

# **APPENDIX F**

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## GGERP Consistency Determination Checklist

# DWR GHG Emissions Reduction Plan Consistency Determination Form

## For Projects Using Only DWR Staff and Equipment



This form is to be used by DWR project managers to document a DWR CEQA project's consistency with the DWR Greenhouse Gas Emissions Reduction Plan. This form is to be used only when DWR is the Lead Agency and when only DWR staff and equipment are used to implement the project.

California Department of Water Resources  
1416 9th Street  
Sacramento, CA  
95814

Additional Guidance on filling out this form can be found at:  
[dwrclimatechange.water.ca.gov/guidance\\_resources.cfm](http://dwrclimatechange.water.ca.gov/guidance_resources.cfm)

[dwrclimatechange.water.ca.gov](http://dwrclimatechange.water.ca.gov)  
[www.water.ca.gov/climatechange](http://www.water.ca.gov/climatechange)

The DWR Greenhouse Gas Emissions Reduction Plan can be accessed at:  
<http://www.water.ca.gov/climatechange/CAP.cfm>

<b>Project Name:</b>	Collection Canal Maintenance Project No. 6
<b>Environmental Document type:</b>	Initial Study / Mitigation Negative Declaration
<b>Manager's Name:</b>	Andy Rogers
<b>Manager's email:</b>	ajrogers@water.ca.gov
<b>Division:</b>	Division of Flood Management
<b>Office, Branch, or Field Division</b>	Flood Maintenance Office

### Short Project Description:

The Project No. 6 maintenance program occurs along the Sutter Bypass SRFCP canals in Sutter County. Project activities along the canals include removal of accumulated sediment and aquatic vegetation from wetted portions of channels to restore channel capacity. Other activities include bridge maintenance, repair and replacement and culvert repair, replacement and removal. The project area covers a total of 60 miles of canals to be cleared over the next several years. Individual sediment removal sites along collection canals range in length from several hundred feet to three miles. These project activities are prioritized to begin in 2016.

### Project GHG Emissions Summary

- All emissions from the project will occur as ongoing operational, maintenance, or business activity emissions and  therefore have already been accounted for and analyzed in the GGERP. (This box must be checked if you are using this form. If you cannot check this box you must use the form at this [link](#))

### Project GHG Reduction Plan Checklist

- All Project Level GHG Emissions Reduction Measures have been incorporated into the design or implementation plan for the project. ([Project Level GHG Emissions Reduction Measures](#))

Or

- All feasible Project Level GHG Emissions Reduction Measures have been incorporated into the design or implementation plan for the project and Measures not incorporated have been listed and determined not to apply to the proposed project (include as an attachment)

Project does not conflict with any of the Specific Action GHG Emissions Reduction Measures  
(Specific Action GHG Emissions Reduction Measures)

Would implementation of the project result in additional energy demands on the SWP system of 15 GWh/yr or greater?

Yes  No

If you answered Yes, attach a Renewable Power Procurement Plan update approval letter from the DWR SWP Power and Risk Office.

Is there substantial evidence that the effects of the proposed project may be cumulatively considerable notwithstanding the proposed project's compliance with the requirements of the DWR GHG Reduction Plan?

Yes  No

If you answered Yes, the project is not eligible for streamlined analysis of GHG emissions using the DWR GHG Emissions Reduction Plan. (See CEQA Guidelines, section 15183.5, subdivision (b)(2).)

Based on the information provided above and information provided in associated environmental documentation completed pursuant to the above referenced project, the DWR CEQA Climate Change Committee has determined that the proposed project is consistent with the DWR Greenhouse Gas Reduction Plan and the greenhouse gasses emitted by the project are covered by the plan's analysis.

Project Manager  
Signature:

Date:

C4 Approval  
Signature:

Date:

Attachments:

- List and Explanation of excluded Project Level GHG Emissions Reduction Measures
- Plan to update Renewable Energy Procurement Plan from DWR SWP Power and Risk Office

## Collection Canal Maintenance Project No. 6 - Inventory and Calculation of Greenhouse Gas Emissions

Line	<b>Emissions from Construction Equipment</b>								
1	Type of Equipment	Maximum Number per Day	Total Operation Days	Total Operation Hours <sup>1</sup>	Fuel Consumption Per Hour <sup>2</sup>	Total Fuel Consumption (gal. diesel)	CO <sub>2</sub> e/gal diesel <sup>3</sup>	Total CO <sub>2</sub> Equivalent Emissions (metric tons)	
2	Excavator	5	50	2000	5.12	10,240	0.010	106	
3	Tractors/Loaders/Backhoes	5	50	2000	2.37	4,740	0.010	49	
25	<b>TOTAL</b>						<b>14,980</b>		<b>156</b>
26	<sup>1</sup> An 8-hour work day is assumed.								
27	<sup>2</sup> California Air Resource Board Offroad 2007 Emissions Inventory fuel consumption factors								
28	<sup>3</sup> World Resources Institute-Mobile combustion CO <sub>2</sub> emissions tool, June 2003 Version 1.2								
29									
30	<b>Emissions from Transportation of Construction Workforce</b>								
31	Average Number of Workers per Day	Total Number of Workdays	Average Distance Travelled (round trip)	Total Miles Travelled	Average Passenger Vehicle Fuel Efficiency <sup>4</sup>	Total Fuel Consumption (gal. gasoline)	CO <sub>2</sub> e/gal Gasoline <sup>3</sup>	Total CO <sub>2</sub> Equivalent Emissions (metric tons)	
32	9	50	21.6	9720	20.8	467.3	0.009	4	
33	<sup>4</sup> United States Environmental Protection Agency. 2008. Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2008. [EPA420-R-08-015]								

34								
35	<b>Emissions from Transportation of Construction Materials</b>							
36	<b>Trip Type</b>	<b>Total Number of Trips</b>	<b>Average Trip Distance</b>	<b>Total Miles Travelled</b>	<b>Average Semi-truck Fuel Efficiency</b>	<b>Total Fuel Consumption (gal. diesel)</b>	<b>CO<sub>2</sub>e/gal Diesel<sup>3</sup></b>	<b>Total CO<sub>2</sub> Equivalent Emissions (metric tons)</b>
37	Delivery/Spoils	33	20	660	6	12	0.010	0.124696512
39	<b>TOTAL</b>							<b>0.124696512</b>

40

41 **Construction Electricity Emissions**

42	MWh of electricity	mtCO <sub>2</sub> e/MWh <sup>5</sup>	CO <sub>2</sub> e emissions
43	Electricity Needed	0	0

44 <sup>5</sup> eGRID2010 Version 1.0, February 2011 (Year 2007 data) CAMX-WECC sub-region .

45

46 **Total Construction Activity Emissions** 160.0 (from lines 25, 32, 39, and 43)

47 **Total Years of Construction** 5

48 **Expected Start Date of Construction** May-16

49

50 **Estimated Project Useful life** 5 Years

51 **Average Annual Total GHG Emissions<sup>7</sup>** 31.99959 **MT CO<sub>2</sub> equivalents**

52 <sup>7</sup>short-term construction emissions amortized over life of project

# Best Management Practices for Construction and Maintenance Activities to Reduce Greenhouse Gas Emissions

The following measures are considered best management practices (BMPs) for DWR construction and maintenance activities. Implementation of these practices will reduce greenhouse gas (GHG) emissions from construction projects by minimizing fuel usage by construction equipment, reducing fuel consumption for transportation of construction materials, reducing the amount of landfill material, and reducing emissions from the production of cement.

## *Pre-Construction and Final Design BMPs*

Pre-construction and Final Design BMPs are designed to ensure that individual projects are evaluated and their unique characteristics taken into consideration when determining if specific equipment, procedures, or material requirements are feasible and efficacious for reducing GHG emissions from the project. While all projects will be evaluated to determine if these BMPs are applicable, not all projects will implement all the BMPs listed below.

**BMP 1.** Evaluate project characteristics, including location, project work flow, site conditions, and equipment performance requirements, to determine whether specifications of the use of equipment with repowered engines, electric drive trains, or other high efficiency technologies are appropriate and feasible for the project or specific elements of the project.

**BMP 2.** Evaluate the feasibility and efficacy of performing on-site material hauling with trucks equipped with on-road engines.

**BMP 3.** Ensure that all feasible avenues have been explored for providing an electrical service drop to the construction site for temporary construction power. When generators must be used, use alternative fuels, such as propane or solar, to power generators to the maximum extent feasible.

**BMP 4.** Evaluate the feasibility and efficacy of producing concrete on-site and specify that batch plants be set up on-site or as close to the site as possible.

**BMP 5.** Evaluate the performance requirements for concrete used on the project and specify concrete mix designs that minimize GHG emissions from cement production and curing while preserving all required performance characteristics.

**BMP 6.** Limit deliveries of materials and equipment to the site to off peak traffic congestion hours.

## *Construction BMPs*

Construction BMPs apply to all construction and maintenance projects that DWR completes or for which DWR issues contracts. All projects are expected to implement all Construction BMPs unless a variance is granted by the Division of Engineering Chief, Division of Operation and Maintenance Chief, or Division of Flood Management Chief, as applicable and the variance is approved by the DWR CEQA Climate Change Committee. Variances will be granted when specific project conditions or characteristics make implementation of the BMP infeasible and where omitting the BMP will not be detrimental to the project's consistency with the Greenhouse Gas Reduction Plan.

**BMP 7.** Minimize idling time by requiring that equipment be shut down after five minutes when not in use (as required by the State airborne toxics control

measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site and provide a plan for the enforcement of this requirement.

**BMP 8.** Maintain all construction equipment in proper working condition and perform all preventative maintenance. Required maintenance includes compliance with all manufacturer's recommendations, proper upkeep and replacement of filters and mufflers, and maintenance of all engine and emissions systems in proper operating condition. Maintenance schedules shall be detailed in an Air Quality Control Plan prior to commencement of construction.

**BMP 9.** Implement tire inflation program on jobsite to ensure that equipment tires are correctly inflated. Check tire inflation when equipment arrives on-site and every two weeks for equipment that remains on-site. Check vehicles used for hauling materials off-site weekly for correct tire inflation. Procedures for the tire inflation program shall be documented in an Air Quality Management Plan prior to commencement of construction.

**BMP 10.** Develop a project specific ride share program to encourage carpools, shuttle vans, transit passes and/or secure bicycle parking for construction worker commutes.

**BMP 11.** Reduce electricity use in temporary construction offices by using high efficiency lighting and requiring that heating and cooling units be Energy Star compliant. Require that all contractors develop and implement procedures for turning off computers, lights, air conditioners, heaters, and other equipment each day at close of business.

**BMP 12.** For deliveries to project sites where the haul distance exceeds 100 miles and a heavy-duty class 7 or class 8 semi-truck or 53-foot or longer box type trailer is used for hauling, a SmartWay<sup>27</sup> certified truck will be used to the maximum extent feasible.

**BMP 13.** Minimize the amount of cement in concrete by specifying higher levels of cementitious material alternatives, larger aggregate, longer final set times, or lower maximum strength where appropriate.

**BMP 14.** Develop a project specific construction debris recycling and diversion program to achieve a documented 50% diversion of construction waste.

**BMP 15.** Evaluate the feasibility of restricting all material hauling on public roadways to off-peak traffic congestion hours. During construction scheduling and execution minimize, to the extent possible, uses of public roadways that would increase traffic congestion.

Quick Guide to CEQA Compliance  
for Discussing GHG Emissions of Exempted Projects

The DWR CEQA Climate Change Committee ("C4") developed this "Quick Guide" for use by DWR staff and consultants on projects for which DWR is involved in developing or supporting environmental documentation for CEQA compliance. This "Quick Guide" is to be used as internal guidance for DWR staff and is designed to help DWR provide a consistent approach to analyzing GHG emissions in its CEQA documents. DWR intends to make periodic updates and addenda to this "Quick Guide" as new information and policies on climate change and GHG emissions develop. This "Quick Guide" and other DWR climate change documents should be used when working with consultants and other agency staff to prepare GHG analysis for DWR documents. They may also be shared with other interested parties with the understanding that these are internal guidance documents intended to assist DWR staff.

**The sample section below and in the other tabs of this Excel spreadsheet should be used as a guide. They may be edited or included as-is. However, DWR staff should carefully review the information provided for individual projects and add additional information that is relevant to their specific project or project location.**

Prior to the public release of any environmental document (e.g., NOEs, NDs, MNDs, EIRs), the climate change and GHG portions must be reviewed by the C4. For Notices of Exemption and their supporting information, the review is done by climate change staff and can usually be completed

Passages within this "Quick Guide" have been *italicized* and **colored red** to indicate information that is local, regional, or project specific and must be added by the project team. Below is a brief summary of the information that must be supplied by the project team prior to review. Please make sure that you have included all of this information before submitting your GHG inventory for review.

1. For NOE's use the "Project Description" tab to provide a brief project description (including project purpose, duration of work, equipment to be used, and location of project).
2. For NOE's provide the specific CEQA code section that describes the exemption that applies to the project.
3. Using the information provided in the "GHG Emissions Calculations" tab, fill in the Construction Activity Emissions and Operations and Maintenance Activities Emissions.
4. If appropriate, provide the estimated useful lifespan of the project and the amortized construction emissions + ongoing emissions. (This will be appropriate for construction projects where a facility with a finite life span is being constructed, or where periodic maintenance, such as dredging, is being performed; this will not apply to many repair projects, such as erosion repair or levee armoring.)
5. On the "GHG Emissions Calculations" tab, fill in column B (lines 2-24) the construction equipment that will be used on the project (add or subtract lines as necessary).
6. Fill in column C the maximum quantity of each piece of equipment that will be used during construction of the project.
7. Fill in column D the number of days each type of equipment will operate during construction.
8. Column E automatically calculates, assuming a work day of 8 hours. If the project construction schedule were to call for a different work day length, modify the formula and the information under footnote number 1.
9. Fill in the fuel consumption rate for each type of equipment. The "Equip. Fuel Consumption Factors" tab can be used to provide default factors for most equipment. If a piece of equipment isn't listed under the "Equip. Fuel Consumption Factors" tab, contact a contractor or other knowledgeable professional to obtain appropriate fuel consumption factors. Be sure to document the source of all information in the footnotes.

## Collection Canal Maintenance Project No. 6 - Inventory and Calculation of Greenhouse Gas Emissions

Line	<b>Emissions from Construction Equipment</b>								
1	Type of Equipment	Maximum Number per Day	Total Operation Days	Total Operation Hours <sup>1</sup>	Fuel Consumption Per Hour <sup>2</sup>	Total Fuel Consumption (gal. diesel)	CO <sub>2</sub> e/gal diesel <sup>3</sup>	Total CO <sub>2</sub> Equivalent Emissions (metric tons)	
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25	<b>TOTAL</b>						<b>14,980</b>		<b>156</b>
26	<sup>1</sup> An 8-hour work day is assumed.								
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29									
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31	Average Number of Workers per Day	Total Number of Workdays	Average Distance Travelled (round trip)	Total Miles Travelled	Average Passenger Vehicle Fuel Efficiency <sup>4</sup>	Total Fuel Consumption (gal. gasoline)	CO <sub>2</sub> e/gal Gasoline <sup>3</sup>	Total CO <sub>2</sub> Equivalent Emissions (metric tons)	
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41	<b>Construction Electricity Emissions</b>							
42		<b>MWh of electricity</b>	<b>mtCO<sub>2</sub>e/MWh<sup>5</sup></b>	<b>CO<sub>2</sub> e emissions</b>				
43	Electricity Needed	0	0.310	0				

44 <sup>5</sup> eGRID2010 Version 1.0, February 2011 (Year 2007 data) CAMX-WECC sub-region .

45									
46	<b>Total Construction Activity Emissions</b>							160.0	(from lines 25, 32, 39, and 43)
47	<b>Total Years of Construction</b>							5	
48	<b>Expected Start Date of Construction</b>							May-16	
49									
50	<b>Estimated Project Useful life</b>							5 Years	
51	<b>Average Annual Total GHG Emissions<sup>7</sup></b>							31.99959	<b>MT CO<sub>2</sub> equivalents</b>
52	<sup>7</sup> short-term construction emissions amortized over life of project								

These data were generated using the California Air Resource Control Board Offroad 2007 Emissions Inventory.

Equipment	Offroad 2007 Outputs			Individual Unit Factors
	Fuel	MaxHP	Class	Gal/hr
Tampers/Rammers	G2	15	Construction and Mining Equipment	0.20
Plate Compactors	G2	15	Construction and Mining Equipment	0.20
Asphalt Pavers	G4	15	Construction and Mining Equipment	0.58
Asphalt Pavers	G4	25	Construction and Mining Equipment	1.47
Asphalt Pavers	G4	50	Construction and Mining Equipment	2.34
Asphalt Pavers	G4	120	Construction and Mining Equipment	3.95
Tampers/Rammers	G4	15	Construction and Mining Equipment	0.49
Plate Compactors	G4	5	Construction and Mining Equipment	0.18
Plate Compactors	G4	15	Construction and Mining Equipment	0.44
Rollers	G4	5	Construction and Mining Equipment	0.27
Rollers	G4	15	Construction and Mining Equipment	0.55
Rollers	G4	25	Construction and Mining Equipment	1.19
Rollers	G4	50	Construction and Mining Equipment	2.64
Rollers	G4	120	Construction and Mining Equipment	4.64
Paving Equipment	G4	5	Construction and Mining Equipment	0.20
Paving Equipment	G4	15	Construction and Mining Equipment	0.58
Paving Equipment	G4	25	Construction and Mining Equipment	1.32
Paving Equipment	G4	50	Construction and Mining Equipment	2.30
Paving Equipment	G4	120	Construction and Mining Equipment	3.70
Surfacing Equipment	G4	5	Construction and Mining Equipment	0.20
Surfacing Equipment	G4	15	Construction and Mining Equipment	0.39
Surfacing Equipment	G4	25	Construction and Mining Equipment	0.94
Signal Boards	G4	5	Construction and Mining Equipment	0.33
Signal Boards	G4	15	Construction and Mining Equipment	0.60
Trenchers	G4	15	Construction and Mining Equipment	0.65
Trenchers	G4	25	Construction and Mining Equipment	1.40
Trenchers	G4	50	Construction and Mining Equipment	2.20
Trenchers	G4	120	Construction and Mining Equipment	4.27
Bore/Drill Rigs	G4	15	Construction and Mining Equipment	0.79
Bore/Drill Rigs	G4	25	Construction and Mining Equipment	1.45
Bore/Drill Rigs	G4	50	Construction and Mining Equipment	2.68
Bore/Drill Rigs	G4	120	Construction and Mining Equipment	6.67
Bore/Drill Rigs	G4	175	Construction and Mining Equipment	9.04
Concrete/Industrial Saws	G4	5	Construction and Mining Equipment	0.27
Concrete/Industrial Saws	G4	15	Construction and Mining Equipment	0.69
Concrete/Industrial Saws	G4	25	Construction and Mining Equipment	1.34
Concrete/Industrial Saws	G4	50	Construction and Mining Equipment	2.78
Concrete/Industrial Saws	G4	120	Construction and Mining Equipment	4.72
Cement and Mortar Mixers	G4	5	Construction and Mining Equipment	0.26
Cement and Mortar Mixers	G4	15	Construction and Mining Equipment	0.52
Cement and Mortar Mixers	G4	25	Construction and Mining Equipment	1.61
Cranes	G4	50	Construction and Mining Equipment	1.94
Cranes	G4	120	Construction and Mining Equipment	3.42
Cranes	G4	175	Construction and Mining Equipment	5.37
Crushing/Proc. Equipment	G4	15	Construction and Mining Equipment	0.75
Crushing/Proc. Equipment	G4	25	Construction and Mining Equipment	1.37

Crushing/Proc. Equipment	G4	120	Construction and Mining Equipment	7.91
Rough Terrain Forklifts	G4	50	Construction and Mining Equipment	3.30
Rough Terrain Forklifts	G4	120	Construction and Mining Equipment	5.26
Rough Terrain Forklifts	G4	175	Construction and Mining Equipment	8.18
Rubber Tired Loaders	G4	50	Construction and Mining Equipment	2.44
Rubber Tired Loaders	G4	120	Construction and Mining Equipment	3.85
Tractors/Loaders/Backhoes	G4	120	Construction and Mining Equipment	2.97
Skid Steer Loaders	G4	15	Construction and Mining Equipment	0.80
Skid Steer Loaders	G4	25	Construction and Mining Equipment	1.11
Skid Steer Loaders	G4	50	Construction and Mining Equipment	1.93
Skid Steer Loaders	G4	120	Construction and Mining Equipment	4.31
Dumpers/Tenders	G4	5	Construction and Mining Equipment	0.14
Dumpers/Tenders	G4	15	Construction and Mining Equipment	0.40
Dumpers/Tenders	G4	25	Construction and Mining Equipment	0.84
Dumpers/Tenders	G4	120	Construction and Mining Equipment	2.60
Other Construction Equipment	G4	175	Construction and Mining Equipment	5.49
Pavers	D	25	Construction and Mining Equipment	0.85
Pavers	D	50	Construction and Mining Equipment	1.32
Pavers	D	120	Construction and Mining Equipment	3.18
Pavers	D	175	Construction and Mining Equipment	5.87
Pavers	D	250	Construction and Mining Equipment	8.84
Pavers	D	500	Construction and Mining Equipment	10.62
Plate Compactors	D	15	Construction and Mining Equipment	0.20
Rollers	D	15	Construction and Mining Equipment	0.29
Rollers	D	25	Construction and Mining Equipment	0.61
Rollers	D	50	Construction and Mining Equipment	1.22
Rollers	D	120	Construction and Mining Equipment	2.71
Rollers	D	175	Construction and Mining Equipment	4.94
Rollers	D	250	Construction and Mining Equipment	6.95
Rollers	D	500	Construction and Mining Equipment	9.95
Scrapers	D	120	Construction and Mining Equipment	4.32
Scrapers	D	175	Construction and Mining Equipment	6.77
Scrapers	D	250	Construction and Mining Equipment	9.52
Scrapers	D	500	Construction and Mining Equipment	14.64
Scrapers	D	750	Construction and Mining Equipment	25.28
Paving Equipment	D	25	Construction and Mining Equipment	0.57
Paving Equipment	D	50	Construction and Mining Equipment	1.13
Paving Equipment	D	120	Construction and Mining Equipment	2.50
Paving Equipment	D	175	Construction and Mining Equipment	4.62
Paving Equipment	D	250	Construction and Mining Equipment	5.56
Surfacing Equipment	D	50	Construction and Mining Equipment	0.66
Surfacing Equipment	D	120	Construction and Mining Equipment	2.92
Surfacing Equipment	D	175	Construction and Mining Equipment	3.91
Surfacing Equipment	D	250	Construction and Mining Equipment	6.12
Surfacing Equipment	D	500	Construction and Mining Equipment	10.04
Surfacing Equipment	D	750	Construction and Mining Equipment	15.75
Signal Boards	D	15	Construction and Mining Equipment	0.28
Signal Boards	D	50	Construction and Mining Equipment	1.68
Signal Boards	D	120	Construction and Mining Equipment	3.67
Signal Boards	D	175	Construction and Mining Equipment	7.05
Signal Boards	D	250	Construction and Mining Equipment	11.57
Trenchers	D	15	Construction and Mining Equipment	0.39
Trenchers	D	25	Construction and Mining Equipment	1.50
Trenchers	D	50	Construction and Mining Equipment	1.55

Trenchers	D	120	Construction and Mining Equipment	2.98
Trenchers	D	175	Construction and Mining Equipment	6.58
Trenchers	D	250	Construction and Mining Equipment	10.14
Trenchers	D	500	Construction and Mining Equipment	14.18
Trenchers	D	750	Construction and Mining Equipment	26.74
Bore/Drill Rigs	D	15	Construction and Mining Equipment	0.47
Bore/Drill Rigs	D	25	Construction and Mining Equipment	0.73
Bore/Drill Rigs	D	50	Construction and Mining Equipment	1.42
Bore/Drill Rigs	D	120	Construction and Mining Equipment	3.52
Bore/Drill Rigs	D	175	Construction and Mining Equipment	6.42
Bore/Drill Rigs	D	250	Construction and Mining Equipment	8.50
Bore/Drill Rigs	D	500	Construction and Mining Equipment	14.07
Bore/Drill Rigs	D	750	Construction and Mining Equipment	27.80
Bore/Drill Rigs	D	1000	Construction and Mining Equipment	41.98
Excavators	D	25	Construction and Mining Equipment	0.75
Excavators	D	50	Construction and Mining Equipment	1.17
Excavators	D	120	Construction and Mining Equipment	3.38
Excavators	D	175	Construction and Mining Equipment	5.12
Excavators	D	250	Construction and Mining Equipment	7.19
Excavators	D	500	Construction and Mining Equipment	10.60
Excavators	D	750	Construction and Mining Equipment	17.56
Concrete/Industrial Saws	D	25	Construction and Mining Equipment	0.75
Concrete/Industrial Saws	D	50	Construction and Mining Equipment	1.40
Concrete/Industrial Saws	D	120	Construction and Mining Equipment	3.40
Concrete/Industrial Saws	D	175	Construction and Mining Equipment	7.30
Cement and Mortar Mixers	D	15	Construction and Mining Equipment	0.29
Cement and Mortar Mixers	D	25	Construction and Mining Equipment	0.80
Cranes	D	50	Construction and Mining Equipment	1.09
Cranes	D	120	Construction and Mining Equipment	2.30
Cranes	D	175	Construction and Mining Equipment	3.67
Cranes	D	250	Construction and Mining Equipment	5.09
Cranes	D	500	Construction and Mining Equipment	8.18
Cranes	D	750	Construction and Mining Equipment	13.77
Cranes	D	9999	Construction and Mining Equipment	44.16
Graders	D	50	Construction and Mining Equipment	1.29
Graders	D	120	Construction and Mining Equipment	3.44
Graders	D	175	Construction and Mining Equipment	5.66
Graders	D	250	Construction and Mining Equipment	7.81
Graders	D	500	Construction and Mining Equipment	10.42
Graders	D	750	Construction and Mining Equipment	22.05
Off-Highway Trucks	D	175	Construction and Mining Equipment	5.71
Off-Highway Trucks	D	250	Construction and Mining Equipment	7.55
Off-Highway Trucks	D	500	Construction and Mining Equipment	12.35
Off-Highway Trucks	D	750	Construction and Mining Equipment	20.03
Off-Highway Trucks	D	1000	Construction and Mining Equipment	28.37
Crushing/Proc. Equipment	D	50	Construction and Mining Equipment	2.06
Crushing/Proc. Equipment	D	120	Construction and Mining Equipment	3.82
Crushing/Proc. Equipment	D	175	Construction and Mining Equipment	7.64
Crushing/Proc. Equipment	D	250	Construction and Mining Equipment	11.09
Crushing/Proc. Equipment	D	500	Construction and Mining Equipment	16.94
Crushing/Proc. Equipment	D	750	Construction and Mining Equipment	26.70
Crushing/Proc. Equipment	D	9999	Construction and Mining Equipment	59.43
Rough Terrain Forklifts	D	50	Construction and Mining Equipment	1.58
Rough Terrain Forklifts	D	120	Construction and Mining Equipment	2.86

Rough Terrain Forklifts	D	175	Construction and Mining Equipment	5.70
Rough Terrain Forklifts	D	250	Construction and Mining Equipment	7.74
Rough Terrain Forklifts	D	500	Construction and Mining Equipment	11.63
Rubber Tired Loaders	D	25	Construction and Mining Equipment	0.77
Rubber Tired Loaders	D	50	Construction and Mining Equipment	1.46
Rubber Tired Loaders	D	120	Construction and Mining Equipment	2.70
Rubber Tired Loaders	D	175	Construction and Mining Equipment	4.85
Rubber Tired Loaders	D	250	Construction and Mining Equipment	6.76
Rubber Tired Loaders	D	500	Construction and Mining Equipment	10.76
Rubber Tired Loaders	D	750	Construction and Mining Equipment	22.04
Rubber Tired Loaders	D	1000	Construction and Mining Equipment	26.99
Rubber Tired Dozers	D	175	Construction and Mining Equipment	5.93
Rubber Tired Dozers	D	250	Construction and Mining Equipment	8.36
Rubber Tired Dozers	D	500	Construction and Mining Equipment	12.11
Rubber Tired Dozers	D	750	Construction and Mining Equipment	18.23
Rubber Tired Dozers	D	1000	Construction and Mining Equipment	27.08
Tractors/Loaders/Backhoes	D	25	Construction and Mining Equipment	0.72
Tractors/Loaders/Backhoes	D	50	Construction and Mining Equipment	1.41
Tractors/Loaders/Backhoes	D	120	Construction and Mining Equipment	2.37
Tractors/Loaders/Backhoes	D	175	Construction and Mining Equipment	4.63
Tractors/Loaders/Backhoes	D	250	Construction and Mining Equipment	7.78
Tractors/Loaders/Backhoes	D	500	Construction and Mining Equipment	15.62
Tractors/Loaders/Backhoes	D	750	Construction and Mining Equipment	23.43
Crawler Tractors	D	50	Construction and Mining Equipment	1.17
Crawler Tractors	D	120	Construction and Mining Equipment	3.03
Crawler Tractors	D	175	Construction and Mining Equipment	5.54
Crawler Tractors	D	250	Construction and Mining Equipment	7.55
Crawler Tractors	D	500	Construction and Mining Equipment	11.80
Crawler Tractors	D	750	Construction and Mining Equipment	21.15
Crawler Tractors	D	1000	Construction and Mining Equipment	29.99
Skid Steer Loaders	D	25	Construction and Mining Equipment	0.63
Skid Steer Loaders	D	50	Construction and Mining Equipment	1.18
Skid Steer Loaders	D	120	Construction and Mining Equipment	1.95
Off-Highway Tractors	D	120	Construction and Mining Equipment	4.32
Off-Highway Tractors	D	175	Construction and Mining Equipment	5.97
Off-Highway Tractors	D	250	Construction and Mining Equipment	5.94
Off-Highway Tractors	D	750	Construction and Mining Equipment	25.95
Off-Highway Tractors	D	1000	Construction and Mining Equipment	37.23
Dumpers/Tenders	D	25	Construction and Mining Equipment	0.35
Other Construction Equipment	D	15	Construction and Mining Equipment	0.46
Other Construction Equipment	D	25	Construction and Mining Equipment	0.60
Other Construction Equipment	D	50	Construction and Mining Equipment	1.30
Other Construction Equipment	D	120	Construction and Mining Equipment	3.70
Other Construction Equipment	D	175	Construction and Mining Equipment	4.86
Other Construction Equipment	D	500	Construction and Mining Equipment	11.51
Compressor (Dredging)	D	50	Dredging	1.41
Compressor (Dredging)	D	120	Dredging	2.62
Compressor (Dredging)	D	175	Dredging	4.42
Compressor (Dredging)	D	250	Dredging	5.60
Compressor (Dredging)	D	500	Dredging	8.90
Compressor (Dredging)	D	1000	Dredging	22.11
Crane (Dredging)	D	750	Dredging	16.28
Deck/door engine	D	250	Dredging	6.45
Dredger	D	175	Dredging	4.09

Dredger	D	250	Dredging	5.69
Dredger	D	750	Dredging	15.90
Dredger	D	9999	Dredging	34.80
Hoist/swing/winch	D	50	Dredging	0.96
Hoist/swing/winch	D	120	Dredging	3.05
Hoist/swing/winch	D	175	Dredging	3.88
Hoist/swing/winch	D	250	Dredging	6.18
Hoist/swing/winch	D	500	Dredging	9.81
Hoist/swing/winch	D	750	Dredging	19.56
Hoist/swing/winch	D	9999	Dredging	36.86
Pump (Dredging)	D	120	Dredging	4.29
Pump (Dredging)	D	175	Dredging	6.35
Pump (Dredging)	D	250	Dredging	10.51
Pump (Dredging)	D	500	Dredging	16.24
Pump (Dredging)	D	750	Dredging	23.77
Pump (Dredging)	D	9999	Dredging	114.38
Generator (Dredging)	D	50	Dredging	1.44
Generator (Dredging)	D	120	Dredging	4.05
Generator (Dredging)	D	175	Dredging	5.47
Generator (Dredging)	D	250	Dredging	9.94
Generator (Dredging)	D	500	Dredging	16.88
Generator (Dredging)	D	750	Dredging	28.09
Generator (Dredging)	D	9999	Dredging	61.55
Other (Dredging)	D	120	Dredging	2.96
Other (Dredging)	D	175	Dredging	5.11
Other (Dredging)	D	250	Dredging	6.32
Other (Dredging)	D	500	Dredging	11.20
Misc Portable Equipment	D	120	Other Portable Equipment	3.15
Misc Portable Equipment	D	175	Other Portable Equipment	4.32
Misc Portable Equipment	D	250	Other Portable Equipment	7.19
Misc Portable Equipment	D	500	Other Portable Equipment	13.44
Misc Portable Equipment	D	750	Other Portable Equipment	19.11
Misc Portable Equipment	D	1000	Other Portable Equipment	25.52