

## Manufacturers of Diesel Emission Control Systems Application for Participation in the Showcase Program

### MANUFACTURER INFORMATION

<b>A. Identification Information</b>					
Name of Company:		PURltech GmbH & Co. KG			
Name of Primary Contact Person:			Thomas Kaltwasser		
Phone Number:	+49-170-9618735	E-Mail Address:	Thomas.kaltwasser@puritech.de		
Company Mailing Address:		Badstr. 26			
City:	Waldshut-Tiengen, Germany	State:		Zip:	D-79761
Do you currently have a control strategy verified by any of the following agencies?		ARB <input type="checkbox"/> EPA <input type="checkbox"/> VERT <input checked="" type="checkbox"/> Check all that apply			
Is the control strategy for which you are applying verified by any of the following agencies?		ARB <input type="checkbox"/> EPA <input type="checkbox"/> VERT <input checked="" type="checkbox"/> Check all that apply			
If verified by CARB, list the Executive Order Number or Control Strategy Family Name					
If verified, describe the engines and applications for which it has been verified					
VERT: all Diesel engines and applications					

### **B. Product Availability**

Is the control strategy currently commercially available in California?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Name of distributor:	PURltech US LLC.	
Company Location:	944 19th Street 90403 Santa Monica	
Primary Contact Person:	Lutz Lehmann	
Phone Number:	310-359-2360	
E-Mail Address:	info@puritechus.com	

**C. Technology Type** (check all applicable boxes)

DPF <input checked="" type="checkbox"/> Active <input type="checkbox"/> Passive <input type="checkbox"/> NOx Reduction <input checked="" type="checkbox"/> <b>PURImax DBS</b>	
If DPF uses catalyst, specify catalyst formulation: Base-Metal Coating	
Filter regenerated on-line?	<input checked="" type="checkbox"/>
Filter regenerated off-line?	<input type="checkbox"/>
Number of hours of operation before regeneration required: automatic on-demand	
Time required for regeneration: variable	
Is regeneration dependent on size of unit? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
Source of regeneration energy:	
Electricity	<input type="checkbox"/>
Fuel	<input checked="" type="checkbox"/> diesel fuel from vehicle tank
NOx Control	<input checked="" type="checkbox"/> Describe: Catalytic by special coating formulation
FBC	<input type="checkbox"/> Describe:
Other	<input type="checkbox"/> Describe:

**D. Previous Experience and Pre-Existing Data**

Is your device currently used in any off-road conditions?	If yes, please describe YES
Do you have any previous data-logging data on off-road applications? If yes, please provide with application.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Do you have existing test data and/or engineering analysis to support anticipated emission reduction/increase claim(s)? If yes, please provide with application.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

**E. Verification**

The intent is to have project participants complete the verification process. Do you intend to pursue CARB verification?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
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<b>F. Identification of Emission Control Group</b>	
For what category of engines do you intend to verify/are you verified? Unregulated <input type="checkbox"/> Tier 1 <input checked="" type="checkbox"/> Tier 2 <input checked="" type="checkbox"/> Tier 3 <input checked="" type="checkbox"/> Tier 4 <input type="checkbox"/>	
What horse-power ranges are included in the above categories? 100 – 400 HP	
Identify parameters used in selection of engines	
• Application	Any
• Engine type	Any
• Minimum exhaust temperature for proper operation	230 deg C for 10 consecutive minutes per shift
• Maximum consecutive minutes operating below minimum exhaust temperature	4 – 8 hours
• Number of Hours of Operation Before Cleaning of Filter Required	1000
• Fuel Type	No.1-D S15 Tolerant up to 500 ppm Sulfur
• Verification Level Sought	Level 3 Plus Mark 1
What is the maximum backpressure allowed when the control strategy is in operation? 250 mbar	

**G. Commercial Availability**

Is control strategy commercially available? <b>YES</b>
<b>Multiple hundreds of vehicles (off- and on-road) fitted with the PURImax DBS system</b>
Please provide information on any demonstrated retrofits.

**H. Emissions Reduction**

What is the anticipated percent reduction from control strategy (from baseline emissions)?		
PM	A. > 90 %	NOx (if applicable) Ca. 30 %
What is the potential increase in other pollutant levels from control strategy (percent increase from baseline emissions)?		
NO <sub>2</sub>	-70 to -95 %	
NO <sub>x</sub>	-20 to -40 %	
CO	-90 %	
CO <sub>2</sub>	+1 to 2% %	
HC	-90 %	

