



environment, forestry & fisheries

Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Box C.12. Estimates for HWP contribution: Pulp mill example

Sheet HWP in the MRV tool

In a pulp mill produces thermomechanical pulp from wood of *Eucalyptus grandis*. The annual volume under bark entering the mill is 337 240 m³. Pulp rejects are minimized by continuously recycling fibres back into the process.

It is not possible to differentiate the origin of the wood by activity (i.e. Forest management, Afforestation or Deforestation). Solid waste per year is 24 400 t d.m. and Liquid waste output per day is 50 m³ day⁻¹.

Applying Tier 1, the Total inflow: Mass C Entering the Mill (t C) is

Species = *Eucalyptus grandis*

Volume Entering the Mill (m³) under bark = 337 240 m³

Mean wood density (t m³) = 0.42

Carbon fraction (CF) = 0.47 (default)

Bark fraction = 0.13 (default)

Activity = Forest management.

Total inflow: Mass C Entering the Mill (t C) = 337 240 x 0.42 x (1+0.13) x 0.47 = 75 225 t C

mC recycled wood/pulp inflow (t C) = 0, because it is already included in the mass flow balance.

mC_{RM} (t C) = 75 225 t C

FmC_E = 0.11; FmC_{SW} = 0.04; FmC_{LW} = 0.1

mC_E = 9 152 t C

Does solid waste threshold exceed amount specified in C tax act? No

Does waste water threshold exceed amount specified in C tax act? No

mC_{SW} (t C) = NO

mC_{LW} (t C) = NO

mC_{HWP} from milling processing facility (t C) = 66 951 t C

fL_{C96} = 0.74 (default provided)

S_{HWPi} Reporting = - 181 659 t CO₂

S_{HWPi} Accounting = -204 112 t CO₂