**City of Long Beach**

**Proposed Edits**

**September 4, 2018 CARB Cap & Trade Proposal**

**§95852**

*No changes proposed to the deletion of the categorical exemption for waste-to-energy*

**§95870**

(j) Allocation to Waste-to-Energy Facilities. Vintage 2020 allowances available for allocation to waste-to-energy facilities shall be calculated as set forth in section 95891(f)(1). The Executive Officer will place vintage 2020 allowances in the annual allocation holding account of each eligible waste-to-energy facility, not to exceed its covered 2018 and 2019 emissions, by October 24, 2019. An amount of vintage 2020 true-up allowances will be placed in the annual allocation holding account of each eligible waste-to-energy facility by October 24, 2019 to account for 2018 and 2019 emissions.

**§95871**

1. Allocation to Waste-to-Energy Facilities. Allowances available for allocation to waste-to-energy facilities each budget year shall only be calculated as set forth in section 95891(f). The Executive Officer will place an annual individual allocation in the annual allocation holding account of each eligible waste-to-energy facility, not to exceed its covered emissions, by October 24 of each calendar year beginning in 2020 for allocation from the following year annual allowance budget.

**§95891**

(f) Allocation to Waste-to-Energy Facilities. The Executive Officer shall calculate the amount of allowances directly allocated to waste-to-energy facilities using the following methods.

1. Allocation for Budget Year 2020. For budget year 2020, the Executive Officer shall calculate the amount of California GHG Allowances directly allocated to waste-to-energy covered facilities using the following equation:

Where:

“A2020” is the amount of California GHG allowances directly allocated to a facility for budget year 2020;

“BaselineAllocation” is the GHG emissions from the historical arithmetic mean of the amount of energy produced due to fuel combustion at the facility based on the emissions efficiency benchmark per unit of energy from fuel combustion adjusted for the GHG emissions from the historical arithmetic mean of annual electricity sold or provided for off-site use that was generated from non-biogenic fuel. This value is calculated by the following equation:

Where:

“FConsumed” is the historical baseline annual arithmetic mean amount of energy produced due to fuel combustion at the facility, measured in MMBtu. The Executive Officer shall calculate this value based on the total mass of steam generated by the facility multiplied by the ratio “B” in units of MMBtu/lb steam, defined as the ratio of the boiler’s maximum rated heat input capacity to its design rated steam output capacity by section 98.33 of subpart C, title 40, Code of Federal Regulations, Part 98 (December 9, 2016).

“BFuel” is the emissions efficiency benchmark per unit of energy from fuel combustion, 0.05307 California GHG Allowances/MMBtu;

“eSold,Non-Biogenic” is the historical arithmetic mean of annual electricity sold or provided for off-site use that is generated from non-biogenic fuel, measured in MW h. This equals the historical arithmetic mean of total annual electricity sold or provided for off-site use multiplied by the historical arithmetic mean of annual covered (non-biogenic) emissions divided by annual total emissions;

“BElectricity” is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances/MWh;

“ct” is the cap adjustment factor for budget year “t” to account for cap decline as specified in Table 9-2;

“t” is the budget year from which the direct allocation occurs; and

“TrueUpt” is the amount of true-up allowances allocated to account for allocation not properly accounted for in prior allocations. This value of allowances from budget year “t” shall be allowed to be used for compliance for budget year t-2 and subsequent years pursuant to sections 95856(h)(1)(D) and 95856(h)(2)(D). This value is calculated by the following equation:

1. Allocation for Budget Years 2021 and beyond. For budget years 2021 and beyond, the Executive Officer shall calculate the amount of California GHG Allowances directly allocated to eligible waste-to-energy covered entities using the following formula:

Where:

“At” is the amount of California GHG allowances directly allocated to a facility for budget year “t”;

“t” is the budget year from which the direct allocation occurs;

“BaselineAllocation” is the GHG emissions from the historical arithmetic mean of the amount of energy produced due to fuel combustion at the facility based on the emissions efficiency benchmark per unit of energy from fuel combustion adjusted for the GHG emissions from the historical arithmetic mean of annual electricity sold or provided for off-site use that was generated from non-biogenic fuel. This value is calculated by the following equation:

“FConsumed” is the historical baseline annual arithmetic mean amount of energy produced due to fuel combustion at the facility, measured in MMBtu. The Executive Officer shall calculate this value based on the total mass of steam generated by the facility multiplied by the ratio “B” in units of MMBtu/lb steam, defined as the ratio of the boiler’s maximum rated heat input capacity to its design rated steam output capacity by section 98.33 of subpart C, title 40, Code of Federal Regulations, Part 98 (December 9, 2016).

“BFuel” is the emissions efficiency benchmark per unit of energy from fuel combustion, 0.05307 California GHG Allowances/MMBtu;

“eSold,Non-Biogenic” is the historical arithmetic mean of annual electricity sold or provided for off-site use that is generated from non-biogenic fuel, measured in MW h. This equals the historical arithmetic mean of total annual electricity sold or provided for off-site use multiplied by the historical arithmetic mean of annual covered (non-biogenic) emissions divided by annual total emissions;

“BElectricity” is the emissions efficiency benchmark per unit of electricity sold or provided to off-site end users, 0.431 California GHG Allowances/MWh; and

“ct” is the cap adjustment factor for budget year “t” to account for cap decline as specified in Table 9-2.

(3) Data Sources. To determine the appropriate baseline values, the Executive Officer employed data reported to ARB pursuant to MRR for the data years 2013-2017. The Executive Officer may solicit additional data as needed.

**Table 9-2: Cap Adjustment Factors for Allowance Allocation**

|  |  |  |
| --- | --- | --- |
| **Budget Year** | **Cap Adjustment Factor, c** | |
| **Standard Activities** | **Industrial Activities with NAICS codes 325311, 327310, and 327410#, 562213†** |
| 2013 | 0.981 | 0.991 |
| 2014 | 0.963 | 0.981 |
| 2015 | 0.944 | 0.972 |
| 2016 | 0.925 | 0.963 |
| 2017 | 0.907 | 0.953 |
| 2018 | 0.888 | 0.944 |
| 2019 | 0.869 | 0.935 |
| 2020 | 0.851 | 0.925 |
| **Budget Year** | **Cap Adjustment Factor, c** | |
| **~~All~~ Standard Activities** | **Industrial Activities with NAICS codes 324199 (coke calcining only), 325311, 327310, 327410#, 562213†** |
| 2021 | 0.817 | 0.909 |
| 2022 | 0.783 | 0.892 |
| 2023 | 0.749 | 0.875 |
| 2024 | 0.715 | 0.858 |
| 2025 | 0.681 | 0.841 |
| 2026 | 0.647 | 0.824 |
| 2027 | 0.613 | 0.807 |
| 2028 | 0.579 | 0.790 |
| 2029 | 0.545 | 0.773 |
| 2030 | 0.511 | 0.756 |
| 2031 | 0.494 | 0.747 |

#These are activities with over 50 percent of total emissions from process emissions, high emissions intensity and a high leakage risk classification in Table 8-1. The activities are coke calcining under the NAICS code 324199, activities under the NAICS code 325311, activities under the NAICS code 327310, and the activities under the NAICS code 327410.

**†**Activities under NAICS code 562213 shall transition to the cap adjustment factor for standard activities when all activities under NAICS code 5622 are subject to this article.