

MEMORANDUM

DATE: May 30, 2014

TO: Docket # EPA-HQ-OAR-2014-0410

FROM: Jessica Gordon, Lisa Grogan-McCulloch, US EPA/Climate Change Division

SUBJECT: Publication of Certain Aggregated Greenhouse Gas Data

Background

On October 30, 2009, the EPA published the Greenhouse Gas (GHG) Reporting Rule, 40 CFR Part 98, requiring annual reporting of GHG data from a broad range of industry sectors. Under the Greenhouse Gas Reporting Rule and its subsequent amendments (hereinafter referred to as “Part 98”), the EPA requires annual reporting of data from certain facilities and suppliers. Through a series of rulemaking actions, the EPA determined which categories of data elements qualify for protection as confidential business information (CBI) under EPA’s regulations at 40 CFR Part 2, subpart B.

Many data elements determined to be CBI at the facility or supplier level may be published as aggregated values at the subpart level (e.g., industry total or weighted average) or corporate-level (for subparts OO, PP, and QQ) if the aggregation shields the underlying facility or supplier-level CBI. In the Federal Register notice, Greenhouse Gas Reporting Rule: Publication of Aggregated Greenhouse Gas Data, Docket ID EPA-HQ-OAR-2014-0410, the EPA outlined criteria for determining whether aggregated CBI data may be published without risk of disclosing the underlying CBI data. These criteria are summarized below.

Criteria for Aggregating Data at the National or Regional Level

- 1a. The data used to calculate the aggregated value must be reported by at least three separate facilities or suppliers that have no common ownership or operator;
- 2a. No single owner or operator can contribute more than x percent to a particular aggregated value. (The EPA will not disclose the value of x);
- 3a. No two owners or operators can contribute more than y percent of a particular aggregated value. (The EPA will not disclose the value of y); and
- 4a. No underlying facility or supplier-level CBI can be back-calculated or otherwise determined using the aggregated value in combination with other publicly available data, including any facility-, supplier-, regional-, or national-level data published by the GHGRP or any other data likely to be available to owners or operators.

Criteria for Corporate-Level Supplier Data in Subparts OO, PP, and QQ

- 1b. The aggregated value includes information from two or more products supplied by the reporter;
- 2b. No single product can contribute more than z percent of the corporate-level total to a particular aggregated value. (The EPA will not disclose the value of z);
- 3b. Publication of the data does not allow for values (from another owner) that do not themselves meet criteria 1b and 2b to be back-calculated from national- or regional-level data aggregations; and

4b. If a company only reports data on a single product type, the products within that product type contain different GHGs, different amounts of that GHG per product, or both.

As we explained in the Federal Register notice, the EPA will publish only aggregated values that meet all of the final criteria in the appropriate set (national/regional aggregation or corporate-level aggregation) that the EPA adopts after considering comment on the Federal Register notice. We intend to hold confidential the values of x and y in criteria 2a and 3a and the value of z in criterion 2b to provide additional protection of the facility and supplier-level data.

Table 1 of this memorandum contains a list of data elements that the EPA is presently considering for aggregation. This table presents the subpart of the data to be evaluated for aggregation; the data element description; whether this applies to Continuous Emissions Monitoring Systems (CEMS), non-CEMS facilities, or the combination of the two (“CEMS & non-CEMS”); the rule citation; and the aggregation level (e.g., national, state).

The EPA will consider comments on the Federal Register notice and develop the final criteria for publication. The EPA will then evaluate certain Reporting Year 2013 data, particularly the data elements listed in Table 1, against the final criteria. For aggregated values that meet all of the applicable final criteria for publication, the EPA will then individually notify each affected reporter (in writing and in a manner providing confirmation of receipt, as specified under the EPA’s CBI regulations at 40 CFR 2.204(e)(1)) about which data elements the EPA intends to aggregate and the intended level of aggregation. The EPA will then give the reporter at least ten days to file for judicial review, as required under 40 CFR 2.205(f)(2), before publicly releasing any aggregated values.

For aggregated values to be published in any future year, the final criteria must be met for the relevant data element(s) for that particular year. As long as the aggregation criteria remain consistent, the EPA does not anticipate publishing additional Federal Register notices, but will continue to provide written notice to individual reporters in advance of publishing aggregated values, as described above.

Please see the Federal Register notice for a discussion of the comments we request on the data elements and aggregation levels in this table and for instructions on how to comment.

Table 1. List of Data Aggregations that the EPA May Evaluate Against the Final Aggregation Criteria.

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
AA	Pulp & Paper Manufacturing	Unbleached virgin chemical pulp production	N/A	98.276(k)	National (Total)
		Total annual steam purchases	N/A	98.276(j)	National (Total)
CC	Soda Ash Manufacturing	Soda ash production	CEMS & non-CEMS	98.296(a)(2), 98.296(b)(3)	National (Total)
EE	Titanium Dioxide Production	Titanium dioxide annual production	CEMS & non-CEMS	98.316(a)(3), 98.316(b)(4)	National (Total)
		Annual Production of Carbon Containing Waste	CEMS & non-CEMS	98.316(a)(5), 98.316(b)(7)	National (Total)
		Average Carbon Content of Carbon Containing Waste	non-CEMS only	98.316(b)(11)	National (Weighted average)
		Annual Consumption of calcined petroleum coke	CEMS & non-CEMS	98.316(a)(2), 98.316(b)(3)	National (Total)

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
		Sampling analysis results of carbon content of petroleum coke	non-CEMS only	98.316(b)(13)	National (Weighted average)
G	Ammonia Manufacturing	Annual Urea Production	non-CEMS only	98.76(b)(12)	National (Total)
GG	Zinc Production	Annual production quantity for each zinc product	CEMS & non-CEMS	98.336(a)(2), 98.336(b)(3)	National (Total)
H	Cement Production	Annual Cement Production	CEMS & non-CEMS	98.86(a)(2), 98.86(b)(3)	National (Total)
		Clinker production	CEMS & non-CEMS	98.86(a)(1), 98.86(b)(2)	National (Total)
I	Electronics Manufacturing	Annual production in terms of substrate surface area (e.g., silicon, PV-cell, glass)	N/A	98.96 (e)	National for each subsector (semiconductor, LCD, PV, etc.) (Total). For semiconductors, also by wafer size, by device type (e.g., memory vs. logic, as indicated by the World Fab Forecast), by fab level of abatement (e.g. percentage groupings such as 0-50%, 50-75%, 75-90%, 90-100%), by Si vs. other substrates (as indicated by the World Fab Forecast) (Total).
		Annual manufacturing capacity of each fab at the facility used to determine the annual manufacturing capacity of the facility in Equation I-5 of subpart I	N/A	98.96 (a)	National for each subsector (semiconductor, LCD, PV, etc.) (Total). For semiconductors, also by wafer size, by device type (e.g., memory vs. logic, as indicated by the World Fab Forecast), by fab level of abatement (e.g. percentage groupings such as 0-50%, 50-75%, 75-90%, 90-100%), by Si vs. other substrates (as indicated by the World Fab Forecast) (Total).

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
K	Ferroalloy Production	Annual facility ferroalloy product production capacity	CEMS & non-CEMS	98.116(a)	National (Total)
MM	Suppliers of Petroleum Products	Quantity of each Product in Table MM-1 entering refineries	N/A	98.396(a)(2)	National and by PADD (Total)
		Quantity of each Product in Table MM-1 exiting refineries	N/A	98.396(a)(6)	National and by PADD (Total)
		Quantity of each biomass product in Table MM-2 entering refineries to be co-processed with petroleum feedstocks	N/A	98.396(a)(14)	National and by PADD (Total)
		For each product in Table MM-1, CO2 associated with that product exiting refineries MINUS Total CO2 associated with that product entering refineries	N/A	98.396(a)(16), 98.396(a)(17), 98.396(19)	National and by PADD (Total)
		For each product in Table MM-2, CO2 associated with each biomass based feedstock entering refineries for co-processing with petroleum feedstocks	N/A	98.396(a)(18)	National and by PADD (Total)
		Volume of crude oil received at refineries	N/A	98.396(a)(20)	National and by PADD (Total)
		Volume of bulk NGLs received for processing at refineries	N/A	98.396(a)(21)	National and by PADD (Total)
		Volume of crude injected into crude supplies/reservoirs by refineries	N/A	98.396(a)(22)	National and by PADD (Total)
		Volume of each product listed in Table MM-1 imported	N/A	98.396(b)(2)	National (Total)
		CO2 associated with each product in table MM-1 that is imported	N/A	98.396(b)(7)	National (Total)
		Volume of each product listed in Table MM-1 exported	N/A	98.396(c)(2)	National (Total)
CO2 associated with each product in table MM-1 that is exported	N/A	98.396(c)(8)	National (Total)		
N	Glass Production	Glass Production	CEMS & non-CEMS	98.146(a)(2), 98.146(b)(3)	National (Total)
		Annual Quantity of carbonate based-raw material charged to glass melting furnaces	CEMS only	98.146(a)(1)	National (Total and by carbonate raw material)
		Annual Quantity of carbonate based-raw material charged to all glass furnaces combined	non-CEMS only	98.146(b)(2)	National (Total and by carbonate raw material)
		Decimal fraction of calcination achieved for each carbonate-based raw material, if a value other than 1.0 is used to calculate process mass emissions of CO ₂		98.146(b)(6)	National (Average, by carbonate type)

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
		Mass fraction of each sample analyzed for all tests used to verify the carbonate-based mineral mass fraction charged to a furnace	non-CEMS only	98.146(b)(5)(iii)	National (Average, by carbonate type)
NN-FRAC	Supplier of Natural Gas & Natural Gas Liquids	National CO2 value associated with NGL Supply (across all 5 NGLs)	N/A	98.406(a)(6)	National (Total)
		National CO2 value associated with each of the 5 NGLs (ethane, propane, butane, isobutane, pentanes plus) supplied minus the amount received	N/A	98.406(a)(7)	National (Total)
		National quantity of each of the 5 NGLs supplied	N/A	98.406(a)(1)	National (Total)
		National quantity of each of the 5 NGLs received for processing	N/A	98.406(a)(2)	National (Total)
		Volume of natural gas received for processing	N/A	98.406(a)(3)	National (Total)
		Volume of bulk NGLs received for processing	N/A	98.406(a)(4)(i)	National (Total)
		Volume of propane odorized and delivered to others	N/A	98.406(a)(5)	National (Total)
		Quantity of bulk NGLs supplied	N/A	98.406(a)(1)	National (Total)
NN-LDC	Supplier of Natural Gas & Natural Gas Liquids	Volume of natural gas received at city gate stations	N/A	98.406(b)(1)	National (Total)
		Volume of vaporized LNG withdrawn from storage	N/A	98.406(b)(3)	National (Total)
		Volume of natural gas received from local production	N/A	98.406(b)(5)	National (Total)
		Volume of natural gas delivered to customer meters receiving above 460,000 Mscf per year	N/A	98.406(b)(7)	National (Total)
OO	Suppliers of Industrial GHGs	Aggregated net CO2e supply to U.S. (production + imports - exports - transformation - destruction) of all gases	N/A	98.416(a)(1)-(13)	National and corporate level (Total)
		Aggregated net supply to U.S. of a single gas	N/A	98.416(a)(1)-(13)	National (Total). Gases may be aggregated together if one or more gas fails to meet publication criteria.
		Aggregated components of supply to U.S. (aggregated production, aggregated imports, aggregated exports, aggregated transformation, aggregated destruction) of all gases. Provided in tCO2e and/or tons chemical	N/A	98.416(a)(1)-(13)	National and corporate level (Total)

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
		Aggregated net supply by gas group (e.g., fully fluorinated GHGs (including saturated PFCs, SF6, and NF3 as well as other fully fluorinated, very long-lived compounds such as PFPME); saturated HFCs (may divide these into more than one group based on lifetime); saturated HFEs (may divide these into more than one group based on lifetime or application); unsaturated PFCs; unsaturated HFCs; unsaturated HFEs; and other very short-lived compounds)	N/A	98.416(a)(1)-(13)	National and corporate level (Total). Gas groups may be aggregated together if one or more groups fails to meet publication criteria.
P	Hydrogen Production	Hydrogen Production	CEMS & non-CEMS	98.166(a)(2), 98.166(b)(3)	National (Total)
		Ammonia Production	CEMS & non-CEMS	98.166(a)(3), 98.166(b)(4)	National (Total)
PP	Suppliers of CO2	CO2 Supplied by CO2 Capture Facilities	N/A	98.426(c)	National and by State (Total)
		CO2 Imported	N/A	98.426(a)(1), 98.426(b)(1), 98.426(d)	National (Total)
		CO2 transferred to the following applications: food and beverage, municipal water/wastewater, metal fabrication, plant growth, fumigants, pulp and paper mills, cleaning and solvent use, fire fighting, storage of explosives, enhanced oil and natural gas recovery, long-term storage, research and development, other uses	N/A	98.426(f)	National, by State, and by natural dome (Total)
		CO2 Exported	N/A	98.426(a)(1), 98.426(b)(1), 98.426(d)	National (Total)
QQ	Imports and Exports of equipment pre-charges with F-GHGs or containing F-GHGs in closed-cell foams	Aggregate net CO2e supply to U.S. (imports - exports)	N/A	98.436(a)(1), 98.436(a)(6)(i), 98.436(b)(1), 98.436(b)(6)(i)	National and corporate level (Total)
		Aggregate net CO2e supply to U.S. in equipment	N/A	98.436(a)(1)	National and corporate level (Total)
		Aggregate net CO2e supply to U.S. in foam	N/A	98.436(a)(1)	National and corporate level (Total)
		Aggregate net CO2e supply by gas subgroups (e.g., fully fluorinated GHGs (including saturated PFCs, SF6, and NF3 as well as other fully fluorinated, very long-lived compounds such as PFPME); saturated HFCs (may divide these into more than one group based on lifetime or application); saturated	N/A	98.436(a)(2)-(4)	National and corporate level (Total)

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
		HFEs (may divide these into more than one group based on lifetime or application); unsaturated PFCs; unsaturated HFCs; unsaturated HFEs; and other very short-lived compounds)			
		Aggregate net CO2e supply by individual gases	N/A	98.436(a)(2)-(4)	National and corporate level (Total)
		Aggregate net CO2e supply by individual equipment types	N/A	98.436(a)(2)	National and corporate level (Total)
		Aggregated net number of units supplied of individual equipment types	N/A	98.436(a)(2)	National (Total)
		Aggregate net CO2e supply by individual gas(es) and type(s) of equipment	N/A	98.436(a)(2)	National and corporate level (Total)
R	Lead Production	Total Lead Production	CEMS & non-CEMS	98.186(a)(3), 98.186(b)(4)	National (Total)
S	Lime Manufacturing	Lime product sold	CEMS only	98.196(a)(6)	National (Total)
		Lime product not sold	CEMS only	98.196(a)(8)	National (Total)
		Annual amount of CO2 captured for use in the on-site process	non-CEMS only	98.196(b)(17)(i)	National (Total)
T	Magnesium Production	Magnesium produced or processed	N/A	98.206(c)	National and by industry segment (re-melt, die casting, smelting, refining) (Total)
UU	Injection of CO2	Mass of CO2 received for injection	N/A	98.476(a)(1), 98.476(b)(4), 98.476(c)	National, by State, by AAPG Province (Total)
V	Nitric Acid Production	Nitric Acid Production	N/A	98.226(e)	National (Total)
		Type of Nitric Acid Process	N/A	98.226 (k)	National (Totals, production share by type)
X	Petrochemical Production	Acrylonitrile produced	CEMS & non-CEMS	98.246(a)(5), 98.246(b)(8)	National (Total)
		Carbon black produced	CEMS & non-CEMS	98.246(a)(5), 98.246(b)(8)	National (Total)
		Ethylene produced	CEMS & non-CEMS, including optional combustion methodology from 98.243(d)	98.246(a)(5), 98.246(b)(8), 98.246(c)(5)	National (Total)
		Ethylene dichloride produced	CEMS & non-CEMS	98.246(a)(5), 98.246(b)(8)	National (Total)
		Ethylene oxide produced	CEMS & non-CEMS	98.246(a)(5), 98.246(b)(8)	National (Total)

Subpart	Subpart Description	Data Element Description	CEMS/Non-CEMS	Rule Citation	Aggregation Level
Y	Petroleum Refineries	Coke burn-off quantity per cycle or measurement period for catalytic cracking units, traditional fluid coking units and catalytic reforming units	N/A	98.256(f)(13)	National (Total)
Z	Phosphoric Acid Production	Phosphoric Acid Production	N/A	98.266(a)	National (Total)
		Phosphoric Acid Production by origin of phosphate rock	N/A	98.266(a)	National (Total)
		Phosphoric Acid production capacity	N/A	98.266(b)	National (Total)
		Annual arithmetic average percent inorganic carbon or carbon dioxide in phosphate rock	N/A	98.266(c)	National (Average)
		Annual phosphate rock consumption from monthly measurement records by origin	N/A	98.266(d)	National (Total)