

**Tomato Processing
Covered Product Data Reporting Guidance**
for California's Mandatory Greenhouse Gas Reporting Regulation

Introduction

The following guidance is provided by the California Air Resources Board (ARB) to tomato processing facilities to comply with reporting of covered product data¹ listed in section 95115(n)(10) of the Regulation for the Mandatory Reporting of Greenhouse Gas Emissions (title 17, California Code of Regulations, section 95100 et seq.) (MRR). These product data must be reported annually through the California Electronic Greenhouse Gas Reporting Tool (Cal e-GGRT) along with greenhouse gas (GHG) emissions data.

For additional information about covered product data reporting, including the requirement to exclude inaccurate product data, the use of financial transaction records, how product data are evaluated during verification for accuracy and conformance with the regulation, and other topics, refer to the [Covered Product Data General Reporting Guidance](#) document.

This guidance document describes the requirements of MRR. This guidance document does not, and cannot, create or vary any legal requirements of MRR.

1 Covered Product Data Reporting

The operator of a tomato processing facility must report the quantity of aseptic tomato paste, aseptic whole and diced tomato, non-aseptic tomato paste and tomato puree, non-aseptic whole and diced tomato, and non-aseptic tomato juice in short tons for each reporting year, pursuant to section 95115(n)(10) of MRR. When reporting formulated products, covered product data produced at tomato processing facilities should be broken down into the three categories of tomato constituents: non-aseptic tomato paste and tomato puree, non-aseptic whole and diced tomato, and non-aseptic tomato juice. For example, a canned salsa may include non-aseptic whole and diced tomatoes and a topping² of non-aseptic tomato juice. These constituents must be reported separately under non-aseptic whole and diced tomatoes and non-aseptic tomato juice. Other products such as spices and vegetables must be omitted when reporting the quantity of covered product data.

Operators of facilities must report all required tomato product data in Subpart A of Cal e-GGRT ("Sections 95100-95108 (Subpart A) - General Information"). Figure 1 provides a screenshot of the tomato product data entry fields and the applicable reporting units

¹ "Covered product data" means all product data included in the allocation of allowances under sections 95870, 95890, and 95891 of the Cap-and-Trade Regulation, regardless of whether the Cap-and-Trade Regulation imposes a compliance obligation for the data year.

² Topping is the liquid or semisolid medium in which other products are canned.

(short tons, etc.). Details for calculating and reporting the production of each tomato product type and tomato soluble solids are included in parts 1.1–1.6 of this document.

Figure 1: Tomato Processing Covered Product Data Reporting in Cal e-GGRT Subpart A.

▼ Tomato processing facility [95115(n)(10)]	
Annual production of aseptic tomato paste (covered product data)	<input type="text"/> (short tons of 31% TSS)
Annual production of aseptic whole and diced tomato (covered product data)	<input type="text"/> (short tons)
Annual production of non-aseptic tomato paste and tomato puree (covered product data)	<input type="text"/> (short tons of 24% TSS)
Annual production of non-aseptic whole and diced tomato (covered product data)	<input type="text"/> (short tons)
Annual production of non-aseptic tomato juice (covered product data)	<input type="text"/> (short tons)

1.1 Calculating Tomato Soluble Solids

Some products listed below require the normalization of the product using a conversion for tomato soluble solids. MRR defines tomato soluble solids as follows:

“Tomato soluble solids’ (TSS) means the sucrose value as determined by the method prescribed in the “Official Methods of Analysis of the Association of Official Analytical Chemists,” 13th Ed., 1980, sections 32.014 to 32.016 and 52.012. For instances where no salt has been added, the sucrose value obtained from the referenced tables shall be considered the percent of tomato soluble solids. If salt has been added either intentionally or through the application of the acidified break, determine the percent of such added sodium chloride as specified in the definition of salt. Subtract the percentage sodium chloride from the percentage of total soluble solids found (sucrose value from the refractive index tables) and multiply the difference by 1.016. The resultant value is considered the percent of ‘tomato soluble solids.’”

The reference to the Official Methods of Analysis of the Association of Official Analytical Chemists is used to detail the method and calculation of tomato soluble solids. The centrifuges, centrifuge spin rate, centrifuge spin time, and other lab measurement equipment may be exchanged with more modern equipment and measurement procedures where the operator deems necessary. Tomato soluble solids may be rounded to the nearest tenth of a percent of solids.

To convert the mass of a paste or puree product with a TSS of “TSS%” to the normalized TSS of “Normalized TSS%,” the following conversion factor is used.

$$\text{Normalized TSS Conversion Factor} = \frac{\text{TSS\%} - \text{RawTSS\%}}{\text{Normalized TSS\%} - \text{RawTSS\%}}$$

The “*Normalized TSS%*” is 31 percent for aseptic tomato paste and 24 percent for non-aseptic tomato paste and tomato puree.

The “*RawTSS%*” is the TSS of incoming raw tomatoes, and per section 95102(b) of MRR, “Raw TSS’ means the average annual percent tomato soluble solids of raw tomatoes to be processed in a tomato processing facility.”

Once the “*Normalized TSS Conversion Factor*” is calculated, the mass of the tomato paste at “*TSS%*” can be converted to the mass of tomato paste at the “*NormalizedTSS%*” using the following equation:

$$\begin{aligned} \text{Mass Tomato Paste (Normalized TSS\%)} \\ = \text{Mass Tomato Paste (TSS\%)} * \text{Normalized TSS Conversion Factor} \end{aligned}$$

1.2 Aseptic Tomato Paste

Per MRR, “Aseptic tomato paste’ means tomato paste packaged using aseptic preparation. Aseptic paste is normalized to 31 percent tomato soluble solids. Aseptic paste normalized to 31% TSS = (%TSS - raw TSS)/(31 - raw TSS).” Facilities must report net aseptic paste in short tons at the normalized TSS of 31 percent. For the conversion factor, see Section 1.1 of this document. The value reported should only include the mass of tomato product and does not include vegetables, spices, or other ingredients.

Net paste processed does not include tomato paste that is reprocessed or remanufactured. Reprocessed paste and remanufactured paste are not considered to be covered product data because they are intermediates used to produce covered product later on the production line. Reprocessing involves taking paste of a different TSS, off-specification paste, or spoiled paste, and reprocessing it back into paste. Remanufacturing involves taking tomato paste and processing it into other products, usually other non-aseptic consumer products. Aseptic paste produced on-site that is remanufactured is not counted toward aseptic paste, but the final products may be counted in other non-aseptic categories.

1.3 Aseptic Whole and Diced Tomatoes

Per MRR, “Aseptic whole and diced tomato’ means the sum of whole and diced tomatoes packaged using aseptic preparation. Sum of aseptic whole and diced tomatoes = whole tomatoes + (diced tomatoes x 1.05).”

Facilities must report net aseptic whole and diced tomatoes in short tons. The mass of topping is included in the mass of aseptic whole and diced tomato product whether that topping is a juice or puree. The value reported should only include the mass of tomato product and does not include vegetables, spices, or other ingredients. Net aseptic whole and diced tomatoes processed does not include whole and diced tomatoes that

are reprocessed or remanufactured. Reprocessed and remanufactured aseptic whole and diced tomatoes are not considered to be covered product data because those products are used as an intermediate for another covered product produced on-site. Reprocessing involves taking aseptic whole and diced tomatoes of a different specification or spoiled, and reprocessing it back into aseptic whole and diced tomatoes. Remanufacturing involves taking aseptic whole and diced tomatoes and processing it into other products, usually other non-aseptic consumer products.

1.4 Non-Aseptic Tomato Paste and Tomato Puree

Per MRR, “Non-Aseptic tomato paste and tomato puree’ means the sum of tomato paste and tomato puree packaged using methods other than aseptic preparation. Non-aseptic paste and puree is normalized to 24 percent tomato soluble solids. Non-aseptic paste and puree normalized to 24% TSS = $(\%TSS - \text{raw TSS}) / (24 - \text{raw TSS})$.”

Facilities must report net non-aseptic tomato paste and tomato puree in short tons at the normalized TSS of 24 percent. For the conversion factor, see Section 1.1 of this document. Reprocessed and remanufactured non-aseptic tomato paste and tomato puree is not considered to be covered product data because that product is used as an intermediate for another covered product produced on-site. Reprocessing involves taking non-aseptic tomato paste and tomato puree of a different specification or spoiled, and reprocessing it back into non-aseptic tomato paste and tomato puree. Remanufacturing involves taking non-aseptic tomato paste and tomato puree and processing it into other products, usually other non-aseptic consumer products.

Production reported for non-aseptic tomato paste and tomato puree should include the topping paste used in other non-aseptic products. The value reported should only include the mass of tomato product and does not include vegetables, spices, or other ingredients.

1.5 Non-Aseptic Whole and Diced Tomatoes

Per MRR, “Non-Aseptic whole and diced tomato’ means the sum of whole and diced tomatoes packaged using methods other than aseptic preparation. Sum of non-aseptic whole and diced tomatoes = whole tomatoes + (diced tomatoes x 1.05).” This value should include the whole and diced tomato product used in other reformulated products. Topping is not included in mass of this product. Instead, topping puree is reported in non-aseptic tomato paste and tomato puree and topping tomato juice is reported in non-aseptic tomato juice. The value reported should only include the mass of tomato product and does not include vegetables, spices, or other ingredients.

Facilities must report the net production of non-aseptic whole and diced tomatoes. Net non-aseptic whole and diced tomatoes do not include whole and diced tomatoes that are reprocessed or remanufactured. Reprocessed and remanufactured non-aseptic whole and diced tomatoes are not considered to be covered product data because those products are used as an intermediate for another covered product produced on-

site. Reprocessing and remanufacturing involves taking non-aseptic whole and diced tomatoes of a different specification or spoiled, and reprocessing it into the same or other products.

1.6 Non-Aseptic Tomato Juice

Per MRR, “Non-Aseptic tomato juice’ means tomato juice packaged using methods other than aseptic preparation.”

Facilities must report the amount of tomato juice, which should include juice used as a topping for other products. Eligible tomato juice must contain at least 5 percent TSS. Tomato juice that contains less than 5 percent TSS must not be reported as covered product. Facilities may round the average TSS of a specific product to the nearest tenth of a percent of solids. The reported value should be the mass of product without any conversion. The value reported must only include the mass of tomato product and does not include vegetables, spices, or other ingredients.

Facilities must report the net production of non-aseptic tomato juice. Net non-aseptic tomato juice does not include tomato juice that is reprocessed or remanufactured. Reprocessed and remanufactured non-aseptic tomato juice is not considered to be covered product data because that product is used as an intermediate for another covered product produced on-site. Reprocessing and remanufacturing involves taking non-aseptic tomato juice of a different specification or spoiled, and reprocessing it into the same or other products.

2 Additional Information

Detailed training materials for reporting using Cal e-GGRT:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/tool/ghg-tool.htm>.

The GHG Mandatory Reporting Regulation, with full requirements:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/regulation/mrr-regulation.htm>.

Contact the MRR helpdesk: ghgreport@arb.ca.gov.

For help with reporting, please contact the appropriate staff member:
<http://www.arb.ca.gov/cc/reporting/ghg-rep/ghg-contacts.htm>.