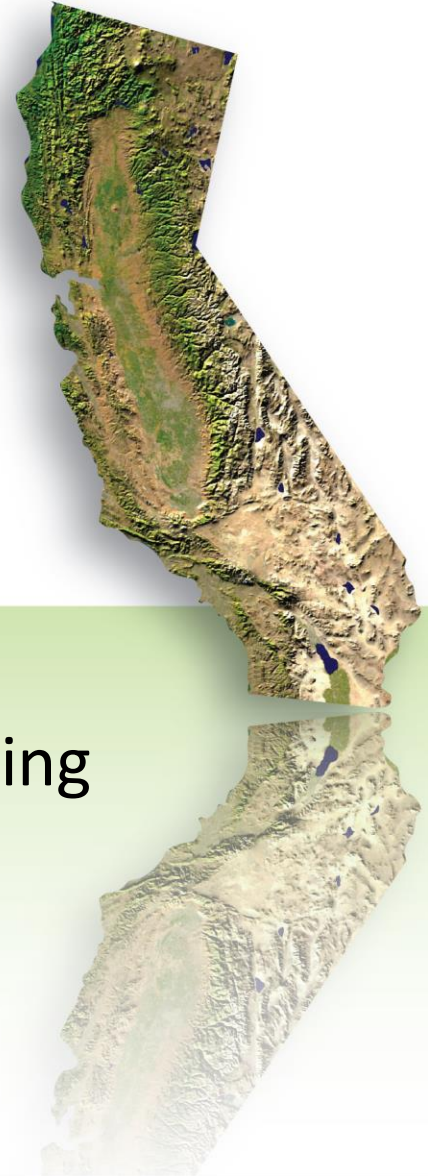


Verifier Accreditation Training for Mandatory Greenhouse Gas Reporting



Process Emissions Specialty
Course 4.6: Pulp and Paper Manufacturing

California Environmental Protection Agency

 **Air Resources Board**

Verifier Accreditation Training for Mandatory Greenhouse Gas Reporting

Course 4: Process Emissions Specialty

4.1 Cement Production

4.2 Lime Manufacturing

4.3 Glass Manufacturing

4.4 Nitric Acid Production

4.5 Iron and Steel Production

4.6 Pulp and Paper Manufacturing

4.7 Lead Production

California Environmental Protection Agency

 **Air Resources Board**

Course 4.6 Handouts

No handouts are used for this course.

Course 4.6 Pulp and Paper Manufacturing*

1. Verifying Covered Product Data
2. Example

* No process emissions for existing California facilities

Verifying Covered Product Data (1 of 2)

Covered products (air dried short tons) (§ 95119(d))

- Recycled boxboard
- Recycled linerboard
- Recycled medium
- Saleable tissue by type, along with a description of the process used to produce tissue
 - Bathroom tissue reported separately for each distinct water absorption capacity (WAC)
 - Facial tissue
 - Delicate task wipers
 - Paper towels

Verifying Covered Product Data (2 of 2)

- For bathroom tissue, water absorption capacity must be measured at least once in the data year (ISO standard with ARB-specific parameters for humidity and temperature)
- Sum product of each output x WAC to get total production

$$\sum_{i=1}^n O_i \times WAC_i$$

Where:

O_i = annual product output in air dried saleable ton for each bathroom tissue product (i) with a distinct water absorption capacity; and

WAC_i = water absorption capacity for each bathroom tissue product (i) with a distinct water absorption capacity.

Covered Product Data Example Calculation

Category	Reported Air Dried Short Tons	Water Absorption Capacity (WAC)	Total Reported Quantity
Paper Towels	24,450 (50%)		24,450 (9%)
Bathroom Tissue Type A	17,222 (35%)	9.91	170,670 (65%)
Bathroom Tissue Type B	7,041 (15%)	9.78	68,861 (26%)
Total Covered Product Data			<u>263,981</u>

1. Mass quantities

2. Used for material misstatement
(Tons x WAC for bathroom tissue)

Questions and ARB Comments

Course 4: Process Emissions Specialty

Complete:

4.1 Cement Production

4.2 Lime Manufacturing

4.3 Glass Manufacturing

4.4 Nitric Acid Production

4.5 Iron and Steel Production

4.6 Pulp and Paper Manufacturing

Next:

4.7 Lead Production