

Mobile Cargo Handling Equipment Regulation

Carl Moyer Program Implementation Charts

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

The information provided below is for informational purposes only. ARB will make eligibility determinations for multi-district projects and local air districts will make eligibility determinations for those projects funded with Carl Moyer funds allocated to their district. Eligibility determinations will be based on applicable Guidelines, statute and advisories, which are available at <http://www.arb.ca.gov/msprog/moyer/moyer.htm>.

The information below describes possible funding options for vehicles subject to the ARB's Mobile Cargo Handling Equipment Regulation (CHE). Eligibility is directly impacted by pollutant(s) to be claimed by the project and timing of the project. Emission factors, baseline costs and project life are provided for each option described.

For potential projects in which NO_x, ROG and PM are claimed additional charts are provided to help ARB and Districts ensure that the reductions are at least three years early to the compliance deadline as required by Guidelines. Instructions for reading those charts are below.

Instructions for Reading the Fleet Rule Carl Moyer Program Implementation Charts

The charts provided throughout this document are to be used as tools when determining eligibility for projects claiming surplus NO_x, ROG and/or PM from vehicles subject to the CHE regulation. ARB/Districts will determine project eligibility.

If there are at least three years prior to the first compliance milestone (left of the three solid lines ||| in charts):

1. The vehicle 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
3. Applicants do not have to show compliance of the vehicle group unless requesting a longer project life

If there are less than three years prior to the first compliance milestone (right of the three solid lines ||| in charts):

1. An applicant can only receive funding once
2. An applicant must apply for funding at least three years prior to the final compliance deadline
3. Vehicles which have at least three years of project life prior to the compliance deadline are eligible for the incremental cost up to the appropriate cost effectiveness limit (green cells in charts)
4. Remaining vehicles within the group subject to the regulation with less than three years prior to the compliance deadline are not eligible for funding and must be brought into compliance by the applicant before the Carl Moyer funded project is installed and in operation (yellow cells in charts).

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5. Work can begin on the Carl Moyer funded projects once the funds have been obligated.

Example:

If an applicant is subject to the chart below and was applying for funding eligibility would be determined as follows:

| Vehicles Eligible for Funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|-------------------------------|------|------|------|------|------|
| 100% of Group | | | | | |
| 80% of Group | | | | | |
| 40% of Group | | | | | |

- Projects installed and in operation by 12/31/08:
 1. Applicant can only apply for funding if they have not received funding for this group of vehicles since 1/1/07.
 2. Districts can fund the PM, NOx & ROG portion of up to 40% of the vehicle group (green cells).
 3. The vehicles will have a 4 year project life
 4. The applicant must agree by contract to show compliance of the remaining 60% of the vehicle group before receiving payment by the district (yellow cells). At post inspection documentation for this compliance must be provide to the district.
- Projects installed and in operation by 12/31/09:
 1. Applicant can only apply for funding if they have not received funding for this group of vehicles since 1/1/07.
 2. Districts can fund the PM, NOx & ROG portion of up to 40% of the vehicle group (green cells).
 3. The vehicles will have a 3 year project life.
 4. The applicant must agree by contract to show compliance of the remaining 60% of the vehicle group before receiving payment by the district (yellow cells). At post inspection documentation for this compliance must be provide to the district.

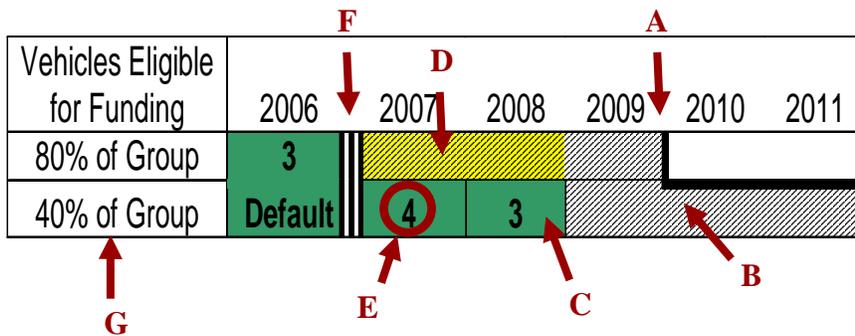
If the projects are installed and in operation any time after 1/1/10 then they are not eligible.

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Key

| | |
|---|--|
|  | =Potential Carl Moyer Funding for PM, NOx & ROG |
|  | =3 years of Moyer Eligibility |
|  | =Portion to be Paid by Applicant |
|  | =Compliance Deadline |
|  | = Point at which applicants can only receive funding once and is triggered three years prior to the first compliance deadline. The applicant must demonstrate that equipment with less than three years prior to the compliance deadline is in compliance and in operation before payment can be made for the Carl Moyer funded project. |
| Number in Cell | = Maximum project life applicable if installed and in operation by 12/31 of that year. D = default project life as specified in criteria. |

SAMPLE ELIGIBILITY CHART



- A = Compliance Deadline**
- B = 3 Years of Moyer Eligibility**
- C = Potential Funding**
- D = Portion to be paid by applicant**
- E = Project Life as of 12/31**
- F = One more opportunity line**
- G = % of Group/Fleet Eligible for Funding**

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Mobile Cargo Handling Equipment Projects

- *Rule impacts any person who conducts business in California who sells, offers for sale, leases, rents, purchases, owns or operates any compression ignition mobile cargo handling equipment that operates at any California port or intermodal rail yard.*
- *Rule requires owners to maintain compliance records on-site and make available to ARB upon request. Owners must demonstrate compliance to ARB and submit reports annually.*
- *Compliance (phased in BACT) for the cargo handling equipment (CHE) will be determined by reviewing all engines owned for BACT at each terminal or intermodal yard location.*
- *Regulatory information can be found at:
<http://www.arb.ca.gov/msprog/offroad/cargo/cargo.htm>*
- *Questions regarding compliance can be directed to Lisa Williams of the ARB at (916) 327-1498 or at lwilliams@arb.ca.gov.*
- *Statements of compliance or copies of compliance reports must be obtained from applicants.*

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 ARB/Districts will determine project eligibility.

| Yard Trucks | | | |
|---|-----------------------------|----------|----------|
| | Credit allowed ONLY for: | | |
| | NOx | PM | ROG |
| Retrofits (PM only or PM + NOx) when the engine is a MY 2003 or newer off-road engine. <ul style="list-style-type: none"> • Baseline emission factors = Tables B-4 for on-road engines or B-12 for off-road engines* • Incremental cost = default • Project life = up to 3 years for 2003 MY engines, up to 4 years on 2004 MY engines, and up to 5 years on 2005 and newer MY engines. | X | X | |
| Retrofits (PM only or PM + NOx) when the engine is a MY 2002 or newer on-road engine. <ul style="list-style-type: none"> • Baseline emission factors = Tables B-4 for on-road engines or B-12 for off-road engines* • Incremental cost = default • Project life = up to 3 years for 2002 MY engines, up to 4 years on 2003 MY engines, and up to 5 years on 2004 and newer MY engines. | X | X | |
| | | | |
| Diesel engine projects which have at least 3 years of project life prior to the regulation's compliance deadlines (see charts below for further information). <ul style="list-style-type: none"> • Baseline emission factors = Tables B-4 for on-road engines or B-12 for off-road engines* • Incremental cost = default • Project life = will be determined by ARB/Districts using charts below | X | X | X |

* Appendix B of the 2005 and 2008 Carl Moyer Program Guidelines.

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| Non-Yard Trucks | | | |
|---|-----------------------------|----------|----------|
| | Credit allowed ONLY for: | | |
| | NOx | PM | ROG |
| Level 1 retrofits achieving NOx reductions for excavators, sweepers, scrubbers, tractors, loaders, backhoes, and forklifts. <ul style="list-style-type: none"> ○ Baseline emission factors = Table B-12* ○ Incremental cost = ½ the cost of a Level 1 retrofit ○ Project life = up to 5 years | X | | |
| Level 2 retrofits achieving more than 20% NOx reduction for container handling equipment. <ul style="list-style-type: none"> ○ Baseline emission factors = Table B-12* ○ Incremental cost = cost of a Level 2 retrofit achieving a 20% NOx reduction ○ Project life = up to 5 years ○ Retrofit percent reduction = the retrofit percent of NOx reduction must be reduced by 20% in the emission reduction calculation. | X | | |
| Level 3 retrofits achieving NOx reductions for cranes. <ul style="list-style-type: none"> ○ Baseline emission factors = Table B-12* ○ Incremental cost = ½ the cost of a Level 3 retrofit ○ Project life = up to 5 years | X | | |
| Level 2 or 3 retrofits for excavators, sweepers, scrubbers, tractors, loaders, and backhoes (PM only or PM + NOx). <ul style="list-style-type: none"> ○ Baseline emission factors = Table B-12* ○ Incremental cost = cost of a level 1 retrofit. ○ Project life = up to 5 years ○ Retrofit percent reduction = the retrofit percent of PM reduction must be reduced by 25% in the emission reduction calculation. | X | X | |
| Level 3 retrofits achieving more than 20% NOx reduction for container handling equipment (PM only or PM + NOx). <ul style="list-style-type: none"> ○ Baseline emission factors = Table B-12* ○ Incremental cost = cost of a Level 2 retrofit achieving a 20% NOx reduction ○ Project life = up to 5 years ○ Retrofit percent reduction = the retrofit percent of PM reduction must be reduced by 50% and the NOx reduction must be reduced by 20% in the emission reduction calculation. | X | X | |
| | | | |
| Diesel engine projects which have at least 3 years of project life prior to the regulation's compliance deadlines (see charts below for further information). <ul style="list-style-type: none"> ○ Baseline emission factors = Table B-12* ○ Incremental cost = default ○ Project life = will be determined by ARB/Districts using charts below | X | X | X |

* Appendix B of the 2005 and 2008 Carl Moyer Program Guidelines.

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I. In-Use Yard Trucks

A. Fleets of three or less

1. Potential Funding for In-Use Yard Truck Fleets of Three or Less Engine Certified to On-road Standard

(a) Engine Model Year Pre-2000 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| Pre-2000 | No | December 31, 2007 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

(b) Engine Model Year Pre-2000 With Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| Pre-2000 | Yes | December 31, 2008 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

(c) Engine Model Year 2000 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2000 | No | December 31, 2008 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

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(d) Engine Model Year 2000 With Retrofit and 2001 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2000 | Yes | December 31, 2009 |
| 2001 | No | December 31, 2009 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

(e) Engine Model Year 2001 With Retrofit and 2002 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2001 | Yes | December 31, 2010 |
| 2002 | No | December 31, 2010 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

(f) Engine Model Year 2002 With Retrofit and 2003 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2002 | Yes | December 31, 2011 |
| 2003 | No | December 31, 2011 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/08.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 |
|--------------------------------|------|------|------|------|
| 100% of group | 3 | | | |

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(g) Engine Model Year 2003 With Retrofit and 2004 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2003 | Yes | December 31, 2012 |
| 2004 | No | December 31, 2012 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/09.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------|------|------|------|------|
| 100% of group | 4 | 3 | | | |

(h) Engine Model Year 2004 With Retrofit and 2005 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2004 | Yes | December 31, 2013 |
| 2005 | No | December 31, 2013 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/10.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of group | D | 4 | 3 | | | |

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(i) Engine Model Year 2005 With Retrofit and 2006 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2005 | Yes | December 31, 2014 |
| 2006 | No | December 31, 2014 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/11.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------------|------|------|------|------|------|------|------|
| 100% of group | D | D | 4 | 3 | | | |

(j) Engine Model Year 2006 With Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2006 | Yes | December 31, 2015 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/12.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------|------|------|------|------|------|------|------|------|
| 100% of group | D | D | D | 4 | 3 | | | |

2. Potential Funding for In-Use Yard Truck Fleets of Three or Less Engine Certified to Off-road Standard

(a) Engine model year pre-2003 without retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| Pre-2003 | No | December 31, 2007 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

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(b) Engine model year pre-2003 with retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| Pre-2003 | Yes | December 31, 2008 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

(c) Engine Model Year 2003 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2003 | No | December 31, 2010 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

(d) Engine Model Year 2003 With Retrofit and 2004 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2003 | Yes | December 31, 2011 |
| 2004 | No | December 31, 2011 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/08.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 |
|--------------------------------|------|------|------|------|
| 100% of group | 3 | | | |

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(e) Engine Model Year 2004 With Retrofit and 2005 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2004 | Yes | December 31, 2012 |
| 2005 | No | December 31, 2012 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/09.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------|------|------|------|------|
| 100% of group | 4 | 3 | | | |

(f) Engine Model Year 2005 With Retrofit and 2006 Without Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2005 | Yes | December 31, 2013 |
| 2006 | No | December 31, 2013 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/10.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of group | D | 4 | 3 | | | |

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(g) Engine Model Year 2006 With Retrofit

Regulatory Requirement

| Model Year | Retrofit Installed by December 31, 2006 | Compliance Deadline |
|------------|---|---------------------|
| 2006 | Yes | December 31, 2014 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/11.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------------|------|------|------|------|------|------|------|
| 100% of group | D | D | 4 | 3 | | | |

B. Fleets of Four or More

1. Potential Funding for In-Use Yard Truck Fleets of Four or More Engine Certified to On-road Standard Without VDECS installed by December 31, 2006

(a) Engine Model Year Pre-2000

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| Pre-2000 | No | 25 | December 31, 2007 |
| | | 50 | December 31, 2008 |
| | | 100 | December 31, 2009 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

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(b) Engine Model Year 2000

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2000 | No | 25 | December 31, 2008 |
| | | 50 | December 31, 2009 |
| | | 100 | December 31, 2010 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

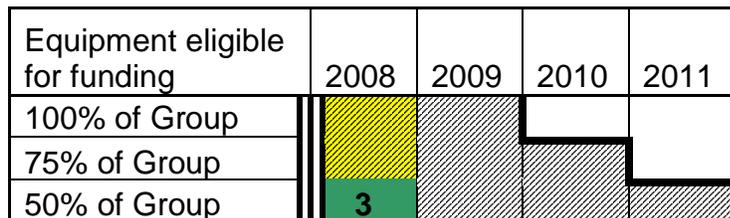
(c) Engine Model Year 2001

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2001 | No | 25 | December 31, 2009 |
| | | 50 | December 31, 2010 |
| | | 100 | December 31, 2011 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/08.
- Applicants are only eligible to receive funds once for this group after 1/1/07.



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(d) Engine Model Year 2002

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2002 | No | 25 | December 31, 2010 |
| | | 50 | December 31, 2011 |
| | | 100 | December 31, 2012 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/09.
- Applicants are only eligible to receive funds once for this group after 1/1/08.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------|------|------|------|------|
| 100% of Group | | | | | |
| 75% of Group | 3 | | | | |
| 50% of Group | 4 | 3 | | | |

(e) Engine Model Year 2003

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2003 | No | 25 | December 31, 2011 |
| | | 50 | December 31, 2012 |
| | | 100 | December 31, 2013 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/10.
- Applicants are only eligible to receive funds once for this group after 1/1/09.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of Group | 3 | | | | | |
| 75% of Group | 4 | 3 | | | | |
| 50% of Group | D | 4 | 3 | | | |

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(f) Engine Model Year 2004

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2004 | No | 25 | December 31, 2012 |
| | | 50 | December 31, 2013 |
| | | 100 | December 31, 2014 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/11.
- Applicants are only eligible to receive funds once for this group after 1/1/10.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------------|------|------|------|------|------|------|------|
| 100% of Group | 4 | 3 | | | | | |
| 75% of Group | D | 4 | 3 | | | | |
| 50% of Group | D | D | 4 | 3 | | | |

(g) Engine Model Year 2005

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2005 | No | 25 | December 31, 2013 |
| | | 50 | December 31, 2014 |
| | | 100 | December 31, 2015 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/12.
- Applicants are only eligible to receive funds once for this group after 1/1/11.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------|------|------|------|------|------|------|------|------|
| 100% of Group | D | 4 | 3 | | | | | |
| 75% of Group | D | D | 4 | 3 | | | | |
| 50% of Group | D | D | D | 4 | 3 | | | |

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(h) Engine Model Year 2006

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2006 | No | 25 | December 31, 2014 |
| | | 50 | December 31, 2015 |
| | | 100 | December 31, 2016 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/13.
- Applicants are only eligible to receive funds once for this group after 1/1/12.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------------------------|------|------|------|------|------|------|------|------|------|
| 100% of Group | D | D | 4 | 3 | 3 | 3 | | | |
| 75% of Group | D | D | D | 4 | 3 | 3 | | | |
| 50% of Group | D | D | D | D | 4 | 3 | | | |

2. Potential Funding for In-Use Yard Truck Fleets of Four or More Engine Certified to On-road Standard With VDECS installed by December 31, 2006

(a) Engine Model Pre-2000

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| Pre-2000 | Yes | 25 | December 31, 2008 |
| | | 50 | December 31, 2009 |
| | | 100 | December 31, 2010 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG and PM.

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(b) Engine Model Year 2000

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2000 | Yes | 25 | December 31, 2009 |
| | | 50 | December 31, 2010 |
| | | 100 | December 31, 2011 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/08.
- Applicants are only eligible to receive funds once for this group after 1/1/07.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 |
|--------------------------------|------|------|------|------|
| 100% of Group | | | | |
| 75% of Group | | | | |
| 50% of Group | 3 | | | |

(c) Engine Model Year 2001

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2001 | Yes | 25 | December 31, 2010 |
| | | 50 | December 31, 2011 |
| | | 100 | December 31, 2012 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/09.
- Applicants are only eligible to receive funds once for this group after 1/1/08.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------|------|------|------|------|
| 100% of Group | | | | | |
| 75% of Group | | | | | |
| 50% of Group | 3 | 3 | | | |
| | 4 | | | | |

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(d) Engine Model Year 2002

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2002 | Yes | 25 | December 31, 2011 |
| | | 50 | December 31, 2012 |
| | | 100 | December 31, 2013 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/10.
- Applicants are only eligible to receive funds once for this group after 1/1/09.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of Group | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | 4 | 3 | 3 | 3 | 3 |

(e) Engine Model Year 2003

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2003 | Yes | 25 | December 31, 2012 |
| | | 50 | December 31, 2013 |
| | | 100 | December 31, 2014 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/11.
- Applicants are only eligible to receive funds once for this group after 1/1/10.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------------|------|------|------|------|------|------|------|
| 100% of Group | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | D | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | D | 4 | 3 | 3 | 3 | 3 |

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(f) Engine Model Year 2004

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2004 | Yes | 25 | December 31, 2013 |
| | | 50 | December 31, 2014 |
| | | 100 | December 31, 2015 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/12.
- Applicants are only eligible to receive funds once for this group after 1/1/11.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------|------|------|------|------|------|------|------|------|
| 100% of Group | D | 4 | 3 | 3 | 3 | | | |
| 75% of Group | D | D | 4 | 3 | | | | |
| 50% of Group | D | D | D | 4 | 3 | | | |

(g) Engine Model Year 2005

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2005 | Yes | 25 | December 31, 2014 |
| | | 50 | December 31, 2015 |
| | | 100 | December 31, 2016 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/13.
- Applicants are only eligible to receive funds once for this group after 1/1/12.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------------------------|------|------|------|------|------|------|------|------|------|
| 100% of Group | D | D | 4 | 3 | 3 | 3 | | | |
| 75% of Group | D | D | D | 4 | 3 | | | | |
| 50% of Group | D | D | D | D | 4 | 3 | | | |

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

(h) Engine Model Year 2006

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2006 | Yes | 25 | December 31, 2015 |
| | | 50 | December 31, 2016 |
| | | 100 | December 31, 2017 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/14.
- Applicants are only eligible to receive funds once for this group after 1/1/13.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|
| 100% of Group | D | D | D | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | D | D | D | D | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | D | D | D | D | 4 | 3 | 3 | 3 | 3 |

3. Potential Funding for In-Use Yard Truck Fleets of Four or More Engine Certified to Off-road Standard Without VDECS installed by December 31, 2006

(a) Engine Model Year Pre-2003

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| Pre-2003 | No | 50 | December 31, 2007 |
| | | 100 | December 31, 2008 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

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

(b) Engine Model Year 2003

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2003 | No | 25 | December 31, 2010 |
| | | 50 | December 31, 2011 |
| | | 100 | December 31, 2012 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/09.
- Applicants are only eligible to receive funds once for this group after 1/1/08.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------|------|------|------|------|
| 100% of Group | 3 | 3 | 3 | 2 | 1 |
| 75% of Group | 3 | 3 | 3 | 2 | 1 |
| 50% of Group | 4 | 3 | 3 | 2 | 1 |

(c) Engine Model Year 2004

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2004 | No | 25 | December 31, 2011 |
| | | 50 | December 31, 2012 |
| | | 100 | December 31, 2013 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/10.
- Applicants are only eligible to receive funds once for this group after 1/1/09.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of Group | 3 | 3 | 3 | 3 | 2 | 1 |
| 75% of Group | 4 | 3 | 3 | 3 | 2 | 1 |
| 50% of Group | 4 | 4 | 3 | 3 | 2 | 1 |

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

(d) Engine Model Year 2005

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2005 | No | 25 | December 31, 2012 |
| | | 50 | December 31, 2013 |
| | | 100 | December 31, 2014 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/11.
- Applicants are only eligible to receive funds once for this group after 1/1/10.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------------|------|------|------|------|------|------|------|
| 100% of Group | 4 | 3 | | | | | |
| 75% of Group | D | 4 | 3 | | | | |
| 50% of Group | D | D | 4 | 3 | | | |

(e) Engine Model Year 2006

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2006 | No | 25 | December 31, 2013 |
| | | 50 | December 31, 2014 |
| | | 100 | December 31, 2015 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/12.
- Applicants are only eligible to receive funds once for this group after 1/1/11.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------|------|------|------|------|------|------|------|------|
| 100% of Group | D | 4 | 3 | | | | | |
| 75% of Group | D | D | 4 | 3 | | | | |
| 50% of Group | D | D | D | 4 | 3 | | | |

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

4. Potential Funding for In-Use Yard Truck Fleets of Four or More Engine Certified to Off-road With VDECS installed by December 31, 2006

(a) Engine Model Year Pre-2003

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| Pre-2003 | Yes | 50 | December 31, 2008 |
| | | 100 | December 31, 2009 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

(b) Engine Model Year 2003

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2003 | Yes | 25 | December 31, 2011 |
| | | 50 | December 31, 2012 |
| | | 100 | December 31, 2013 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/10.
- Applicants are only eligible to receive funds once for this group after 1/1/09.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of Group | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | 4 | 3 | 3 | 3 | 3 |

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

(c) Engine Model Year 2004

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2004 | Yes | 25 | December 31, 2012 |
| | | 50 | December 31, 2013 |
| | | 100 | December 31, 2014 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/11.
- Applicants are only eligible to receive funds once for this group after 1/1/10.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|--------------------------------|------|------|------|------|------|------|------|
| 100% of Group | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | D | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | D | 4 | 3 | 3 | 3 | 3 |

(d) Engine Model Year 2005

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2005 | Yes | 25 | December 31, 2013 |
| | | 50 | December 31, 2014 |
| | | 100 | December 31, 2015 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/12.
- Applicants are only eligible to receive funds once for this group after 1/1/11.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------|------|------|------|------|------|------|------|------|
| 100% of Group | D | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | D | D | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | D | D | 4 | 3 | 3 | 3 | 3 |

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 ARB/Districts will determine project eligibility.

(e) Engine Model Year 2006

Regulatory Requirements

| Model Year | Retrofit Installed by December 31, 2006 | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|------------|---|--|---------------------|
| 2006 | Yes | 25 | December 31, 2014 |
| | | 50 | December 31, 2015 |
| | | 100 | December 31, 2016 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/13.
- Applicants are only eligible to receive funds once for this group after 1/1/12.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------------------------|------|------|------|------|------|------|------|------|------|
| 100% of Group | D | D | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 75% of Group | D | D | D | 4 | 3 | 3 | 3 | 3 | 3 |
| 50% of Group | D | D | D | D | 4 | 3 | 3 | 3 | 3 |

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

II. In-Use Non Yard Trucks

A. Potential Funding for In-Use Non Yard Truck Fleets of Three or Less

1. Engine Model Year Pre-1988

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| Pre-1988 | 100 | December 31, 2007 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

2. Engine Model Years 1988-1995

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| 1988-1995 | 100 | December 31, 2008 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

3. Engine Model Years 1996-2002

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| 1996-2002 | 100 | December 31, 2009 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

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

4. Engine Model Years 2003-2006

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| 2003-2006 | 100 | December 31, 2010 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

B. Potential Funding for In-Use Non Yard Truck Fleets of Four or More

1. Model Year Pre- 1988

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| Pre-1988 | 25 | December 31, 2007 |
| | 50 | December 31, 2008 |
| | 75 | December 31, 2009 |
| | 100 | December 31, 2010 |

Potential Funding

No funding opportunity available for projects claiming NOx, ROG, and PM.

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

2. Model Years 1988-1995

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| 1988-1995 | 25 | December 31, 2008 |
| | 50 | December 31, 2009 |
| | 75 | December 31, 2010 |
| | 100 | December 31, 2011 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/08.
- Applicants are only eligible to receive funds once for this group after 1/1/06.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 |
|--------------------------------|------|------|------|------|
| 100% of Group | | | | |
| 75% of Group | | | | |
| 50% of Group | | | | |
| 25% of Group | 3 | | | |

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

3. Model Years 1996-2002

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| 1996-2002 | 25 | December 31, 2009 |
| | 50 | December 31, 2010 |
| | 75 | December 31, 2011 |
| | 100 | December 31, 2012 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/09.
- Applicants are only eligible to receive funds once for this group after 1/1/06.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------------------|------|------|------|------|------|
| 100% of Group | | | | | |
| 75% of group | | | | | |
| 50% of Group | 3 | | | | |
| 25% of Group | 4 | 3 | | | |

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

4. Model Years 2003-2006

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| 2003-2006 | 25 | December 31, 2010 |
| | 50 | December 31, 2011 |
| | 75 | December 31, 2012 |
| | 100 | December 31, 2013 |

Potential Funding

- Funding opportunities remain for this group of engines through 12/31/10.
- Applicants are only eligible to receive funds once for this group after 1/1/08.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|--------------------------------|------|------|------|------|------|------|
| 100% of Group | | | | | | |
| 75% of group | 3 | | | | | |
| 50% of Group | 4 | 3 | | | | |
| 25% of Group | D | 4 | 3 | | | |

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

C. Potential Funding for Final Compliance of In-Use Non-Yard Truck Fleets of Three or Less and In-Use Non-Yard Truck Fleets of Four or More

Basic Container Handling and Bulk Cargo Handling Equipment:

- Final compliance is required if the BACT option is a pre-2007 on-road or a Tier 1, 2, or 3 off-road engine with a Level 1 retrofit.
- Final compliance is meeting the certified Tier 4 off-road emission standards or be equipped with a Level 3 VDECS.

RTG Cranes:

- Final compliance is required if the BACT option is a pre-Tier 1 or Tier 1 off-road engine with a Level 1 or 2 retrofit.
- Final compliance is meeting the certified Tier 4 off-road emission standards or be equipped with a Level 3 VDECS.

All Model Years

Regulatory Requirements

| Engine Model Years | Percentage of Group to Use Best Available Control Technology | Compliance Deadline |
|--------------------|--|---------------------|
| All | 100 | December 31, 2015 |

Potential Funding

Funding opportunities remain for this group of engines through 12/31/12.

| Equipment eligible for funding | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------------------|------|------|------|------|------|------|------|------|
| 100% of group | D | D | D | 4 | 3 | | | |