

## **Draft: Determination and Deduction methodology of process water from the gross water use calculation 7-26-10:**

### **Applicability:**

An urban retail water supplier is eligible to exclude process water from the calculation of Gross Water Use only if its industrial water use comprises a substantial percentage of total water use and to avoid a disproportionate burden on another customer sector. Industrial water use is considered to be a substantial percentage of total water use only if the following conditions are true:

1. Industrial water uses supplied by the urban retail water supplier through the distribution system are a substantial percentage of total water use; at least 10% of Gross Water Use before process water deductions.
2. It avoids putting a disproportionate burden (absence of proportion, symmetry, or proper relation; American Heritage College dictionary) on another customer sector.
3. The industries are existing water customers.
4. The deduction of process water can be verifiably quantified.

If these conditions are true then process water use can be deducted from Gross Water Use calculations. Process water use must then be included when determining Base Daily Per Capita Water Use and Compliance with the Daily Per Capita Water Use.

### **Some examples of what 'is' and 'is not' considered process water;**

1. The calculation of process water does not include recycled water used in the manufacturing process.
2. Process water does not include the repackaging of a manufactured product such as with restaurant or other commercial uses.
3. Process water does not include incidental water use such as in landscapes, bathrooms or kitchens of an industrial facility.
4. The calculation of process water includes water used as a part of the product such as in soups, pastes or beverages.
5. Process water can include cooling water.
6. Water used for manufacturing sanitation can be considered process water.

### **For purposes of implementing this deduction, the following definitions apply:**

- Distribution system means a water conveyance system that delivers water to a customer and the turn out is either raw or potable water.

- Subdivision (d) of Section 10608.12 of SBx7 7 “Commercial water user” means a water user that provides or distributes a product or service. Examples include commercial businesses and retail stores, office buildings, restaurants, hotels and motels, laundries, food stores, and car washes. Water is used mainly for sanitation, food preparation, cooling, heating, cleaning, and landscape irrigation. Water used by multi-family residences, institutional water users, and dedicated irrigation accounts should be excluded from the tally of commercial water uses.
- Subdivision (h) of Section 10608.12 of SBx7 7 defines an “industrial water user” as a manufacturer or processor of materials as defined by the North American Industry Classification System (NAICS) code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development. “Industrial water user” means a water user that is primarily involved in product manufacturing and processing activities, such as those related to chemicals, food, beverage bottling, paper and allied products, steel, electronics and computers, metal finishing, petroleum refining, and transportation equipment.
- Subdivision (l) of Section 10608.12 of SBx7 7 “Process water” means water used for producing a product or product content or water used for research and development, including, but not limited to, continuous manufacturing processes, water used for testing and maintaining equipment used in producing a product or product content, and water used in combined heat and power facilities used in producing a product or product content. Process water does not mean incidental water uses not related to the production of a product or product content, including, but not limited to, water used for restrooms, landscaping, air conditioning, heating, kitchens, and laundry.
- “Process cooling water” is water that is used to cool machinery, buildings, or any other manufacturing cooling process, other than water which is used for incidental cooling uses.
- Local agency is any municipality other than a local water utility (or some other appropriate definition).
- “Beneficial use” means water that is used or reused for a beneficial purpose in any other urban or agricultural sector.

**Quantification and verification:**

The measured annual volume of process water use should be based on facility records of each industrial water user with process water uses.

Process water use can be separated out from incidental water use if the incidental water use can be verified. Verification can be accomplished by metering or sub metering or other means as determined suitable and verifiable by the local water purveyor such as waste discharge permits or other industrial water use reports.

In cases where the urban retail water supplier provides only a portion of an industrial water user's water supply, the average share of facility water use supplied by urban retail water supplier for the previous five years should be used to pro rate the volume of process water use deducted from Gross Water Use. For example, if over the previous five years the industrial water user's own sources of supply accounted, on average, for 40% of its annual use and supply from the urban retail water supplier accounted for the other 60%, only 60% of the industrial water user's process water use should be deducted from Gross Water Use.

Cooling process water used in the manufacturing process can be included in the process water deduction. However, the volume is subject to the same quantification and verification as other process water uses and are not to be confused with incidental cooling uses or other HVAC systems. Water which is lost and not recoverable may be deducted. Water that is returned to the system or otherwise beneficially used can be counted.

#### **Existing Industries:**

- Subdivision (d) (1) of Section 10608.26 Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.
- However, a local agency may consider requiring; based upon planning and building codes, regulation, or law, that existing industries utilize water efficiency technologies, methodologies and practices.

#### **New & Retrofitted Industries**

- We strongly recommend that local agencies and water purveyors encourage the utilization of the Green Building Industry standards whenever retrofitting or establishing new manufacturing facilities.