

# Stationary Diesel In-Use Agricultural Engine Air Toxic Control Measure

## Carl Moyer Program Implementation Charts

This document is for informational purposes only.  
ARB/Districts will determine project eligibility.

The information provided in this document is for informational purposes only. Local air districts will make eligibility determinations for those projects funded with Carl Moyer Program funds allocated to their districts. Eligibility determinations will be based on applicable Guidelines, statutes, and advisories, which are available at <http://www.arb.ca.gov/msprog/moyer/moyer.htm>.

The information below describes possible funding options for engines subject to the Stationary Diesel In-Use Agricultural Engine Air Toxic Control Measure (ATCM). Eligibility is directly impacted by the timing of the project. For potential projects in which NOx, ROG and PM are claimed, charts are provided to help ARB and Districts ensure that the reductions are at least one year early to the compliance deadline as required by the Guidelines. Instructions for reading those charts are below.

### **Instructions for Reading the Moyer Implementation Charts**

The charts provided throughout this document are to be used as tools when determining eligibility for projects claiming surplus NOx, ROG and/or PM from engines subject to the Stationary Diesel In-Use Agricultural Engine Air Toxic Control Measure (ATCM). ARB/Districts will determine project eligibility.

If there is at least one year prior to the compliance milestone (left of the solid line in charts):

1. The engine is eligible for the incremental cost assuming it meets all other project criteria as described in the Carl Moyer Program Guidelines and advisories.
2. The project life would be based on the number of years before the first compliance deadline.

If there is less than one year prior to the first compliance milestone (right of the solid line in charts), a repower project with a new diesel engine is no longer eligible for funding. Repower projects with new electric motors or natural gas engines may provide emission reductions surplus to the regulatory requirements and may be eligible for Carl Moyer Program funding.

This document is for informational purposes only.  
 ARB/Districts will determine project eligibility.

**Example:**

If an applicant currently owned an 85 hp diesel engine and was applying for funding, eligibility would be determined as follows:

1. The existing uncontrolled engine would be eligible for Moyer funds for a repower project with a new diesel engine through 2010 using the eligibility chart below. The project may use a
  - o Three year project life through 2008
  - o Two year project life through 2009
  - o One year project life through 2010

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	3	2	1					

2. The existing uncontrolled engine would be eligible for Moyer funds for a repower project with a new electric motor through 2011 using the eligibility chart below. Baseline emissions for the project would be calculated as follows:
  - o Uncontrolled engine emissions would be calculated through 2010.
  - o Tier 3 diesel emissions would be calculated for 2011 and years beyond the compliance date.

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	10	10	10	10				

3. The existing uncontrolled engine would be eligible for Moyer funds for a repower project with a new natural gas engine through 2011 using the eligibility chart below. Baseline emissions for the project would be calculated as follows:
  - o Uncontrolled engine emissions would be calculated through 2010.
  - o Tier 3 diesel emissions would be calculated for 2011 and years beyond the compliance date.

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	7	7	7	7				

This document is for informational purposes only.  
 ARB/Districts will determine project eligibility.

**Key:**

	= Potential Carl Moyer Funding for PM, NOx & ROG
	= less than 1 year of Moyer Eligibility
	= Compliance Deadline
<b>Number in Cell</b>	= Maximum project life applicable if installed and in operation by 12/31 of that year.

**SAMPLE ELIGIBILITY CHART**

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	3	2	1					
100 – 750 hp	2	1						

↑  
**E**

↑  
**D**

↑  
**C**

↑  
**B**

↑  
**A**

- A = Compliance Deadline**
- B = 1 Year of Moyer Eligibility**
- C = Potential Funding**
- D = Project Life as of 12/31**
- E = Engines Eligible for Funding**

This document is for informational purposes only.  
ARB/Districts will determine project eligibility.

## STATIONARY DIESEL IN-USE AGRICULTURAL ENGINE AIR TOXIC CONTROL MEASURE

- *Rule impacts any owner of a diesel-fueled stationary diesel agricultural engine in California greater than 50 horsepower (hp).*
- *Rule requires engine replacement based on horsepower and engine Tier designation. In addition, engine owners must register all impacted engines in their local air districts.*
- *Remotely located agricultural engines, “engines located in a federal ambient air quality area that is designated as unclassifiable or attainment for all PM and ozone national ambient air quality standards, and that are located more than one-half mile from any residential area, school, or hospital,” are not subject to the engine replacement provisions of the rule.*
- *Regulatory information can be found at: <http://www.arb.ca.gov/diesel/ag/inuseag.htm>*
- *Questions regarding compliance can be directed to Jon Manji of the ARB at (916) 327-1507 or [jmanji@arb.ca.gov](mailto:jmanji@arb.ca.gov)*

### Existing Uncontrolled Engines

#### Regulatory Requirements

Horsepower Range	Diesel PM Not to Exceed (g/bhp-hr)	Engine Tier level required for compliance	Compliance Date
> 50 to 99	0.30	Tier 3	Dec. 31, 2011
100 to 174	0.22	Tier 3	Dec. 31, 2010
175 to 750	0.15	Tier 3	Dec. 31, 2010
> 750	0.075	Interim Tier 4	Dec. 31, 2014

#### Potential Funding

- Funding opportunities remain indefinitely for engines 25 to < 50 hp.
- Funding opportunities remain indefinitely for remotely located agricultural engines (engines located in a federal ambient air quality area that is designated as unclassifiable or attainment for all PM and ozone national ambient air quality standards, and that are located more than one-half mile from any residential area, school, or hospital).

This document is for informational purposes only.  
 ARB/Districts will determine project eligibility.

- Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new diesel engine. The chart below indicates project lives prior to the compliance deadlines.

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	3	2	1					
100 – 750 hp	2	1						
> 750 hp	*	*	*	3	2	1		

\* Engines meeting the interim Tier 4 standard will not be available until 2011.

- Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new electric motor until the compliance date using the eligibility chart below. Projects must be in operation prior to the compliance date of the ATCM. Baseline emissions for the project are calculated as follows:
  - Uncontrolled engine emissions are calculated for project year dates to the left of the “striped” year in the table below.
  - Tier 3 diesel emissions (interim Tier 4 diesel emissions for > 750 hp engines) are calculated for the “striped” year and for project year dates to the right of the compliance date on the table.

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	10	10	10	10				
100 – 750 hp	10	10	10					
> 750 hp	*	*	*	10	10	10	10	

\* Engines meeting the interim Tier 4 standard will not be available until 2011.

This document is for informational purposes only.  
 ARB/Districts will determine project eligibility.

- Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new natural gas engine until the compliance date using the eligibility chart below. Projects must be in operation prior to the compliance date of the ATCM. Baseline emissions for the project are calculated as follows:
  - Uncontrolled engine emissions are calculated for project year dates to the left of the “striped” year in the table below.
  - Tier 3 diesel emissions (interim Tier 4 diesel emissions for > 750 hp engines) are calculated for the “striped” year and for project year dates to the right of the compliance date on the table.

Uncontrolled stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015
< 100 hp	7	7	7	7				
100 – 750 hp	7	7	7					
> 750 hp	*	*	*	7	7	7	7	

\* Engines meeting the interim Tier 4 standard will not be available until 2011.

### Existing Tier 1 and Tier 2 Engines

#### Regulatory Requirements

Horsepower Range	Diesel PM Not to Exceed (g/bhp-hr)	Engine Tier level required for compliance	Compliance Date
> 50 to 74	0.02	Tier 4	Dec. 31, 2015 *
75 to 174	0.01	Tier 4	Dec. 31, 2015 *
175 to 750	0.01	Tier 4	Dec. 31, 2014 *
>750	0.075	Interim Tier 4	Dec. 31, 2014 *

\* or 12 years after the date of initial installation, whichever is later

#### Potential Funding

- Funding opportunities remain indefinitely for engines 25 to < 50 hp.
- Funding opportunities remain indefinitely for remotely located agricultural engines (engines located in a federal ambient air quality area that is designated as unclassifiable or attainment for all PM and ozone national ambient air quality standards, and that are located more than one-half mile from any residential area, school, or hospital).

This document is for informational purposes only.  
 ARB/Districts will determine project eligibility.

- Tier 1 and Tier 2 diesel agricultural engines may be eligible for Moyer funds for a repower project with a new diesel engine. The chart below indicates project lives prior to the compliance deadlines.

Tier 1 and Tier 2 stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015	2016
> 50 - 74 hp	*	*	*	*	*	2	1		
75 to 174	*	*	*	*	3	2	1		
175 – 750 hp	*	*	*	3	2	1			
> 750 hp	*	*	*	3	2	1			

\* Engines meeting the Tier 4 or interim Tier 4 standard will not be available until 2011 through 2013, depending on horsepower..

Note: engines may have later compliance dates depending on date of initial installation of existing engines. Districts must determine project eligibility based on surplus emission reductions prior to the compliance date.

- Tier 1 and Tier 2 diesel agricultural engines may be eligible for Moyer funds for a repower project with a new electric motor until the compliance date using the eligibility chart below. Baseline emissions for the project are calculated as follows:
  - Existing Tier 1 or Tier 2 engine emissions are calculated for project year dates to the left of the “striped” year in the table below.
  - Tier 4 diesel emissions (interim Tier 4 diesel emissions for > 750 hp engines) are calculated for the “striped” year and for project year dates to the right of the compliance date on the table.

Tier 1 and Tier 2 stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015	2016
> 50 - 74 hp	*	*	*	*	*	10	10	10	
75 to 174	*	*	*	*	10	10	10	10	
175 – 750 hp	*	*	*	10	10	10	10		
> 750 hp	*	*	*	10	10	10	10		

\* Engines meeting the Tier 4 or interim Tier 4 standard will not be available until 2011 through 2013, depending on horsepower.

Note: engines may have later compliance dates depending on date of initial installation of existing engines. Districts must determine project eligibility based on surplus emission reductions prior to the compliance date.

This document is for informational purposes only.  
 ARB/Districts will determine project eligibility.

- Uncontrolled diesel agricultural engines may be eligible for Moyer funds for a repower project with a new natural gas engine until the compliance date using the eligibility chart below. Baseline emissions for the project are calculated as follows:
  - Existing Tier 1 or Tier 2 engine emissions are calculated for project year dates to the left of the “striped” year in the table below.
  - Tier 4 diesel emissions (interim Tier 4 diesel emissions for > 750 hp engines) are calculated for the “striped” year and for project year dates to the right of the compliance date on the table.

Tier 1 and Tier 2 stationary diesel-fueled agricultural use engines	2008	2009	2010	2011	2012	2013	2014	2015	2016
> 50 - 74 hp	*	*	*	*	*	7	7	7	
75 to 174	*	*	*	*	7	7	7	7	
175 – 750 hp	*	*	*	7	7	7	7		
> 750 hp	*	*	*	7	7	7	7		

\* Engines meeting the Tier 4 or interim Tier 4 standard will not be available until 2011 through 2013, depending on horsepower..

Note: engines may have later compliance dates depending on date of initial installation of existing engines. Districts must determine project eligibility based on surplus emission reductions prior to the compliance date.