Greenhouse Gas Certification Template

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality

January 24, 2021

General Information

Paperwork Reduction Act Notice

The public reporting and recordkeeping burden for this collection of information is estimated to average 70 hours per response (for combination tractors) and 24 hours per response (for vocational vehicles). Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number(s) in any correspondence. Do not send the completed form to this address.

OMB Control No: 2060-NEW
Expires: xx-xx-20xx

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Office of Transportation and Air Quality
November 2011

United States Environmental Protection Agency, Office of Air and Radiation, Office of Transportation and Air Quality

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Vehicle Family Information

a) Vehicle Family Description

Manufacturer		Fee paid?			
Model year		Production start date		Prod. end date	
Family		Intro. to commerce date			
Process code		Est production volume			
		Are you a secondary vehicle manufacturer (§1037.620(b))?		Please identify the primary vehicle manufacturer	
Vehicle type		*For Tractors Only*		*Please list typical applications for this vehicle family*	
Averaging set		Cab			
Useful life (yrs/miles)	10/185,000	Roof height			
Advanced technology (vehicle only)?		Class	7		
				Is this a vocational tractor family?	
CO_2 Emission standard		g/ton-mile			
Lowest projected CO2 family emission limit		g/ton-mile			
Highest projected CO2 family emission limit		g/ton-mile			

Trade name(s) of vehicles in family

Vehicle assembly location(s)

City	State	Country	Importation Point

Name, address & telephone of U.S.-based agent for service

Please identify the emission control system(s) utilized in this vehicle family

Please identify any adjustable parameters (per §1037.115)

Name	Nominal	Minimum	Maximum

CO2 Deterioration Factor

Are you using EPA-assigned DF?	
Type?	
Value	

b) Disclosure

	Yes/No/N-A
Do you intend on using the averaging, banking & trading provisions of §1037, subpart H?	
Has a copy of the warranty statement been sent to the certification staff?	
Has a copy of the emission control label been sent to the certification staff?	
Has a copy of your aerodynamic worksheet been sent to the certification staff (tractors only)?	
Do you meet the maintenance requirements of §1037.125?	
Are you participating in NHTSA's early-credit program?	
Secondary veh. manufacturers: Will vehicles be distributed without conforming to all applicable regulations?	

To the best of your belief, you will not have a negative balance of emission credits for any averaging set when all emission credits are calculated at the end of the year; or you will have a negative balance of emission credits for one or more averaging sets such that it is allowed under §1037.745

c) Vehicle Speed Limit (VSL) System

Do any of your configurations use a vehicle speed limiter, consistent with §1037.640?

Please enter your VSL properties for at least the following configurations: Highest Projected Sales, Lowest GEM Input, Highest GEM Input

VSL Configuration Type				
Default speed limit (MPH)				
Soft top?				
Soft top speed (MPH)				
Max soft top duration (per day)				
Soft top Units				
Does your VSL expire?				
Expiration point (Miles)				
Effective speed limit (GEM input) (MPH)	**0.0**	**0.0**	**0.0**	**0.0**

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d) Automatic Engine Shutdown (AES) System

Do any of your configurations utilize automatic engine shut-down features, as described in §1037.660?

Please describe conditions that must be met for the engine to shut-down after 300 seconds (§1037.660(a))

Please describe any conditions that may override the AES (§1037.660(b))

Does the AES system have an expiration point?

	Configuration 1	Configuration 2	Configuration 3	Configuration 4
Configuration type				
Please enter the expiration point in miles				
AES Credit (GEM Input), g CO_2/ton-mile	**0.00**	**0.00**	**0.00**	**0.00**

e) Aerodynamics

Are C_dA measurements from a high-roof tractor being used for a low or mid-roof tractor (per §1037.520(b)(3))?

Please enter the vehicle family name of the high-roof tractor

	Method 1	Method 2	Method 3	Method 4	Method 5
Method for determining C_dA?					
$F_{alt\text{-}aero}$					
Date of alternate procedure approval					

f) Tire Information

Please identify all the tires used in this vehicle family. Alternatively, you may submit your own document with this information.

Make	C_{rr}	Model	Drive/Steer

g) Weight Reduction Information

Please list all components associated with weight reduction (§1037.520(e))

Wheels

Type	Wheel material	Used in this family?
Single-wide drive tire	Steel	
	Aluminum	
	Light-Weight Steel	
Steer or dual-wide drive tire	High-Strength Steel	
	Aluminum	
	Light-Weight Aluminum	

Other Components (per Table 5 of §1037.520)

Component	Material	Weight reduction (lb)	Innovative technology?

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Auxiliary Emission Control Device (AECD) Worksheet

Manufacturer	0	Process Code	0
Vehicle Family	0	Model Year	0
Regulatory Subcategory	0	Projected Volume	0
Averaging set	0		

Please use this worksheet to disclose any AECDs your vehicle may have

As a reminder, §1037.801 defines "AECD" as: "any element of design that senses temperature, motive speed, engine RPM, transmission gear, or any other parameter for the purpose of activating, modulating, delaying or deactivating the operation of any part of the emission control system." AECDs are not restricted to physical "devices" and in many cases are software algorithms.

AECD Name	Sensed parameter(s)	Controlled parameter(s)	Purpose	Reduced effectiveness?

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Technology Worksheet

Manufacturer	0	Process Code	0
Vehicle Family	0	Model Year	0
Regulatory Subcategory	0	Projected Volume	0
Averaging set	0		

i) Advanced Technologies

Test Vehicle "A" (conventional vehicle)

Configuration	1-A	2-A	3-A	4-A	5-A
Vehicle model					
Serial number					
Service accumulation (miles)					

Please describe the conventional vehicle used for comparison ("Vehicle A"), including why its suitable for comparison. If you submit a supplemental document containing more detailed information, please reference the document name here.

Please enter description here...

Test Vehicle "B" (advanced technology vehicle)

Configuration	1-B	2-B	3-B	4-B	5-B
Vehicle model					
Serial number					
Service accumulation (miles)					

Please describe the features of the advanced technology vehicle ("Vehicle B"). If this technology is applied across multiple configurations, please explain the differences between each of the configurations. If you submit a supplemental document containing more detailed information, please reference the document name here.

Please enter description here...

Calculations

If you have more than 5 configurations, please list the 5 with the highest projected sales in the table below

Configuration	1	2	3	4	5	
Emission rate of Vehicle A						g CO2/ton-mile
Emission rate of Vehicle B						g CO2/ton-mile
Improvement factor	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	
Estimated volume of configuration						

ii) Innovative Technologies

Please provide a brief description of any innovative technologies you are claiming emission credits for (per §1037.610). If you submit a supplemental document containing more detailed information, please reference the document name here.

Please enter description here...

Summary of innovative technologies

Technology name	Improvement factor	Projected volume	Approval date	US EPA approval number

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HFC Worksheet

Manufacturer	0	Process Code	0
Vehicle Family	0	Model Year	0
Regulatory Subcategory	0	Projected Volume	0
Averaging set	0		

Please enter information for at least the following configurations: highest system emission rate, largest refrigerant capacity , highest % leakage, and highest projected sales

A/C System Information					Leakage Inputs (optional)				A/C Leakage Rate	
A/C system number	Refrigerant	Refrigerant GWP, if other than R134a	Production Volume	Refrigerant Capacity (g)	Rigid Pipe Connections emission rate	Service port/control device emission rate (g/year):	Hose permeation rate (g/year):	Compressor emission rate (g/year):	Total System HFC Emission Rate (g/year)	Total System HFC Percent Leakage (%/year)

Installation details

Please list the corporate name(s) (other than the certifying manufacturer) of who will be the final installer(s) of the A/C system

Name	Location (state or country, if non-U.S.)	Location (state or country, if non-U.S.)	Location (state or country, if non-U.S.)

Please paste your GEM ***input*** file on this page

This should include at least 10 subconfigurations (unless the family has fewer), including: highest-CO2 emissions, lowest-CO2 emissions, and highest projected volume and equivalent fuel consumption values in 49 CFR 535.8(c)

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Please paste your GEM ***output*** file on this page

- This should include at least 10 subconfigurations (unless the family has fewer), including: highest-CO2 emissions, lowest-CO2 emissions, and highest projected volume

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