

# United States Environmental Protection Agency Office of Transportation and Air Quality

#### Manufacturer Averaging, Banking, and Trading Report for Heavy-Duty Highway Gasoline Engines and Vehicles

Last Revision: August 2010 Version Number: 2.3

Heavy Duty Highway Gasoline HDE/HDV ABT Template (Credit Calculations) - MY 2007 and After

Submission Date:

Program		1																	
Option: Model Year:															undit Tunnafa	(Drawan Ontions 1 8 2 Onto			
Wouer rear:											1			Ci	redit Fransie	rs (Program Options 1 & 2 Only)			
Engine Family	Averaging Set	Use or Accrual of Early Compliance Offsets?	Weight Class	Parameter (NOx, NMHC+NOx, or NMHC)	FEL	Useful Life (miles)	Transient Cycle Conversion Factor	"ABT Only" Sales (units)	"Non Manufacturer Owned" or "Offset" Sales (units)	Applicable Standard	Units for Standard and FEL (g/bhp-hr or g/mile)	Non-ABT Credit Balance	ABT-Only Credit Balance	Approved Conversion Factor	# ABT-only Credits to Convert	# ABT-only Credits transferred to HDE	ABT-only Credits transferred to HDV	ABT-Only Credit Balance After Transfer	Messages
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ı	ABT-Only Credits	NOx/NMHC+N	Ox (Phase-out)	NOx (PI	nase-in)	NMHC (Phase-in)	
		HDE	HDV	HDE	HDV	HDE	HDV
	Current MY Deficit	0.0	0.0				
	Current MY Credits available for Averaging			0.0	0.0	0.0	0.0
	(FEL > trigger: 10% discount applied before banking or trading.)	0.0	0.0				
	(FEL < trigger: No discount applied before banking or trading.)	0.0	0.0				
	Transfer credits gained	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL CREDITS AVAILABLE FOR AVERAGING	0.0	0.0	0.0	0.0	0.0	0.0

	HDE	HDV
Phase-in Percentage (MY 2008 only)	0.00%	0.00%
Total Offsets Accrued to date		

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OMB No. 2060-0038 Approval Expires on 01/31/2022 EPA Form 5900-134

Total Offsets Used in Current MY (MY 2008 and 2009 only)	0.0	0.0
TOTAL OFFSETS	0.0	0.0

respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.



#### **United States**

## Environmental Protection Agency Office of Transportation and Air Quality

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### Heavy Duty Highway Gasoline HDE/HDV ABT Template (Averaging and Summary)

Model Yea	ar: Manufacturer:			Averag	ing Set		
	XYZ manufacturer	NOx/NMHC+N	Ox (Phase-out)	NOx (P	hase-in)	NMHC (F	Phase-in)
		HDE	HDV	HDE	HDV	HDE	HDV
Deficit:							
	Current MY Deficit	0.0	0.0				
Credit Balan	nces before Averaging:						
	Current MY credits acquired via trading activity						
	Carryover credits banked from prior model years						
	Current MY Credits from transfer (HDE ↔ HDV)	0.0	0.0	0.0	0.0	0.0	0.0
	Current MY Credits			0.0	0.0	0.0	0.0
	Current MY Credits (FEL > trigger: 10% discount before banking or trading.)	0.0	0.0				
	Current MY Credits (FEL < trigger: No discount.)	0.0	0.0				
Credit Usag	e and Averaging:						
	Apply credits acquired via trade						
	Apply carryover credits						
	Apply NMHC+NOx credits to NOx credit balance (HDE only)						
	Apply Current MY Credits from transfer (HDE ↔ HDV)						
	Apply Current MY Credits (FEL > trigger)						
	Apply Current MY Credits (FEL < trigger)						
Credit Sumr	mary after Averaging:						
	Current MY Deficit	0.0	0.0				
	Carryover credit balance	0.0	0.0	0.0	0.0	0.0	0.0
	Current MY credit bal. (FEL > trigger)	0.0	0.0				
	Discount Amount (10%)	0.0	0.0				
	Current MY credit bal. (FEL > trigger) after discount	0.0	0.0				
	Current MY credit bal. (FEL < trigger)	0.0	0.0				
	Current MY Credits for Banking/Trading	0.0	0.0	0.0	0.0	0.0	0.0
	Total Credit Balance after Averaging	0.0	0.0	0.0	0.0	0.0	0.0

<sup>\*\*\*</sup> Please make sure you have Automatic Calculations turned ON. [Tools --> Options --> Calculation tab. Select the 'Automatic' radio button]

#### Paperwork Reduction Act Notice

The public reporting and recordkeeping burden for this collection of information is estimated to average 43 hours per response. 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 (2060-0287) in any correspondence. Do not send the completed form to this address.

OMB No. 2060-0287 Approval Expires on 03/31/2011 EPA Form 5900-134



### **United States Environmental Protection Agency** Office of Transportation and Air Quality

# Manufacturer Averaging, Banking, and Trading Report for Duty Highway Gasoline Engines and Vehicles

Heavy-

### Field Descriptions for Credit Calculations-Current MY

FIELDS (for Credit Calculation - Current MY)	NOTES
Program Option	Enter the Program Option which you are using to certify. Option 1 participants committed to the program in the 2003 model year. Option 2 and Option 3 participants begin participation in model years 2004 and 2005 respectively.
Model Year	Enter the model year for which credits are being calculated.
Engine Family	Enter the 12-character engine family name or test group name.
Averaging Set	Select the averaging set for the associated engine family. Choose 'Engine (phase-out),' 'Engine (phase-in),' 'Vehicle (phase-out),' or 'Vehicle (phase-in)' from the dropdown list.
Use or Accrual of Early Compliance Offsets?	If the engine family will result in accrued Offsets (MY 2007 and prior only), select 'Accrual' or 'Accrual-2X.' The 'Accrual-2X' option should be selected only if the engine family is certified to the voluntary standards for HDEs or HDVs. Select 'Use' if the engine family requires the use of existing Offsets for compliance purposes (MY 2008 and 2009 only). Select 'NJA (ABT)' if Offsets will not be accrued or used. Engine families must have an entry of 'NJA (ABT)' in this column to allow for the calculation of ABT credits.
Weight Class	For engine families associated with a HDV averaging set, select the applicable weight class.
Parameter (NOx, NMHC+NOx, or NMHC)	Select the applicable parameter from the drop-down menu.
FEL	Enter the NOx or NMHC+NOx FEL for the engine family.
Useful Life (miles)	Enter the allowable useful life for the engine family (in miles)
Transient Cycle Conversion Factor	For engine families associated with an HDE averaging set, insert the applicable transient cycle conversion factor as defined at 40 CFR 86.004-15(c)(2) and 86.094-15(c)(2). Note that for HDV averaging sets, this value should be entered as 1.0, to ensure that the associated credit calculation is not affected.
"ABT Only" Sales (units)	Enter the number of engines produced for U.S. sale within the given engine family during the model year that will be used to generate ABT credits.
"Non Manufacturer Owned" or "Offset" Sales (units)	Enter the number of engines produced for U.S. sale within the given engine family during the model year that will be used to generate non-manufacturer owned credits or Offsets.
Applicable Standard	The applicable standard will be automatically displayed in this field depending on the averaging set and parameter selected.
Units for Standard and FEL (g/bhp-hr or g/mile)	The applicable units will be automatically displayed in this field depending on the averaging set and parameter selected.
Non-ABT Credit Balance	The credit balance will be automatically calculated and displayed in this field based on the FEL, useful life, non-manufacturer owned sales, and the applicable standard.
ABT-Only Credit Balance	The credit balance will be automatically calculated and displayed in this field based on the FEL, useful life, ABT-only sales, and the applicable standard.
Approved Conversion Factor	Enter the pre-approved conversion factor that is used to convert between chassis-based credits (derived on a grams per mile basis) and equivalent engine-based credits (derived on a grams per brake horsepower-hour basis)
# ABT-only Credits to Convert	Enter the number of HDV or HDE credits you wish to transfer (convert) to HDE or HDV credits respectively. Transferred credits must be used in the current model year.
# ABT-only Credits transferred to HDE	This is a calculated value. If any credits are entered in column P that are associated with an HDV engine family, the resulting number of transferred HDE credits are shown.
ABT-only Credits transferred to HDV	This is a calculated value. If any credits are entered in column P for an HDE engine family, the resulting number of transferred HDV credits are shown.
ABT-Only Credit Balance After Transfer	This is a calculated value that displays column N, modified to reflect any credit transfers.
Messages	Messages will appear in this field if there are any inconsistencies or problems associated with the engine family data that would preclude the calculation of ABT credits (e.g., FEL cap exceeded) or the use/accrual of Offsets.

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