

## Cummins Emission Solutions – By Goal

Emissions Goal	Product	Result
Particulate Matter (PM) Control	Diesel Oxidation Catalyst (DOC) On-Road Off-Road	≥ 20% PM reduction ≥ 50% CO reduction ≥ 50% HC reduction (Including toxic HC)
	Diesel Particulate Filter – Passive (CRT and CCRT)	90% PM reduction 85% CO reduction 95% HC reduction
Particulate Matter (PM) plus Oxides of Nitrogen (NOx) Control	Lean-Nox Catalyst (Longview)	25% NOx reduction 85% PM reduction 90% CO reduction 65% HC reduction
Particulate Matter (PM), Carbon Monoxide (CO) and HC Control	Diesel Oxidation Catalyst (DOC) + Closed Crankcase Ventilation (CCV)	Blow-By = 100% reduction 30% PM reduction 50% CO reduction 74% HC reduction (Including toxic HC)
	Partial Continuously Regenerating Technology (PCRT2®)	≥ 50% PM reduction > 90% CO reduction > 90% HC reduction
Oxides of Nitrogen (NOx), Carbon Monoxide (CO) Total Hydrocabons (THC) from natural gas engines	Three Way Catalyst	> 90% NOx reduction > 90% CO reduction > 90% THC reduction