**Section 225.465 Clean Air Set-Aside (CASA) Allowances**

a) The CAIR NOx allowances for the CASA for each control period will be assigned to the following categories of projects:

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | Phase I | Phase II |
| (2009-2014) | (2015 and thereafter) |
| 1) | Energy Efficiency and Conservation/Renewable Energy | 9149 | 7625 |
| 2) | Air Pollution Control Equipment Upgrades | 3811 | 3175 |
| 3) | Clean Coal Technology | 4573 | 3810 |
| 4) | Early Adopters | 1525 | 1271 |

b) The following formulas must be used to determine the number of CASA allowances that may be allocated to a project per control period:

1) For an energy efficiency and conservation project pursuant to Section 225.460(a)(1) through (a)(4)(A), the number of allowances must be calculated using the number of megawatt hours of electricity that was not consumed during a control period and the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhc) × (1.5 lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project. |
| MWhc | = | The number of megawatt hours of electricity conserved or generated during a control period by a project. |

2) For a zero emission electric generating project pursuant to Section 225.460(b)(1), the number of allowances must be calculated using the number of megawatt hours of electricity generated during a control period and the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhg) × (2.0 lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project |
| MWhg | = | The number of megawatt hours of electricity generated during a control period by a project. |

3) For a renewable energy emission unit pursuant to Section 225.460(b)(2), the number of allowances must be calculated using the number of MWhs of electricity generated during a control period and the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhg) × (0.5 lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project. |
| MWhg | = | The number of MW hours of electricity generated during a control period by a project. |

4) For an air pollution control equipment upgrade project pursuant to Section 225.460(c)(1), the number of allowances will be calculated as follows:

A) For NOx or SO2 control projects, by determining the difference in emitted NOx or SO2 per control period using the emission rate before and after replacement or improvement, and the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhg) × K × (ERB lb/MWh - ERA  lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project. |
| MWhg | = | The number of megawatt hours of electricity generated during a control period by a project. |
| K | = | The pollutant factor: for NOx, K= 0.1; and for SO2, K = 0.05. |
| ERB | = | Average NOx or SO2 emission rate based on CEMS data from the most recent two control periods prior to the replacement or improvement of the control equipment in lb/MWh, unless subject to a court order or consent decree. For units subject to a court order or consent decree entered into before May 30, 2006, ERB is limited to emission rates that are lower than the emission rate required in the consent decree or court order. For a court order or consent decree entered into after May 30, 2006, ERB is limited to the lesser of the emission rate specified in the court order or consent decree or the actual average emission rate during the control period. If such limit is not expressed in lb/MWh, the limit must be converted into lb/MWh using a heat rate of 10 mmBtu/1 MW. |
| ERA | = | Annual NOx or SO2 average emission rate for the applicable control period data based on CEMS data in lb/MWh. |

B) For a baghouse project:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhg) × (Q lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project. |
| MWhg | = | The number of MWh of electricity generated during a control period or the portion of a control period that the units were controlled by the baghouse. |
| Q | = | • If a baghouse was not installed pursuant to a consent decree or court order, 0.2.  • If a baghouse was installed pursuant to a consent decree or court order that assigns a Q factor, the factor established in the consent decree or court order but must not exceed a factor of 0.2.  • If a baghouse was installed pursuant to a consent decree or court order that does not assign a Q factor, then Q shall equal:  Q = 0.25 - (P × ERq) |

Where:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| P | = | If the most recent control period's average PM emission rate was based on PM CEMS data, 1.0; otherwise 1.1. | | | |
| ERq | = | The magnitude of the most recent control period's average PM emission rate in lb/MWh exiting the baghouse, subject to the following limits: | | | |
| If P | = | 1.0, then 1/10 ≤ ERq ≤ 2/10 |
| If P | = | 1.1, then 1/11 ≤ ERq ≤ 2/11 |

|  |
| --- |
| • If the ERq is less than the lower limit, the lower limit shall be used. |
| • If ERq is greater than the upper limit, the upper limit shall be used. |
| • If ERq is not expressed in lb/MWh, the number must be converted to lb/MWh using a heat rate of 10 mmBtu/1 MW. |

5) For highly efficient power generation and clean coal technology projects:

A) For projects other than fluidized coal combustion pursuant to Section 225.460(a)(4)(B), (a)(4)(C), and (c)(2), the number of allowances must be calculated using the number of MWh of electricity the project generates during a control period and the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhg) × (1.0 lb/MWh - ER lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project. |
| MWhg | = | The number of megawatt hours of electricity generated during a control period by a project. |
| ER | = | Annual average NOx emission rate based on CEMS data in lb/MWh. |

B) For fluidized bed coal combustion projects pursuant to Section 225.460(c)(2), the number of allowances shall be calculated using the number of gross MWh of electricity the project generates during a control period and the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | (MWhg) × (1.4 lb/MWh - ER lb/MWh) / 2000 lb |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project. |
| MWhg | = | The number of gross MWh of electricity generated during a control period by a project. |
| ER | = | Annual NOx emission rate for the control period based on CEMS data in lb/MWh. |

6) For a CASA project that commences construction before December 31, 2012, in addition to the allowances allocated pursuant to subsections (b)(1) through (b)(5) of this Section, a project sponsor may also request additional allowances pursuant to the early adopter project category pursuant to Section 225.460(e) based on the following formula:

|  |  |  |
| --- | --- | --- |
| A | = | 1.0 + 0.10 × Σ Ai |

Where:

|  |  |  |
| --- | --- | --- |
| A | = | The number of allowances for a particular project as determined in subsections (b)(1) through (b)(5) of this Section. |
| Ai | = | The number of allowances as determined in subsection (b)(1), (b)(2), (b)(3), (b)(4) or (b)(5) of this Section for a given project. |

(Source: Added at 31 Ill. Reg. 12864, effective August 31, 2007)