

# CONTRACT ROUTING SHEET

Date Prepared: 4-28-08

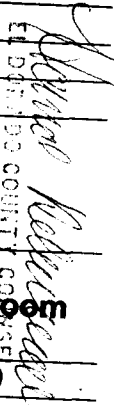
Need Date: \_\_\_\_\_

### PROCESSING DEPARTMENT:

Department: Environmental Mgmt  
Dept. Contact: Linda Milligin  
Phone #: 6668  
Department  
Head Signature: 

### CONTRACTOR:

Name: Dept of Transportation  
Address: 2850 Fairlane Ct.  
Placerville  
Phone: \_\_\_\_\_

2008 APR 28 PM 3:53  
EL DORADO COUNTY COURSE  


### CONTRACTING DEPARTMENT:

Service Requested: EMD Air Quality Projects 422200  
Review of agreement regarding AB2766 funding for DOT - on-road cleaner vehicle replacement purchase with a waterless/dustless broom street sweeper.

Contract Term: June 30, 2009


Contract/Amendment Value: \$203,236.00

Compliance with Human Resources requirements? Yes:

No:


Compliance verified by: \_\_\_\_\_

### COUNTY COUNSEL: (Must approve all contracts and MOU's)

Approved:  Disapproved:  Date: 5/25/08 By:   
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_

DATE	ATTORNEY	DEPT / INDEX NO	BY
05/11/2008	MIKE	422200	AS

### RISK MANAGEMENT: (All contracts and MOU's except boilerplate grant funding agreements)

Approved:  Disapproved:  Date: 5/28/08 By:   
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_

RECEIVED  
HUMAN RESOURCES DEPT  
MAY 28 PM 1:11

### OTHER APPROVAL: (Specify department(s) participating or directly affected by this contract).

Departments:  
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_  
Approved:  Disapproved:  Date: \_\_\_\_\_ By: \_\_\_\_\_

**FUNDING AGREEMENT NO. 002-DMV-08/09-BOS  
WITH EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION**

---

**This Agreement No. 002-DMV-08/09-BOS** made and entered by and between the **EL DORADO COUNTY AIR QUALITY MANAGEMENT DISTRICT**, a county air pollution control district formed pursuant to California Health and Safety Code section 40100, et seq. (hereinafter referred to as "AQMD"); and **EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION**, a political subdivision of the State of California (hereinafter referred to as "COUNTY");

**W I T N E S S E T H:**

**WHEREAS**, the California Clean Air Act requires local air pollution control districts to reduce emissions from motor vehicles; and

**WHEREAS**, AB 2766, codified in California Health and Safety Code section 44220, et seq., authorizes districts to impose a fee of up to four dollars upon certain registered motor vehicles within the AQMD, and the Governing Board of the AQMD has imposed said fee; and

**WHEREAS**, said legislation requires the AQMD to use said funds for activities related to reducing air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act of 1988; and

**WHEREAS**, COUNTY has proposed a Project that meets the eligibility criteria of the AQMD and that has been approved by AQMD for funding; and

**WHEREAS**, COUNTY represents that it is willing and able to perform the activities set forth herein.

**NOW, THEREFORE**, AQMD and COUNTY mutually agree as follows:

## **1. PROJECT**

COUNTY shall perform all activities and work necessary to complete the replacement of a on-road cleaner vehicle with a waterless/dustless broom street sweeper Project (hereinafter referred to as "Project"); set forth in the fully described "Proposal" attached hereto as Exhibit "A" and incorporated herein by this reference. COUNTY agrees to furnish all labor, materials, equipment, licenses, permits, fees, and other incidentals necessary to perform and complete, per schedule, in a professional manner, the services described herein. COUNTY represents that COUNTY has the expertise necessary to adequately perform the Project specified in said Proposal.

In the event of any conflict between or among the terms and conditions of this Agreement, the Proposal incorporated herein, and the documents referred to and incorporated herein, such conflict shall be resolved by giving precedence in the following order of priority:

1. To the text of this Agreement;
2. Proposal to this Agreement; and
3. To the "Motor Vehicle Emission Reduction Projects Request for Proposals" (RFP) released to Interested Parties by the AQMD and dated 2008-2009.

## **2. PERIOD OF PERFORMANCE/TIMETABLE**

COUNTY shall commence performance of work and produce all work products in accordance with the Work Statement and deadlines for performance identified in the Proposal of this Agreement, unless this Agreement is terminated sooner as provided for elsewhere in this Agreement.

If requested by the AQMD, COUNTY shall submit regular progress reports, at intervals determined by the AQMD, detailing the work performed during the current reporting period; work planned for the next reporting period; problems identified, solved, and/or unresolved; and the percentage of each

task completed. COUNTY shall provide AQMD with a comprehensive final written report prior to the end of Agreement term. Said final report shall be complete and shall document the work performed under this Agreement.

### **3. TERM**

The term of this Agreement shall be for the period of July 1, 2008 through June 30, 2009 unless terminated earlier in accordance with Article 7, Termination.

### **4. COMPENSATION**

AQMD will pay the COUNTY the sum of TWO HUNDRED THREE THOUSAND, TWO HUNDRED THIRTY SIX DOLLARS AND NO CENTS (\$203,236.00) as follows:

COUNTY shall obtain through other sources sufficient additional monies to fund the total cost of the Project as outlined in the Proposal. Satisfactory written evidence of such funding commitments shall be provided to AQMD prior to the release by AQMD of any funds under this Agreement. In the event funding from other sources for the total cost of the Project is not received by COUNTY, AQMD reserves the right to terminate or renegotiate this Agreement. In accordance with Section 44233 of the California Health and Safety Code, COUNTY agrees to limit expenditure of funds for the purpose of administration to not more than five percent of the monies distributed to COUNTY. The AQMD is not obligated to pay COUNTY for administrative costs exceeding five percent of the actual total cost of the Project.

The total obligation of the AQMD under this Agreement SHALL NOT EXCEED TWO HUNDRED THREE THOUSAND, TWO HUNDRED THIRTY SIX DOLLARS AND NO CENTS (\$203,236.00).

A. **PAYMENTS:** Advance payments shall not be permitted. Payments will be permitted only at which time an equivalent service has been completed. The AQMD shall reimburse COUNTY quarterly, in arrears, after receipt and verification submitted to El Dorado County Air Quality Management District, Attention: Marcella McTaggart. Payment shall be made to COUNTY by the AQMD upon submission and evaluation of the COUNTY'S invoice of claim. Said invoice of claim shall set forth the work completed pursuant to this Agreement.

Upon receipt of proper documentation, and verification that COUNTY has satisfactorily completed the work for which compensation is sought and that the work is in accordance with the Exhibit Summary Sheet attached hereto, AQMD will issue payment to COUNTY within forty five (45) calendar days of verification.

The amount to be paid to COUNTY under this Agreement includes all sales and use taxes incurred pursuant to this Agreement, if any, including any such taxes due on equipment purchased by the COUNTY. The COUNTY shall not receive additional compensation for reimbursement of such taxes and shall not decrease work to compensate therefore.

Concurrently with the submission of any claim for payment, COUNTY shall certify (through copies of invoices issued, checks, receipts, and the like) that complete payment has been made to any and all subcontractors as provided.

It is understood that all expenses incidental to COUNTY'S performance of services under this Agreement shall be borne exclusively by COUNTY.

In no event shall compensation paid by the AQMD to the COUNTY for the performance of all services and activities under this Agreement exceed the amount set forth in paragraph 4 above.

**B. Surplus Funds:** Any compensation under this agreement, which is not expended by COUNTY pursuant to the terms and conditions of this Agreement by the Project completion date, shall automatically revert to the AQMD. Only expenditures incurred by the COUNTY in the direct performance of this Agreement will be reimbursed by the AQMD. Allowable expenditures under this Agreement are specifically established and included in the Proposal.

**C. Closeout Period:** All final claims shall be submitted by COUNTY within sixty (60) days following the final month of activities for which payment is claimed. No action will be taken by AQMD on claims submitted beyond the 60-day closeout period.

##### **5. NON-ALLOCATION OF FUNDS**

The terms of this Agreement and the services to be provided thereunder are contingent on the approval of funds by the appropriating government agency. Should sufficient funds not be allocated, the services provided may be modified or this Agreement terminated at any time by giving the COUNTY thirty (30) days prior written notice.

##### **6. INDEPENDENT CONTRACTOR LIABILITY**

COUNTY is, and shall be at all times, deemed independent and shall be wholly responsible for the acts of COUNTY'S employees, associates, and subcontractors, in connection with the installation, operation, use and maintenance of the Project.

## 7. TERMINATION

A. **Breach of Agreement:** AQMD may immediately suspend or terminate this Agreement, in whole or in part, where in the determination of the AQMD there is:

1. An illegal or improper use of funds;
2. A failure to comply with any term of this Agreement;
3. A substantially incorrect or incomplete report submitted to the AQMD; or
4. Improperly performed services.

In no event shall any payment by the AQMD constitute a waiver by the AQMD of any breach of this Agreement or any default, which may then exist on the part of the COUNTY. Neither shall such payment impair or prejudice any remedy available to the AQMD with respect to the breach or default. The AQMD shall have the right to demand of the COUNTY the repayment to the AQMD of any funds disbursed to the COUNTY under this Agreement which in the judgment of the AQMD were not expended in accordance with the terms of this Agreement. The COUNTY shall promptly refund any such funds upon demand.

In addition to immediate suspension or termination, AQMD may impose any other remedies available at law, in equity, or otherwise specified in this Agreement.

B. **Without Cause:** Either party may terminate this Agreement at any time upon giving the other party at least thirty (30) days advance, written notice of intention to terminate. In such case, the AQMD shall, subject to paragraph 4, pay its pro rata share of the reasonable value of all services satisfactorily rendered and actual, reasonable costs incurred up to the time of the termination. Upon such termination, all the work product produced by COUNTY shall be promptly delivered to the AQMD.

## **8. CHANGES TO AGREEMENT**

This Agreement may be amended by mutual consent of the parties hereto. Said amendments shall become effective only when in writing and fully executed by duly authorized officers of the parties hereto.

## **9. INDEMNIFICATION**

COUNTY shall defend, indemnify, and hold the AQMD harmless against and from any and all claims, suits, losses, damages and liability for damages of every name, kind and description, including attorneys fees and costs incurred, brought for, or on account of, injuries to or death of any person, including but not limited to workers, AQMD employees, and the public, or damage to property, or any economic or consequential losses, which are claimed to or in any way arise out of or are connected with the COUNTY'S activities and work necessary to complete the Project unless such claim, loss, damage, injury or death is the result of the sole or active negligence of the AQMD. This duty of COUNTY to indemnify and save AQMD harmless includes the duties to defend set forth in California Civil Code, Section 2778.

AQMD shall indemnify COUNTY against and hold it harmless from any loss, damage, and liability for damages, including attorney fees and other costs of defense incurred by COUNTY, whether for damage to or loss of property, or injury to or death of COUNTY'S officer's, agents, or employees which shall in any way arise out of or be connected with AQMD's performance of its obligations hereunder, unless such damage, loss, injury, or death shall be caused by the sole or active by negligence of the COUNTY.



**10. AUDITS AND INSPECTIONS**

COUNTY shall at any time during regular business hours, and as often as AQMD may deem necessary, make available to AQMD for examination all of COUNTY'S records and data with respect to the matters covered by this Agreement. COUNTY shall, and upon request by AQMD, permit AQMD to audit and inspect all of such records and data necessary to ensure COUNTY'S compliance with the terms of this Agreement. COUNTY shall be subject to an audit by AQMD or its authorized representative to determine if the revenues received by COUNTY were spent for the reduction of pollution as provided in AB 2766 and to determine whether said funds were utilized as provided by law and this Agreement. If, after audit, AQMD makes a determination that funds provided COUNTY pursuant to this Agreement were not spent in conformance with this Agreement, or AB 2766 or any other applicable provisions of law, COUNTY agrees to immediately reimburse AQMD all funds determined to have been expended not in conformance with said provisions.

COUNTY shall retain all records and data for activities performed under this Agreement for at least three (3) years from the date of final payment under this Agreement or until all state and federal audits are completed for that fiscal year, whichever is later.

Because this Agreement exceeds Ten Thousand Dollars (\$10,000), COUNTY shall be subject to the examination and audit of the State Auditor for a period of three (3) years after final payment under Agreement (Government Code Section 10532).

**11. NOTICES TO PARTIES**

All notices to be given by the parties hereto shall be in writing and served by depositing same in the United States Post Office, postage prepaid and return receipt requested. Notices shall be in duplicate and addressed as follows:

**COUNTY**

El Dorado County  
 Department of Transportation  
 2850 Fairlane Court  
 Placerville, CA 95667  
 Attn: Richard Shepard  
 Director, Department of Transportation

**AQMD**

El Dorado County  
 Air Quality Management District  
 2850 Fairlane Court  
 Placerville, CA 95667  
 Attn: Marcella McTaggart,  
 Air Pollution Control Officer

**12. TIME IS OF THE ESSENCE**

It is understood that for COUNTY'S performance under this Agreement, time is of the essence. The parties reasonably anticipate that COUNTY will, to the reasonable satisfaction of the AQMD, complete all activities provided herein within the time schedule outlined in the Proposals to this Agreement.

**13. COMPLIANCE WITH APPLICABLE LAWS**

COUNTY will comply with all federal, State, and local laws and ordinances which are or may be applicable to the PROJECT to be undertaken by the COUNTY including but not limited to California Health and Safety Code sections 44220 et seq, all Air Resources Board and AQMD criteria there under, prevailing wage and work day definitions where applicable, contracting license requirements and permits.

**14. NO THIRD-PARTY BENEFICIARIES**

Nothing in this Agreement shall be construed to create any rights of any kind or nature in any other party not a named party to this Agreement.

**15. VENUE**

Any dispute resolution action arising out of this Agreement, including but not limited to litigation, mediation, or arbitration, shall be brought in El Dorado County, California, and shall be resolved in

accordance with the laws of the State of California.

**16. ENTIRE AGREEMENT**

This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties and they incorporate or supersede all prior written or oral Agreements or understandings.

**17. AGREEMENT ADMINISTRATOR**

The AQMD Officer or employee with responsibility for administration of this Agreement is Marcella McTaggart, Air Pollution Control Officer or her successor. The COUNTY Officer or employee with responsibility for administration of this Agreement is Richard Shepard, Director, Department of Transportation or his successor.

**18. AUTHORIZED SIGNATURES**

The parties to this Agreement represent that the undersigned individuals executing this Agreement on their respective behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties to the obligations set forth herein.

**19. PARTIAL INVALIDITY**

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

**AGREEMENT ADMINISTRATOR CONCURRENCE:**

**By:** \_\_\_\_\_ **Dated:** \_\_\_\_\_

**Marcella McTaggart**  
**Air Pollution Control Officer**  
**El Dorado County Air Quality Management District**

**REQUESTING DEPARTMENT CONCURRENCE:**

**By:** \_\_\_\_\_ **Dated:** \_\_\_\_\_

**Marcella McTaggart**  
**Air Pollution Control Officer**  
**El Dorado County Air Quality Management District**

**By:** \_\_\_\_\_ **Dated:** \_\_\_\_\_

**Gerri Silva, M.S., R.E.H.S**  
**Director**  
**El Dorado County Environmental Management Department**

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first herein above written.

**COUNTY  
EL DORADO COUNTY  
DEPARTMENT OF TRANSPORTATION**

**AQMD  
EL DORADO COUNTY  
AIR QUALITY MANAGEMENT DISTRICT**

**Date:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**By:** \_\_\_\_\_  
**Richard Shepard  
Director, Department of Transportation**

**By:** \_\_\_\_\_  
**Chair**

**Attest:  
Cindy Keck,  
Clerk of the Board**

**Date:** \_\_\_\_\_

**By:** \_\_\_\_\_

**EXHIBIT SUMMARY SHEET (COVER)**

Applicant: **El Dorado County Department of Transportation**  
 Contact Person: **Anne Novotny, Senior Planner**  
 Address: **2850 Fairlane Court, Placerville, CA 95667**  
 Telephone #: **(530) 621-5931 Fax #: (530) 626-0387 E-mail: [anovotny@edcgov.us](mailto:anovotny@edcgov.us)**

Project Title: **On-Road Cleaner Vehicle Replacement Purchase - Waterless/Dustless Broom Street Sweeper**

Project Budget (As Proposed)	AB 2766 Funds	\$ Matching Funds (10%)	In-Kind Match	Total Project Costs
Materials	\$ 243,884	\$ 27,098	\$	\$ 270,982
Personnel	\$	\$	\$	\$
<b>TOTAL</b>	<b>\$ 243,884</b>	<b>\$ 27,098</b>	<b>\$</b>	<b>\$ 270,982</b>

Alternative Project Budget 1	AB 2766 Funds	\$ Matching Funds (20%)	In-Kind Match	Total Project Costs
Materials	\$ 216,786	\$ 54,196	\$	\$ 270,982
Personnel	\$	\$	\$	\$
<b>TOTAL</b>	<b>\$ 216,786</b>	<b>\$ 54,196</b>	<b>\$</b>	<b>\$ 270,982</b>

Alternative Project Budget 2	AB 2766 Funds	\$ Matching Funds (25%)	In-Kind Match	Total Project Costs
Materials	\$ 203,236	\$ 67,746	\$	\$ 270,982
Personnel	\$	\$	\$	\$
<b>TOTAL</b>	<b>\$ 203,236</b>	<b>\$ 67,746</b>	<b>\$</b>	<b>\$ 270,982</b>

Estimated Emission Reductions/Cost-Effectiveness	As Proposed	Alternate 1 Funding Level	Alternate 2 Funding Level
Useful Life of Project (years)	10	10	10
Total Lifetime Emissions Reduced (lbs. of NOx, PM-10)	29,400	29,400	29,400
Annualized Cost-Effectiveness (total project costs)*	\$11.06/lb.	\$11.06/lb.	\$11.06/lb.
Annualized Cost-Effectiveness (AQMD Funded project costs)*	\$9..95/lb.	\$8..85/lb.	\$8..30/lb.

\*: See Appendix 3 for instructions

**Brief Project Description:** Purchase a new on-road, heavy-duty waterless/dustless broom street sweeper to replace an existing 2001 Schwarze regenerative air street sweeper.

## REQUEST FOR PROPOSAL CONTENTS CHECKLIST

Applicant: **El Dorado County Department of Transportation**

---

**Please complete and attach this checklist with your application.**

- Exhibit Summary Sheet (Cover) – page 1
  - Request for Proposal Contents Checklist (Second Page) – page 2
  - Authorization Letter/Resolution – page 3
  - Project Description – page 4
  - Project Organization/Background – page 5
  - Emission Benefits/Cost Effectiveness – pages 6 & 7
  - Work Statement – page 8
  - Funding Request/Cost Breakdown – page 9
  - Matching Funds – page 9
  - Schedule of Deliveries/Self-Monitoring Program – page 10
  - Local TPA Review (When Applicable) – page N/A
  - 2 Copies of Proposal
-

**AUTHORIZATION LETTER/RESOLUTION**

**COUNTY OF EL DORADO**

**DEPARTMENT OF TRANSPORTATION**



**MAINTENANCE DIVISION**  
2441 Headington Road  
Placerville CA 95667  
Phone: (530) 642-4909  
Fax: (530) 642-9238

**RICHARD W. SHEPARD, P.E.**  
Director of Transportation  
  
Internet Web Site:  
<http://co.el-dorado.ca.us/dot>

**MAIN OFFICE:**  
2850 Fairlane Court  
Placerville CA 95667  
Phone: (530) 621-5900  
Fax: (530) 626-0387



March 17, 2008

El Dorado County AQMD  
2850 Fairlane Court  
Placerville, CA 95667  
**Attn: Kerri Williams, Time Critical**

RE: FY 08/09 Motor Vehicle Emission Reductions (AB2766) Funding Proposal

Dear Ms. Williams,

I hereby authorize Anne Novotny to submit this grant application for FY2008-09 AB2766 DMV Surcharge funds for the El Dorado County Department of Transportation.

The Department is requesting AB2766 DMV Surcharge funding to purchase a new **waterless broom street sweeper** to replace an existing 2001 Schwarze regenerative air street sweeper. We have received a quote for a 2008 Elgin Eagle (Model UD 3300) for \$270,982 and are requesting **\$243,884** grant funding to be matched with a 10% monetary contribution of \$27,098. The purchase of this fixed asset is included in the Department's FY 2008-09 Maintenance Budget.

Thank you for your consideration of this project proposal for AB276 funding. If you have any questions, please contact Anne Novotny at 621-5931 or e-mail at [anovotny@edcgov.us](mailto:anovotny@edcgov.us).

Sincerely,

A handwritten signature in black ink, appearing to read "Richard W. Shepard".

Richard W. Shepard, P.E.  
Director of Transportation

RWS:an

c: Dennis Milligin, Equipment Superintendent



### PROJECT DESCRIPTION

Identify the objective(s) of the proposal and describe the scope of work of the proposed project.

The County DOT is requesting this funding to purchase a new on-road, heavy-duty waterless/dustless broom street sweeper to replace an existing 2001 Schwarze (Model A8000) regenerative air street sweeper. The existing sweeper is used daily on County maintained paved roads throughout the West Slope area. It's average annual usage hours is about 1,500 which is approximately 45,000 annual vehicle miles traveled (1,500 x 30 miles per hour). The current main and auxiliary engine specifications are as follows:

Main Engine (front, on-road)	Auxiliary Engine (rear, portable)
Equipment Make: Sterling (Chassis) Model: Year: 2001 GVWR: 32,000 lbs. Engine Mfg: Cummins Engine Model: ISB225 Engine Model Yr: 2001 Horsepower: 225 Displacement: 5.9L Total Hours: 10,405 Annual Hours: 1,500 Annual Miles: 45,000 (1,500 x 30 mph) Engine Tier Level: 1 Engine Family/Serial #: EF - 1CEXHO359BAP	Equipment Make: Schwarze Model: A8000 Year: 2001 GVWR: N/A Engine Mfg: John Deere Engine Model: 4045T Engine Model Yr: 2001 Horsepower: 150 Displacement: 4.5L Annual Hours: 1,500 Engine Tier Level: 1 Engine Family/Serial #: YJDXL06-8014

The proposed replacement waterless sweeper engine specifications are as follows:

Main Engine (front, on-road)	Auxiliary Engine (rear, portable)
Equipment Make: Elgin Eagle Model: UD3300 (Chassis) Year: 2008 GVWR: 32,900 Engine Mfg: Hino Engine Model: MD230 Engine Model Yr: 2008 Horsepower: 230 Displacement: 7.7L Engine Tier Level: 3 Engine Family/Serial #: N/A	Equipment Make: Model: Year: 2008 GVWR: N/A Engine Mfg: John Deere Engine Model: 4045 - 4 cylinder diesel (Tier 3 after 2009) Engine Model Yr: 2008 Horsepower: 99 Displacement: 4.5L Engine Tier Level: 2 Engine Family/Serial #: N/A

**See attached EXHIBIT A for detailed specifications and proposed purchase price of the Elgin Eagle UD3300.**

The scope of the project would include: demonstrations of comparable waterless/dustless broom street sweepers, preparing the bid specifications, releasing the bid document, evaluating and the bids and selecting the vendor, preparing/awarding the contract, coordinating the procurement process, inspecting/accepting the new equipment, preparing the new vehicle for service, and surplusing the old vehicle (ID 71-04) which will be sent to auction in Modesto for sale outside El Dorado County.

## PROJECT ORGANIZATION/BACKGROUND

*Provide a very brief description (one page or less: no resumes) of your organization, its need for AB2766 DMV Surcharge Funding for the proposal and its qualifications to successfully carry out the proposed project.*

The mission of the El Dorado County Department of Transportation is to provide a safe, congestion free road and highway system that is responsive to the needs of the County's citizens, and is environmentally sensitive. The County DOT Maintenance and Operations Division is responsible for the maintenance of 1,070 miles of roadway in El Dorado County. The maintenance program includes asphalt patching and paving, roadside brushing and tree trimming, crack sealing, ditch cleaning, roadway sweeping, storm drain and culvert cleaning, bridge maintenance and the roadside vegetation control (herbicide) program. The Maintenance Unit also operates the equipment maintenance facilities that maintain the department's heavy equipment and vehicles. In addition, it conducts the snow removal program and the surface treatment (overlay and chip seal) program. This division is also responsible for the Traffic Unit, which provides installation and maintenance of roadway signs, traffic signals and roadway striping.

Maintaining safe roads involves keeping the roads clear of trash and debris. Routine roadway sweeping is critical to accomplishing this goal. The current sweeper that is used daily on the County maintained paved roads throughout the West Slope area is a 2001 Schwarze regenerative air sweeper. Replacement of this sweeper with a new, waterless/dustless broom sweeper uses cleaner technology that is less polluting and more environmental sensitive.

*Please indicate if your agency has successfully completed a similar project.*

The EDCDOT Maintenance and Operations Division currently maintains 156 pieces in its fleet of rolling stock. On an on-going, as needed basis, the Maintenance Unit has successfully implemented numerous engine repowers and exhaust retrofits with cleaner technology. In a proactive effort to be in early compliance with the California Air Resources Board (CARB) on-road and portable diesel fleet regulations, the County DOT applied in February 2007 for \$792,322 of \$25 Million one-time funding for the purchase of low-polluting construction equipment from CARB. The County DOT was awarded \$823,766 and is in the vendor bid process to repower and retrofit 24 on-road vehicles. The Maintenance Unit is committed to reducing the carbon footprint by having a greener, cleaner fleet.

*If sub-contractors are to be used on the project, please identify and state their qualifications, or if sub-contractors have not yet been identified, state the specific qualifications that must be met.*

Not applicable.

## **EMISSION BENEFITS/COST EFFECTIVENESS**

(excerpt from *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects*, May 2005, page 4)

### **On-Road Cleaner Vehicle Purchases and Repowering**

**Project definition:** The purchase of a motor vehicle that is certified to be less polluting than a typical new vehicle (cleaner purchase) or an engine replacement that transforms a vehicle into a less polluting one (cleaner repower). Since natural replacement of older vehicles or engines with newer, cleaner ones (fleet turnover) is accounted for in clean air plans, in order to claim emission reductions from the project, the vehicles purchased must emit less pollution than conventional new vehicles meeting current emission standards.

**Note:** Recent but limited studies indicate further PM10 and formaldehyde reductions can be obtained from particulate filters and oxygen catalysts on natural gas vehicles.

**How emissions are reduced:** Emission reductions are the emissions associated with a new, more polluting vehicle minus the emissions associated with a new, less polluting vehicle.

**Need to know:**

Funding dollars

Annual vehicle miles traveled (VMT)

Engine certification rates or cleaner vehicle classification

**Inputs to Calculate Cost Effectiveness:**

Inputs	Default	Units	Comments
Funding Dollars (Funding @ 90%)	\$243,884	dollars	
Funding Dollars (Funding @ 80%)	\$216,786	dollars	
Funding Dollars (Funding @ 75%)	\$203,236	dollars	
Effectiveness Period (Life)	10	years	Default for heavy-duty trucks
Annual Hours (BEFORE)	1,500	annual hours	Based on actual vehicle hour meter (10,500 / 7 years)
Annual Vehicle Miles Traveled (VMT) BEFORE	45,000	annual miles	(1,500 average annual hours x 30 miles per hour)
Annual Hours (AFTER)	1,197	annual hours	Based on estimated annual VMT savings on water trips $(9,100 / 30) = 303$ ; $1,500 - 303 = 1,197$
Annual Vehicle Miles Traveled (VMT) AFTER	35,900	annual miles	(estimated daily VMT savings on water trips is 35 VMT x 260 annual usage days = 9,100; $45,000 - 9,100 = 35,900$ )

**Emission Factor Inputs:**

Factor	Default BEFORE Emission Factor	Units (grams)	Default AFTER Emission Factor	Units (grams)
ROG	N/A*	g/mi	N/A*	g/mi
NOx	14.2	g/mi	3.8	g/mi
PM10	0.43	g/mi	0.06	g/mi

Source: California Air Resources Board Draft Proposed Regulation to Reduce Emissions of Diesel Particulate Matter, and other Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles, January 22, 2008, Attachment A, Tables A-1 and A-2

\*Benefits for on-road heavy-duty engines are usually based on NOx and PM emissions only.

**EMISSION BENEFITS/COST EFFECTIVENESS****Formulas:****Units****Annual Emission Reductions**

lbs./year

$$[(\text{VMT Before}) * (\text{Before Emission Factor})] - [(\text{VMT After}) * (\text{After Emission Factor})] / 454$$

$$\text{Capital Recovery Factor (CRF)} = \frac{(1+i)^n(i)}{(1+i)^n - (i)} \quad \text{where: } i = \text{discount rate}$$

$$n = \text{project life}$$

**Cost-Effectiveness of**

$$\text{Funding Dollars} = (\text{CRF} * \text{Funding}) / (\text{Emissions Reductions})$$

dollars/lb.

**Calculations:****Annual Emission Reductions**

$$\text{NOx: } [(45,000 * 14.2) - (35,900 * 3.8)] / 454 = (639,000 - 136,420) / 454 = \mathbf{1,107 \text{ lbs./year}}$$

$$\text{PM10 Engine: } [(45,000 * 0.43) - (35,900 * 0.06)] / 454 = (19,350 - 2,154) / 454 = \mathbf{38 \text{ lbs./year}}$$

$$\text{PM10 Sweeper: } (35,900 * 0.05) = \mathbf{1,795 \text{ lbs./year}}$$

$$\text{Total Annual Emission Reductions} = \mathbf{2,940 \text{ lbs./year}}$$

$$\text{Capital Recovery Factor (CRF)} = \frac{(1+i)^n(i)}{(1+i)^n - 1} = 0.12 \quad \text{(Table 8 for discount rate of 3\%}$$

$$\text{for Project Life of 10 years)}$$

$$\text{Cost-Effectiveness of Funding Dollars} = (0.12 * \$243,884) / 2,940$$

$$\text{(As Proposed @ 90\%)} = 29,266.08 / 2,940 = \mathbf{\$ 9.95 \text{ dollars/lb.}}$$

$$\text{Cost-Effectiveness of Funding Dollars} = (0.12 * \$216,786) / 2,940$$

$$\text{(As Proposed @ 80\%)} = 26,014.32 / 2,940 = \mathbf{\$ 8.85 \text{ dollars/lb.}}$$

$$\text{Cost-Effectiveness of Funding Dollars} = (0.12 * \$203,236) / 2,940$$

$$\text{(As Proposed @ 75\%)} = 24,388.32 / 2,940 = \mathbf{\$ 8.30 \text{ dollars/lb.}}$$

## **WORK STATEMENT**

*Describe separately each phase of the work to be performed.*

- 1) Evaluation of various makes/models of new waterless/dustless broom street sweepers
- 2) Preparation of the bid specifications and releasing the bid
- 3) Selection of vendor and award contract
- 4) Procure equipment
- 5) Acceptance of equipment delivery and preparation of the new vehicle for service
- 6) Surplusing the old vehicle (ID 71-04) for sale outside El Dorado County.

*List tasks within each phase of work and describe as necessary.*

- 1) Schedule demos of various makes/models of new waterless broom street sweepers
- 2) Prepare the bid specs and release the bid
- 3) Evaluate bid proposals, select vendor, prepare contract and obtain Board approval to award contract to selected vendor
- 4) Coordinate procurement process with County Purchasing Department
- 5) Inspect and accept delivered equipment and prepare vehicle for service
- 6) Surplus old vehicle (ID 71-04) to Auction in Modesto

*State the sequence of work activities, including a starting date, this date should not be sooner than the contract execution date between the District and Grantee, and a completion date within one year of executed contract.*

	<b>Fiscal Year 2008/09</b>
1. Demo waterless broom street sweepers.....	1 <sup>st</sup> Quarter (Jul-Sep 2008)
2. Prepare bid specifications .....	1 <sup>st</sup> Quarter (Jul-Sep 2008)
3. Release bid document .....	1 <sup>st</sup> Quarter (Sep 2008)
4. Evaluate bids and select vendor .....	2 <sup>nd</sup> Quarter (Oct-Nov 2008)
5. Prepare/award contract.....	2 <sup>nd</sup> Quarter (Nov-Dec 2008)
6. Coordinate procurement process.....	3 <sup>rd</sup> Quarter (Jan-Feb 2009)
7. Inspect/accept new vehicle .....	3 <sup>rd</sup> Quarter (Feb-Mar 2009)
8. Prepare new vehicle for on-road service.....	4 <sup>th</sup> Quarter (Apr-May 2009)
9. Implement new vehicle.....	4 <sup>th</sup> Quarter (June 2009)
10. Surplus old vehicle (ID 71-04).....	4 <sup>th</sup> Quarter (June 2009)

*Include all relevant information regarding the technology involved, and the parties directly connected with the project.*

The technology used is waterless/dustless sweeping. The project involves the El Dorado County DOT and the selected vendor (to be determined)

*All grant recipients must provide some type of public acknowledgment that their project was funded by the District utilizing AB2766 DMV Surcharge Funds. How will this be accomplished for this project (e.g. logo/placard on equipment, include acknowledgment in a public education address or pamphlets, etc.)?*

A placard acknowledging that this project was partially funded with AB2766 DMV Surcharge Funds will be displayed on the vehicle. In addition, acknowledgments will be included in press releases.

## FUNDING REQUEST/COST BREAKDOWN/MATCHING FUNDS

*Briefly describe the proposal to be funded. Include the amount of money requested from the AB2766 DMV Surcharge fund. All applicants are also strongly encouraged to submit alternative funding levels in their proposals. Include total project costs, including, but not limited to the following: Estimate cost by task and identify source of funding for each task; itemized list of equipment and the proportion of the cost of each piece of equipment to be paid with AB2766 DMV Surcharge funds.*

This proposal is requesting **\$ 243,884** which is 90% of the estimated cost (including El Dorado County sales tax) to purchase a new waterless broom street sweeper.

The following table details the total estimated project costs, broken down by task and fiscal year. The second table identifies the revenue sources by fiscal year.

### Cost Estimates by Task (as of 03/17/2008)

Task	FY 08/09	FY 09/10	Total
On-Road Heavy-Duty Vehicle Replacement	\$ 252,664	\$	\$ 252,664
Sales Tax (7.25% in El Dorado County)	\$ 18,318		\$ 18,318
<b>Total Estimated Project Costs</b>	<b>\$ 270,982</b>	<b>\$</b>	<b>\$ 270,982</b>

### Revenue Source (as of 03/17/2008)

	FY 08/09	FY 09/10	Total
AB2766 DMV Surcharge funds requested	\$ 243,884	\$	\$ 243,884
Matching Funds (Source: Road Fund)	\$ 27,098	\$	\$ 27,098
Other Funds	\$	\$	\$
<b>Total Revenue</b>	<b>\$ 270,982</b>	<b>\$</b>	<b>\$ 270,982</b>

### Matching Funds

*Clearly indicate if the matching funds are monetary or in-kind (non-dollar) contributions along with their source. Provide proof (letter of commitment, reso, CIP Project Summary) that the matching funds are currently available from each funding source.*

The matching funds are monetary and are budgeted in the FY 2008/09 County DOT Maintenance Budget (see letter on page 3.)

## **SCHEDULE OF DELIVERABLES/SELF-MONITORING PROGRAM**

*Provide a list of all work products or deliverable items and their anticipated dates of delivery. The schedule must not extend beyond one year of the date of the executed contract*

<b>Work Products/Deliverables</b>	<b>Delivery Date</b>
	<i><b>Fiscal Year 2008/09</b></i>
1. Demo waterless broom street sweepers.....	1 <sup>st</sup> Quarter (Jul-Sep 2008)
2. Prepare bid specifications.....	1 <sup>st</sup> Quarter (Jul-Sep 2008)
3. Release bid document.....	1 <sup>st</sup> Quarter (Sep 2008)
4. Evaluate bids and select vendor.....	2 <sup>nd</sup> Quarter (Oct-Nov 2008)
5. Prepare/award contract.....	2 <sup>nd</sup> Quarter (Nov-Dec 2008)
6. Coordinate procurement process.....	3 <sup>rd</sup> Quarter (Jan-Feb 2009)
7. Inspect/accept new vehicle.....	3 <sup>rd</sup> Quarter (Feb-Mar 2009)
8. Prepare new vehicle for on-road service.....	4 <sup>th</sup> Quarter (Apr-May 2009)
9. Implement new vehicle.....	4 <sup>th</sup> Quarter (June 2009)
10. Surplus old vehicle (ID 71-04).....	4 <sup>th</sup> Quarter (June 2009)

This grant request is for the purchase of a new waterless broom street sweeper and includes all tasks listed above.

### **Self-Monitoring Program**

*Describe how the project objectives will be measured and reported to the District on a quarterly basis.*

The EDCDOT project manager for this project will provide the District, if requested and at intervals determined by the District, with project progress reports detailing the work performed during the current reporting period; work planned for the next reporting period; problems identified, solved, and/or unresolved; and the percentage of each task completed. A comprehensive final written report, documenting the work performed, will be provided to the District prior to the end of the Agreement term.

**EXHIBIT "A"**

**PROPOSAL**





February 5, 2008

County of El Dorado  
2441 Headington Rd  
Placerville, CA. 95667

Attention: Dennis Milligin:

## PROPOSAL FOR ELGIN EAGLE WATERLESS BROOM STREET SWEEPER

In accordance with your request, we are pleased to submit the following proposal for your consideration and approval:

**EAGLE SERIES FW, DUAL**, with hydraulically driven left and right side brooms and variable height, right side dumping, 4.5 cu. yd. hopper. PM10 Compliance and including the standard features listed below:

Air conditioning  
Air cleaner, dry type with safety element and restriction indicator, truck & sweeper engines  
Air dryer, Bendix AD-9  
Alternator, 120 amp, sweeper  
Alternator, 145 amp, truck  
Auxiliary engine, John Deere 4045 4 cylinder diesel, (Tier 3 after 2009)  
Horsepower: 99 HP at 2500 RPM  
Displacement: 276 cu. in. (4.5 L)  
Dust Skirts  
Torque: 274 lb ft (372 Nm) at 1400 RPM  
Axle, rear, two-speed  
Back-up alarm, electric  
Battery, maintenance free, two  
Brakes, full air  
Broom, main air suspension, cab-controlled  
Broom, main, down pressure gauge  
Broom, main, double wrap  
Conveyor, flushing system  
Conveyor, lower roller washout  
Engine, block heater, chassis  
Engine, hour meter, sweeper  
Fresh air ventilator/heater/defroster  
Fuel tank, 50 gallon  
Fugitive dust control filter with in-cab cleaning  
Hopper inspection door

Hose, hydrant fill, 16'8" (5080 mm) with strainer and coupling  
Lights, automatic backup  
Lights, 2 combination, tail/stop lights  
Lights, flood light, one per broom  
Lights, headlights, 2 dual rectangular  
Light, water level  
Manuals, operator and parts  
Mirrors, West Coast type with 8" diameter convex, both sides  
PM-10 compliant water system  
Signals, self-canceling directional with hazard switch  
Sun visors  
Tachometer, engine, truck and sweeper  
Rocker switch controls for all sweep hydraulic functions  
Tow loops or tow pins, front only; tie-down hooks, rear  
Transmission, Allison, standard with oil cooler  
Water spray, anti-siphon fill  
Water tank, molded polyethylene, 315 gallon total nominal capacity  
Wheels, dual rear with tubeless radial tires  
Windshield washer  
Windshield wipers, two-speed, intermittent feature  
Fugitive dust control fan

### Additional Options in Lieu of Standard

• Conveyor Stall Alarm
• Aux Eng Auto Shutdown
• Autolube System -Sweeper Only-
• JD Block Heater
• Engine Coolant Filter
• Carbide Dirt Shoes-
• Strobe Lights -1 Front & 2 Rear
• LED/Stop/Tail/Rear Turn Lights
• Arrow Board -
• HD/AR Steel Conveyor Lower Roller
• SB Tilt-Right-F Waterless
• Fan Sound Deflector-Fw
• Extended Hopper Door
• Sweep Resume
• Electric Hyd Lift Hopper-F
• Hyd Oil Lvl Ga W/Therm
• PM 10 Compliance
• Frnt Spry Bar-Pm10-
• Water Fill Gauge - Fw
• Eagle Waterless Parts Book
• Eagle Waterless Op Manual
• FW Service Manual
• JD Powertech Service Manual
• JD 4045 Tr-2 Operator Manu
• JD 4045 Tr-2 Parts Book
• Extended Warranty 2nd Yr Parts/Labor
• Chassis Nissan UD 5 Yr Base Warranty-100,000
• RH/LH Heated Remote Mirrors-
• Single Air Horn-Chassis
• In Cab Air Rest Gauge
• Auto Air Drain Valves-Air
• Service Manual CD - UD Chassis

## 2008 UD 3300 Dual steer chassis specification for EAGLE Waterless

### AXLES:

Front - 12,000 lbs. (5,454 kg) with 11,900 lbs. (5,409 kg) springs  
 Rear - Two speed 21,000 lbs. (9,545 kg) with 21,000 (9,545 kg) air bag suspension, solid axle during sweep and dump, fully sprung during transport.  
 Ratio - 5.86/8.17:1  
 Gross Vehicle Weight Rated (GVWR) - 32,900 lbs. (14,555 kg)

### BRAKES:

#### Service:

Type - Full air, anti-lock  
 Front - 16.1 in. x 5.9 in. (410 mm x 150 mm) drum  
 Rear - 16.5 in. x 7 in. (419 mm x 178 mm) drum  
 Compressor Capacity - 20.8 CFM  
 Dryer - desiccant type  
 Auto slack adjusters, front and rear

#### Parking:

Type - Spring set, air release

### CHASSIS:

Manufacturer: UD Trucks  
 Model - UD3300

#### Frame:

Type - Rail, High Strength, 51,200 PSI, 35.7 section modulus, 1,828,000 RBM  
 Size - 9.8 in. x 3.2 in. x 0.331 in. (262 mm x 89 mm x 8.7 mm)  
 Exhaust - Vertical L.H. behind cab

### DIMENSIONS: (with sweeper mounted)

Wheelbase - 150 in. (3353 mm)  
 Cab to axle - 118 in. (2565 mm) usable  
 Overall Length - 301 in. (7188 mm)  
 Overall Height - 110 in. (2794 mm) Top of cab  
 Overall Width - 96 in. (2438 mm)  
 Dumping Clearance Height - 236 in. (5994 mm)  
 SAE Turning Radius - 21 ft.8 in. (6629 mm)  
 Travel Speed - 65 MPH

### ELECTRICAL SYSTEM:

Voltage - 12V  
 Alternator - 130 Amp.  
 Battery - Two (2) 12 Volt 1244 CCA total Maintenance Free

### ENGINE:

Manufacturer: Hino  
 Model - MD230  
 Cylinders - In-Line 6

### WARNING LIGHTS and CHIMES:

ABS warning light  
 Alternator low charge warning light  
 Cab lock warning light and buzzer  
 Engine control system warning light and buzzer  
 Engine glow plug indicator light  
 Exhaust brake indicator light  
 External air restriction indicator  
 Hazard warning flasher  
 High beam indicator light  
 Low air pressure warning light and buzzer  
 Low coolant level and overheating warning light and buzzer  
 Low oil pressure warning light  
 Fuel/water separator warning light  
 Parking brake indicator light  
 Turn signal indicator lights  
 Warning lights have burnt-out bulb check function

### SEATS:

R.H. Air ride, adjustable, cloth covered  
 L.H. adjustable, cloth covered

### STEERING:

Type - Full power hydraulic  
 Tilt Telescope column  
 Dual Steering with LH Gauge Package

### TRANSMISSION:

Allison 2000 Series electronic/5 speed overdrive

### WHEELS:

Front & Rear - 22.5 in. x 7.5 in. (572 mm x 191 mm) stud pilot steel disc

### TIRES:

Front & Rear - 11R 22.5  
 Load Range G (14 ply rating)  
 Goodyear

### ADDITIONAL FEATURES INCLUDED:

Air Conditioner  
 Auto Shutdown  
 Block Heater, 1000 Watt  
 Viscous Fan  
 Tinted Glass—All Windows  
 Dual heated West Coast Mirrors  
 Convex Mirrors (L & R) 8.5 in. (216 mm)  
 Cruise control  
 Power windows  
 Remote entry  
 Intermittent two speed wipers.  
 Cigar lighter

Displacement - 469 cu.in. (7.7 L)  
Horsepower - 230 ( kW) @ 2500 RPM  
Torque - 506 lb. ft. ( Nm) @ 1500 RPM  
Oil Filter - Full-flow, spin on type  
Oil Capacity -13.5qt (12.8L) with filter  
Air Cleaner - Single stage. dry type w/ safety element  
restriction indicator  
Fuel Tank Capacity - 50 gal. (189 L)  
Fuel Filter/Water Separator

**INSTRUMENTS:**

Water temp. gauge, tachometer, speedometer with trip  
odometer, fuel gauge, air pressure

Daytime running lights  
Interior map light  
Halogen headlamps

**OPTIONAL EQUIPMENT AVAILABLE:**

Front Tow Hooks  
Ballistic nylon seat covers  
Cab painted color not Elgin white  
Motorized mirrors  
Chassis and engine extended warranty (5 yr)  
Allison Transmission extended warranty (5 yr)  
AM/FM CD radio  
Automatic air tank drain valves  
Single air horn  
Hour Meter  
In-Cab Air Cleaner Restriction Indicator

**NOTE:** These specifications are subject to change  
without notice.



Elgin Sweeper Company  
1300 West Bartlett Road  
Elgin, IL 60120  
Ph: (847) 741-5370  
Fax: (847) 742-3035

<b>Total Net (Budget)</b>	<b>\$252,663.76</b>
<b>Sales Tax 7.25%</b>	<b><u>\$ 18,318.12</u></b>
	<b>\$270,981.88</b>

**FOB:** Placerville, CA

**Terms:**

**Delivery:**

**Taxes:** Above price, unless noted, does not include sales tax or license fee. Applicable sales tax will be charged at time of delivery and will be reflected on our invoice.

Thank you for this opportunity,

Steve Villata  
Government Sales

# UD3300

2008 MODEL YEAR



## EXHIBIT A TRUCKS

Distributed by

**Nissan Diesel America, Inc.**

### WHEELBASES

	E	H	K	M	M	R	R
GVWR (lb.)	32,900	32,900	32,900	32,900	32,900	32,900	32,900
Chassis Weight (lb.)	10,195	10,395	10,565	10,615	10,945	10,835	11,165
Front (lb.)	6,305	6,370	6,440	6,480	6,480	6,615	6,615
Rear (lb.)	3,690	4,025	4,065	4,135	4,465	4,220	4,550
Gross Payload (lb.)*	22,705	22,505	22,395	22,285	21,955	22,065	21,735
Wheelbase (in.) ** WB	150.39	177.17	192.91	208.66	208.66	238.19	238.19
Cab-to-Rear Axle (in.) CA	118.30	145.00	160.80	176.50	176.50	206.10	206.10
Rear Overhang (in.) RO	44.90	72.80	77.00	88.60	88.60	110.20	110.20
Overall Length (in.) OL	245.70	300.40	320.30	347.60	347.60	398.80	398.80
Typical Body Lengths (ft.)***	14/16	16/18	18/20	20/22	20/22	26/28	26/28
Turning Radius (ft.)	21.30	25.40	27.40	29.40	29.40	32.80	32.80

\*Gross payload capacity equals GVWR minus chassis weight. Installation of specialized equipment or bodies may require frame reinforcement. \*\*Wheelbase selection should be based on specific weight distribution. \*\*\*Typical body lengths assume water level load (no specific consideration for driver, passengers, or fuel) to maximize GVWR. Addition of ancillary equipment such as lift gates and refrigeration units not considered in calculations.

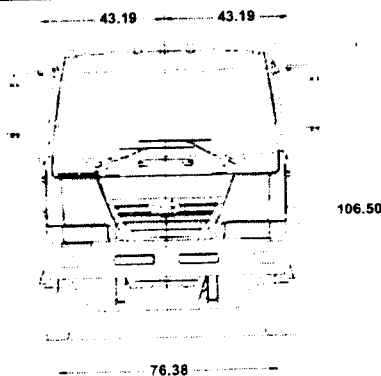
### ENGINE

	MD-230* - 24 Valve Turbo/Intercooled Diesel In-line 6 cylinder, Direct-injection
Horsepower	230 hp @ 2,500 rpm
Torque	506 lb. ft. @ 1,500 rpm
Displacement	469 in. <sup>3</sup> (7.684 L)
Cylinder Liner	Dry, replaceable
Air Compressor	20.8 CFM @ 2,600 engine rpm (nominal)
Fuel System	Electronically controlled common rail system
Air Cleaner	11 in., paper filter type (DONALDSON)
Cold Starting Aid	Automatic electric glow plug
Fan	Viscous type drive

\*MD-230 (J08E-TE) is a vendor engine manufactured for Nissan Diesel Motor Company

### FRONT AXLE

Rated Axle Capacity	11,900 lb.
Axle Type	"I" Beam
Suspension	Semi-elliptic leaf springs
Shock Absorbers	Telescopic type



\*UD3300 shown here with dealer installed optional equipment.

### TRANSMISSION

**STD**  
Nissan Diesel, MLS63B  
Manual, 6 forward  
speeds & 1 reverse  
synchromesh on 2nd  
through 6th gears

**OPTION**  
Allison, 2500RDS  
Automatic  
5 forward  
speeds & 1  
reverse

#### Ratios

1st	-----6.72	-----3.51
2nd	-----4.03	-----1.90
3rd	-----2.30	-----1.44
4th	-----1.44	-----1.00
5th	-----1.00	-----0.74
6th	-----0.74	-----
Rev.	-----6.12	-----5.09
R/A Ratio	---5.57 <sup>STD</sup> - 5.14 -- 5.86 -- 6.83	---5.57 <sup>STD</sup> - 5.14 -- 5.86
Engine rpm @ 65 mph		
w/ 11R22.5	--2,250 --2,080 -2,365 -- -2760	--2,245* -2,070* -2,360*

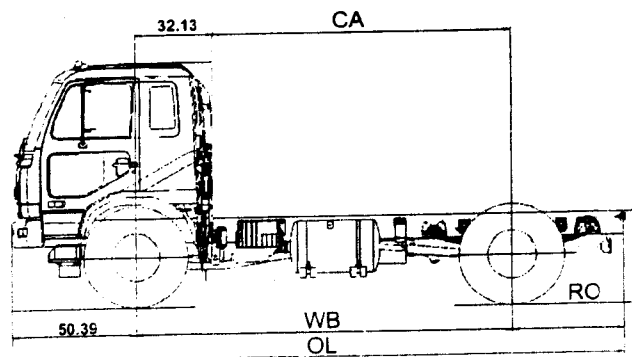
\*Approximate engine rpm only. Allison will provide a performance scan by application on request.

### CLUTCH

Hydraulic clutch with air assist  
13.8 in. cerametallic friction material  
Standard clutch wear indicator

### STEERING

Integral power steering, gear driven pump  
Steering Column Tilt & telescopic type



# UD3300

2008 MODEL YEAR



EXHIBIT A  
**TRUCKS**

Distributed by  
**Nissan Diesel America, Inc.**

## REAR AXLE

Rated Axle Capacity 21,000 lb.  
Axle Type Full-floating banjo housing  
Suspension Semi-elliptic leaf springs with auxiliary springs

## WHEELS & TIRES

Tires Front: Single, highway tread  
Rear: Dual, highway tread  
11R22.5 - 14PR (tubeless radial)  
Wheels Steel disc type, 8 hole,  
7.50 x 22.5 in., offset 6.38 in.

## BRAKE SYSTEM

Service Brakes Anti-lock Braking System  
"S" cam air brake system with automatic  
slack adjusters  
Front Drum diameter x lining width x lining  
thickness: 16.14 x 5.91 x 0.63 in.  
Rear Drum diameter x lining width x lining  
thickness: 16.14 x 8.66 x 0.63 in.  
Air Tanks Supply: 1,831 in.<sup>3</sup>  
Front service: 732 in.<sup>3</sup>  
Rear service: 1,086 in.<sup>3</sup>  
Total: 3,637 in.<sup>3</sup>  
Air Dryer Standard  
Parking Brake Pneumatically controlled spring brakes,  
operated by push/pull button, acting on  
rear wheels

**EXHAUST BRAKE** Electrically controlled, pneumatically  
activated butterfly valve in exhaust pipe

**CHASSIS FRAME** Ladder type, channel section side rails

Dimensions (in.)\* 9.84 x 3.15 x 0.31  
Assembled width 33.9 in.  
Section Modulus (in.<sup>3</sup>)\*\* 35.7 (with reinforcement)  
26.6 (W/B -E only, without reinforcement)  
Yield Strength (psi) 51,200  
RBM (in.-lb.) 1,828,000  
1,362,000 W/B -E

\*Height x Flange Width x Thickness \*\*Measured at back-of-cab, specifications  
based on complete chassis (both rails)

**FUEL TANK** Round fuel tank, mounted to left side  
Capacity - 50 gallons

**CAB** Forward control, steel construction, tilting  
cab. Cab suspension w/ shock absorbers  
Air Conditioner Standard  
Cab Glass Windshield, tinted laminated, 2,314 in.<sup>2</sup>  
Cruise Control Standard  
Door Locks Driver & passenger, electric control  
Door Vent Window Driver, ventilating type  
Driver's Seat Height & seat back angle adjustable with air  
suspension. Cloth cover, high back type  
Floor Mats Standard  
Keyless Entry Standard  
Passenger Seat Back angle adjustable. Cloth cover, high back  
Seat Belts Driver & passenger, 3-point ELR type  
Rearview Mirrors West coast type, 6.5 x 11 in. with  
Convex type. 5.8 x 4.3 in.  
Steering Column Tilt & telescopic type  
Sun Visors Driver & passenger  
Windows Driver & passenger, electric control  
Windshield Wipers Dual, electric-driven, intermittent & 2 speed

## ELECTRICAL EQUIPMENT

Back-up lights  
Cigar lighter  
Clearance, identification & position lights  
Day-time running lights  
Halogen headlights, 2 lamps  
Interior and map light  
License light  
Side turn signal lights  
Stop/tail lights  
Turn signal/hazard lights  
Power outlet - 12 volt

## INSTRUMENTS

Meters & Gauges Air pressure gauges  
Coolant temperature gauge  
Fuel gauge  
Speedometer, odometer & trip meter  
Tachometer

## Warning & Indicator Lights & Buzzers

ABS warning light  
Alternator low charge warning light  
Cab lock warning light & buzzer  
Engine control system warning light  
Engine glow plug indicator light  
Exhaust brake indicator light  
External air restriction indicator  
Hazard warning flasher  
High beam indicator light  
Low air pressure warning light & buzzer  
Low coolant level & overheating  
warning light & buzzer  
Low oil pressure warning light  
Sedimentor warning light  
Parking brake indicator light  
Turn signal indicator lights  
Warning lights with burnt-out bulb  
check function  
Backup alarm  
DPF warning/indicator lights

## OTHER OPTIONS

AM/FM stereo radio with CD  
Block heater  
Center console/third seat  
Heated mirrors  
Rear traction tires  
Air ride rear suspension WB "M" & "R"

All illustrations, specifications and descriptions in this specification are based on the  
latest product information available at the time of this publication. The right is  
reserved to make changes in price, materials, equipment, design, specifications, dia-  
grams and models, and to discontinue models of equipment at any time, without  
notice and without incurring any obligation whatsoever. For more information on  
additional options and accessories, contact NISSAN DIESEL AMERICA, INC.

Manufacturer:  
NISSAN DIESEL MOTOR CO., LTD.  
Saitama, Japan

Distributor:  
NISSAN DIESEL AMERICA, INC.  
P.O. Box 152034  
Irving, Texas 75015-2034  
www.udtrucks.com

# COUNTY OF EL DORADO

# DEPARTMENT OF TRANSPORTATION

**MAINTENANCE DIVISION**

2441 Headington Road  
Placerville CA 95667  
Phone: (530) 642-4909  
Fax: (530) 642-9238

RICHARD W. SHEPARD, P.E.  
Director of Transportation

Internet Web Site:  
<http://co.el-dorado.ca.us/dot>

**MAIN OFFICE:**

2850 Fairlane Court  
Placerville CA 95667  
Phone: (530) 621-5900  
Fax: (530) 626-0387



March 17, 2008

Kerri Williams  
EDCAQMD  
2850 Fairlane Court  
Placerville, CA 95667

RE: AB2766 Grant Applications – FY 08/09  
El Dorado County Department of Transportation

Dear Ms. Williams:

Attached are two proposals for FY 2008/09 AB2766 DMV Surcharge Funds for the following El Dorado County Department of Transportation projects:

- 1) On-Road Cleaner Vehicle Replacement Purchase – Waterless/Dustless Broom Street Sweeper
- 2) U.S. 50/El Dorado Hills Bicycle and Pedestrian Overcrossing

Thank you for your time and consideration. If you have questions or need clarification, please contact Anne Novotny by phone at 621-5931 or email her at [anovotny@edcgov.us](mailto:anovotny@edcgov.us).

Sincerely,

A handwritten signature in black ink, appearing to read "R. W. Shepard".

Richard W. Shepard, P.E.  
Director of Transportation

RWS:an

Attachments