose of these guidelines is to provide guidance on the methodology for determining the sequestration or “S” factor in the C Tax formula. The guidelines aim to facilitate the understanding and completion by companies of the MRV tool for reporting, and the verification of the information reported. The guidelines are in line with the Accounting Rulebook that contain the accounting rules for the C Tax Act (Accounting Rulebook, Chapter B of this document).

C.2. Structure of the Methodological Guidelines

The following sections describe the methods for the estimate of emissions/removals from the different sources and sinks contained within the MRV tool and Accounting Rulebook. Firstly, the source is described, then the calculation method is presented followed by a list of the data required for the estimates in the MRV tool. Examples of calculations are shown within the orange boxes. Finally,