CleanBC Industrial Incentive Program  
Rendering and Animal By-Product Sector Guidance

This guidance applies to reporting operations with primary NAICS codes as follows:

- NAICS – 311613: Rendering and Meat By-product Processing
- NAICS – 311119: Other Animal Food Manufacturing

Sub-Sector: Food Manufacturing, Animal Slaughtering and Processing  
CIIP Product: Rendering and animal by-product – protein and fat

Quantification and Reporting of Emissions and Related Information

Unless explicitly stated otherwise in the CleanBC Industrial Incentive Program (CIIP) guidance, quantification and reporting of greenhouse gas emissions and related information under CIIP must comply with the Greenhouse Gas Industrial Reporting and Control Act (GGIRCA) and the Greenhouse Gas Emission Reporting Regulation (GGERR), including with the referenced in GGERR Western Climate Initiative (WCI) quantification methodologies.

The WCI methodologies typically applicable to rendering and animal by-products reporting operations include, but may not be limited to, the following:

- WCI.020 General Stationary Combustion
- WCI.280 Mobile Equipment at Facilities

Fat, Oil and Grease (FOG) refining and storage, including used cooking oil and imported tallow, fat, oil, grease raw material, are not considered in the benchmark for CIIP purposes. Therefore, the reporting operation’s emissions must be allocated between them and the CIIP product, as described in the section on emission allocation.

In addition to the information required in the GGERR, applicants to CIIP must also report the GHG emissions associated with purchased grid electricity. Purchased electricity is reported under the ‘Production’ tab in the CIIP application. From the ‘Product or Service’ dropdown menu, select ‘Purchased Electricity’. Enter the amount of electricity purchased (in gigawatt hours and the emissions associated with the purchased electricity.
Grid electricity emissions are quantified by multiplying the published electricity emission intensity factor for grid-connected entities $E_{\text{Electr.}}^\text{Grid}$ for the applicable reporting year by the amount of purchased grid electricity $Q_{\text{Purchased}}^\text{Electr.}$ in GWh (1 GWh = 1000 MWh):

$$E_{\text{Electr.}}^\text{Grid} = E_{\text{Electr.}}^\text{Grid} \times Q_{\text{Purchased}}^\text{Electr.}$$

Therefore, the individual facility’s emissions total for CIIP purposes is:

$$E_{\text{CIIP}} = E_{\text{Onsite}} + E_{\text{Electr.}}^\text{Grid} - E_{\text{FOG}}^\text{GSC} - E_{\text{FOG}}^\text{Electr.}$$

where $E_{\text{Onsite}}$ is the reporting operation’s emissions total as required to be reported under GGIRCA and submitted in the Single Window Reporting System, and $E_{\text{FOG}}^\text{GSC}$ and $E_{\text{FOG}}^\text{Electr.}$ are as defined and calculated in the sections below.

### Quantification of Production

Applicants to the CIIP must report the total amount of “protein plus fat” produced ($P_{\text{P+F}}$) by the rendering process in the facility (in tonnes), using the following formula:

$$P_{\text{P+F}} = P_{\text{Blood}}^m + P_{\text{Fish}}^m + P_{\text{Porcine}}^m + P_{\text{Poultry}}^m + P_{\text{Feather}}^m + P_{\text{Fishoil}}^m + P_{\text{Fat}}^m + P_{\text{Lard}}^m$$

Where

- $P_{\text{Blood}}^m$ is the annual amount of Blood Meal, in tonnes;
- $P_{\text{Fish}}^m$ is the annual amount of Fish Meal, in tonnes;
- $P_{\text{Porcine}}^m$ is the annual amount of Porcine Meal, in tonnes;
- $P_{\text{Poultry}}^m$ is the annual amount of Poultry Meal, in tonnes;
- $P_{\text{Feather}}^m$ is the annual amount of Feather Meal, in tonnes;
- $P_{\text{Fishoil}}^m$ is the annual amount of Fish Oil, in tonnes;
- $P_{\text{Fat}}^m$ is the annual amount of Animal Fats, in tonnes;
- $P_{\text{Lard}}^m$ is the annual amount of Lard, in tonnes;

Products that are made from imported FOG raw material such as used cooking oil, tallow, fat, oil, and grease must not be included in the quantification of CIIP products.
Emission Allocation between Products

Applicants to CIIP must allocate GHG emissions between the following:

- Rendering and animal by-product – protein and fat
- Rendering and animal by-product – cooking oil processing (the non-CIIP product for FOG products)

The general stationary combustion emissions allocated to FOG refining and storage $E_{FOG}^{GSC}$ must be quantified as follows:

$$E_{FOG}^{GSC} = E_{onsite}^{GSC} \times \left( \frac{S_{FOG}}{S_{Total}} \right)$$

where

- $E_{onsite}^{GSC}$ are the reporting operation’s stationary combustion emissions;
- $S_{FOG}$ is the quantity of steam used in FOG refining, unloading, storage and export;
- $S_{Total}$ is the total quantity of the steam generated onsite;

All emissions from purchased electricity and/or heat must be allocated to the facility’s products. The electrical emissions allocated to FOG refining and storage $E_{FOG}^{Elect}$ must be quantified as follows:

$$E_{FOG}^{Elect} = E_{Grid}^{Elect} \times 0.15$$

All on-site transportation (mobile combustion) emissions must be allocated to the “protein and fat” rendering product.

Emission Intensity

For the purposes of CIIP, the Emission Intensity of protein plus fat $EI_{P+F}$ will be calculated as:

$$EI_{P+F} = \frac{E_{CIIP}}{P_{P+F}}$$