Instructions for Providing Control Measure Information for State-Specific Rules and Implementation of Non-EGU Federal rules for the 2022 Emissions Modeling Platform

Background

Emissions control factors are applied to emission inventories to estimate emission reductions from control measures using the following equation:

Control Factor = (1-(Control Efficiency*Rule Effectiveness*Rule Penetration))

where,

Control Efficiency is a fractional value or percentage representing the amount of emissions reduced by a control device, process change, or reformulation.

Rule Effectiveness is a fractional value or percentage representing the actual ability of the regulatory program to achieve the planned emission reductions.

Rule Penetration is a fractional value or percentage representing of the percentage of emissions in a source category that are emitted at facilities subject to the requirements the regulatory program (i.e., rule)

The National Emissions Collaborative (NEC) is working with U.S. EPA to develop analytic year (i.e., future year) emissions estimates that are projected from the 2022 base year. We are seeking information on state or local regulations that will impact air pollution emissions between 2022 and 2038 to incorporate into the 2022 emissions modeling platform.

In addition to control information from regulatory programs, the NEC is seeking information on other programs, agreements, or activities that will impact emissions in the future. Examples may include:

- Consent decrees
- Stationary source retirements or fuel switches
- Voluntary programs (please note that these are voluntary)

Information Request

If a state, local, or tribal (SLT) air agency has adopted a regulation that it wants incorporated into the 2022 modeling platform, the agency should provide to the NEC the information necessary to incorporate its rule into the estimates of future year emissions for the applicable sources.

If the SLT feels that the rule will not achieve all estimated reductions due to non-compliance or other reasons, or the rule is not statewide, they could apply a rule

effectiveness or a rule penetration rate estimate to adjust the control efficiency to be more representative of how the rule will actually be implemented.

The NEC has developed an emissions control information template for providing analytic year control information for the 2022 emissions modeling platform.

The information provided by SLT agencies to the NEC must include if applicable:

- Legal name for control measure (rule long name)
- Short name for control measure
- The pollutants being reduced
- The percent pollutant reduction (control efficiency), adjusted for rule effectiveness and/or rule penetration, if applicable
- Date(s) that the rule was effective/promulgated (effective Date)
- Date(s) when the rule is expected to achieve the emission reductions (compliance date)
- For stationary source retirements, the retirement date (if applicable)
- The applicable jurisdiction, e.g., county, state, or tribal codes
- The applicable inventory sector source category, e.g., non-point, onroad mobile, industrial point, etc.
- Source Classification Codes (SCCs) or North American Inventory Classification System (NAICS) codes to which the controls should be applied
- For stationary sources, information on the facility, unit, or process to which the controls should be applied if applicable (note if the controls is applied by SCC these details may not be necessary)
- If the rule is a product or equipment turnover rule, the rule implementation assumption in years for the turnover of products or equipment if extended beyond one year.

The emissions control information template also includes an area for SLTs to provide narrative descriptions of control programs if they do not have ready access to the detailed information requested above. Any information about emissions control programs, including references or links to rule making documents, may be provided through this template. Note that programs described in this way are unlikely to be included in the 2022v1 analytic year inventories, but they can be considered for 2022v2 once more details become available.

How and When to Provide Control Information

Download a copy of the control information template (Excel spreadsheet) from the Projections workgroup wiki page.

Return the updated template to the NEC Projections Workgroup co-leads Zac Adelman (adelman@ladco.org), your MJO contact, and emissionsmodeling@epa.gov by July 19, 2024.

Technical Notes

The benefits for emissions control rules are typically only applied once to an inventory on the effective date of the rule. Some rules however result in emission reductions that occur over an extended period due to long implementation rates, such as technology turn-over rules for low NOx water heaters. For those rules with long implementation rates, SLTs should provide an estimate of the rule implementation period by using the *compliance date* and *rule implementation time* fields in the control information template.

For rules that were adopted prior to the inventory base year (either 2020 or 2022, depending on the sector) and the effective date of the benefits was also prior to the inventory base year, the control measure should already be incorporated into the base year inventory.

For rules with effective dates after the inventory base year (post-2022), and prior to the analytics years in this 2022 platform (2026, 2032, and 2038), the benefits are applicable to the modeling platform and the rule should be reported in the control information template.

Note: the fields in the table below and the spreadsheet reference EIS identifiers. If an agency does not have the information on the EIS identifiers for a specific row, agency identifiers could be provided, but ideally those alternate IDs are also present in EIS, otherwise it will not be possible to map them to the NEI data.

Explanation of Fields from the Control Information Template Spreadsheet

Fields (as applicable)	Description
Source Category	Select a source category from the drop down list to which the emissions controls apply
State Code	Select the two character state ID from the drop down list
State ID	Autofills the two digit state FIPS code based on the user input to the State Code column
County ID	Three digit numeric county FIPS code; leave blank if the rule applies to the entire state
Tribal Code	Numeric BIA tribal code
Facility ID	Numeric EIS facility identifier if applicable
Unit ID	Numeric EIS unit identifier if applicable
Point ID	Numeric EIS point identifier if applicable

Fields (as applicable)	Description
Process ID	Numeric EIS process identifier if applicable
Faclity Name	Facility name as text, if applicable
SCC	7-10 digit source classification code or codes
NAICS Code	6 digit North American Inventory Classification System code if applicable
Pollutant	Pollutant(s) to which the control applies, e.g., NOX, VOC, PM2.5, NH3, CO, or numeric HAPS ID
Effective Date	The date when the regulation was effective/promulgated
Compliance Date	The date by which there will be full compliance with the regulation or for a turnover rule, the date by which compliance begins
Annual Percent Reduction	Total percentage of emissions that will be reduced by the rule either in the year of compliance or for a turnover rule, for each year until complete turnover
Implementation Time	The number of years that the benefits will be spread out over, after initial compliance, if applicable
Rule Long Name	Complete description of the rule from the state or local regulatory docket
Rule Short Name	Short name of the rule
Rule Reference	URL or docket number describing the regulation
Submitted By	Name, email, and agency of the person submitting this information
Comment	Any additional information relevant for modeling the impacts of the rule