

2019 Surplus Off-Road Opt- In For NO_x (SOON)



**SOUTH COAST
AIR QUALITY MANAGEMENT
DISTRICT**

Regulation For In-Use Off-Road Diesel-Fueled Fleets



CCR, Title 13, Division 3, Chapter 9, Article 4.8

	Section	Codifying	Features
“Base Rule” Off-Road Regulation	2449	General Provisions	• Reduction of NOx <u>and</u> PM
	2449.1	Performance Requirements	• Date driven declining “Target Rates” for fleets
SOON	2449.2	<u>Surplus Off-Road Opt-in for NOx</u>	• <u>Reduction of NOx ONLY</u> • Accelerated Emission Reduction / Earlier Target Rates

SOON Overview



- **Purpose of the SOON Program**
 - To achieve **additional** reductions of **NO_x** from In-Use, Off-Road, Diesel-Fueled, Fleets in California
 - Requires earlier (or surplus) NO_x reductions than would otherwise be achieved through the Off-Road Regulation (2449)
- **Cost Effectiveness is Based on NO_x Reduction Benefit Only**
 - \$30,000/ton for projects the bring engines to current standard
 - \$100,000/ton for zero-emissions or alternatively meet the cleanest optional standard level certified

Applicability



Must apply for SOON funding, if:

- **Off-Road, in-use Diesel-fueled fleet**
 - ✦ **As of 2008, fleet consists of >40% of Tier 0 or Tier 1 vehicles**
- **Statewide fleet size >20,000 hp**
 - ✦ **Excludes hp from engines in two-engine vehicles and hp from single engine cranes formerly subject to the Cargo Handling Equipment Regulation**
- **Other fleet sizes may apply on a voluntary basis**
- **Fleet Average Index (FAI) > SOON Target Rate (STR)**

Applicability (cont.)



Exclusions and Limitations

- Excludes replacement projects involving the purchase of new flexible engines
- Repower projects involving flexible engines must be evaluated based on the immediately preceding, applicable, Tier 3 emission standard
 - ✦ Flexible Engines are engines certified to the implementation flexibility standards in title 13, CCR, section 2423 (d)
 - ✦ Usually labeled by the engine manufacturer
- Forklifts that are eligible for SOON funding must be CLASS 7 (LSI)

Maximum Percentage of Eligible Cost



SOON Project Type	Incremental Cost (Maximum Amount Eligible for Funding)	Project Life	Requirements
Replacement	80%	5 Years ¹	Tier 4 ²
Repower	85%	7 Years	Tier 4 ²
Retrofit	100%	5 Years	Must be verified by CARB to meet reduction standard

1. 3 Years for Excavators, Skid Steer Loaders and Rough Terrain Fork Lifts

2. If, Tier 4 technology is not available from manufacturer then, Tier 3 may be used but it will result in lower funding amount

Application Requirement



SOON Application Requirements

- Equipment Usage Records
 - ✦ Hour-meter reading logs, maintenance records, etc.
- Proof of Ownership
 - ✦ Show 2 Year ownership in California (i.e. Bill of Sale)
- Must provide a DOORS Fleet Compliance Plan (through ARB)
 - ✦ DOORS Snapshot
 - ✦ Equipment List of ALL Equipment under Fleet DOORS ID
- Applications must include vendor quotes
 - ✦ Obtained within 90 days prior to application deadline
- Must Submit SOON Compliance Plan

If funding is provided, fleet owners must provide
Annual Reports (same as CMP)!

SOON Compliance Plan



- Demonstrate compliance with CARB Off-Road Regulation throughout the contract period must be provided
 - SOON Compliance Plan Signature Page (www.aqmd.gov/soon)
 - SOON Compliance Calculator (www.aqmd.gov/soon) **OR** ARB Fleet Calculator (ARB)
 - DOORS Compliance Snapshot (ARB)
 - DOORS Fleet Listing (ARB)

SOON Compliance Plan



Fleet Average Averages																		
	Baseline	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Fleet Average																		
Fleet Average TARGET	NA	NA	NA	NA	NA	NA	NA	NA										
SOON Fleet Average																		
SOON Fleet Avg. TARGET	NA	NA	NA	NA	NA	NA	NA	NA										
Tier Summary																		
	Baseline	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Tier 0																		
Tier 1																		
Tier 2																		
Tier 3																		
Tier 4																		

	Baseline	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Average Model Year																		
Average Age	NA																	
Engines Added	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Engines Retired	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Engines Replaced	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOON Engines Replaced	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Engines Retrofitted-NOx	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Engines Retrofitted-PM	NA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Baseline	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018	2020	2021	2022	2023
Turnover by Number																		
State Rule Turnover	NA																	
SOON Turnover	NA	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

	Baseline	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Turnover by Horsepower																		
State Rule Turnover	NA																	
SOON Turnover	NA	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

SOON Compliance Plan



- At a minimum, forecast annual fleet NO_x reduction actions, for the next two upcoming consecutive SOON NO_x target dates (2020, 2023)
- Cannot take credit for SOON project emission reductions until end of project term
 - Cannot use this lower emission rate to calculate the fleet average index and target rate, and BACT Credit

Must meet cost-effectiveness limit and be operational no later than **May 21, 2021**

Questions/Contact Information



SOON Program

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Application Deadline is
June 4, 2019 at 1 PM!