State of California • Arnold Schwarzenegger, Governor State and Consumer Services Agency

DEPARTMENT OF GENERAL SERVICES

Office of Fleet and Asset Management

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State Fleet Petroleum Reduction Advisory Committee Meeting Minutes

Meeting Date: March 3, 2009

Meeting Location: Dept. of General Services Office of Fleet & Asset Management

Committee Members in Attendance

Rick Shedd, Dept. of General Services
Rick Slama, Dept. of General Services
Edward Benelli, Dept. of Toxic Substances Control
Phil Garthe, Dept. of Transportation
Steve Butler, Dept. of Transportation
Mike Trujillo, California Energy Commission
Cara Vallot, Dept. of Motor Vehicles

Committee Members Absent

Kathy Hicks, Dept. of General Services
Dale Greep, Dept. of Transportation
Bo Bohanan, Dept. of Fish & Game
Charlene Minnick, California State University
Dean Simeroth, Air Resources Board
Debra Moreno, Dept. of Corrections & Rehabilitation
Lourdes Conrad, Dept. of Corrections & Rehabilitation
Nina Martinez, Dept. of Corrections & Rehabilitation
Bob Boughton, Dept. of Toxic Substances Control
Case Belltawn, Dept. of Parks & Recreation
Libbey Guerra, Dept. of Motor Vehicles
Jim Peterson, Air Resources Board

Guest Speakers

Bob Sulnick, Evergreen Oil Roger Hood, Exxon Mobil

Welcoming remarks and Introductions

Rick Shedd called the meeting to order at 9:11 a.m. and thanked everyone for their attendance. Each committee member introduced themselves and stated which department they represented. Ed Benelli attended the meeting via teleconference, as did Bob Sulnick and Roger Hood.

Overview of January 29th Meeting

Rick Shedd gave the committee an overview of the Advisory Committee Meeting held on January 29, 2009. He reviewed the tasks assigned to the committee stating that the main points are to improve the state fleet's use of alternative fuels, synthetic lubricants, fuel efficient vehicles and to reduce/displace the consumption of petroleum products when compared to the 2003 consumption level. Rick informed the committee members that they would be hearing from two guest speakers; Bob Sulnick from Evergreen Oil (a re-refined motor oil producer) and Roger Hood from Exxon Mobil (a producer of synthetic oils).

Rick provided an update on the efforts to benchmark the 2003 consumption level. He stated that based on preliminary data provided by Voyager, approximately twenty-one million gallons of fuel was purchased in 2003 on the State fuel card. This data still needs to be filtered to remove any irrelevant fuels, such as jet fuel and marine fuel not part of the vehicular fleet. Rick stated that DGS is still pursuing the bulk fuel numbers and some assumptions will have to be made regarding the 2003 totals based on the purchase numbers available between 2003 and 2008. A survey is being sent to state agencies using bulk fuel as well as data the State Controllers Office for payment histories.

Phil Garthe added that due to Caltrans reducing its fleet in 2004 and 2007, their fuel numbers may drop.

Rick updated the committee's action plan timeline by saying that he would like to have a draft completed by April 2009 and that due to time constraints the committee members and the DGS Executive Office would likely be reviewing the draft concurrently.

Presentation by Evergreen Oil

The entire presentation by Evergreen Oil can be viewed at the following website: http://www.documents.dgs.ca.gov/ofa/FAMS/evergreenoilcomments.pdf

The following was presented by Bob Sulnick, representative of Evergreen Oil.

Evergreen Oil, Inc. (Evergreen) operates the only fully licensed part "B" re-refinery in the Western United States dedicated to the production of virgin-like quality lube base oils, from used lube oil. Evergreen's re-refinery is located in Newark, California.

Evergreen's base oils have passed the laboratory and engine test requirements ensuring they meet all American Petroleum Institute (API) standards for the same cold-start pumpability, rust erosion, engine wear, and high performance standards as virgin oil; as well as warranty requirements for new automobiles. Evergreen's base lubes are used in California government fleet vehicles as well as the California cities of Los Angeles, Thousand Oaks, Santa Monica, San Francisco, Chula Vista and Sacramento all use re-refined oil in their fleets.

Phil Garthe voiced concern about whether the use of re-refined oils in fleet vehicles would void the auto manufacturer's warranty.

Bob Sulnick provided the following:

Auto manufacturers may not legally endorse a particular brand of motor oil. However, many, including: Ford, GM, Mercedes-Benz, Chrysler, Cummins and Detroit-Diesel have gone on record to state that using re-refined oil does not affect warranty coverage.

Ford recommends using engine oil meeting Ford specifications. Both virgin and rerefined engine oils are capable of meeting these requirements.

General Motors recommends for use in its vehicles engine oils which meet the performance requirements specified in the latest International Lubricant Standardization and Approval Committee (ILSAC) Minimum Performance Standard and which are certified by the American Petroleum Institute for use in gasoline engines. Engine oils meeting these requirements can be made with either virgin or re-refined base oils.

The engine oil used in Chrysler vehicles must meet the Owners' Manual recommendation to satisfy warranty requirements. This recommendation is to use an oil displaying the American Petroleum Institute certification mark. This specification does not differentiate between products made from virgin base oils or re-refined base oils. Oils made from re-refined base oils can meet these requirements.

Mercedes Benz approved the use of re-refined engine oils for use in their engines decades ago.

Re-refined lubricating oils can be used in Cummins engines if they have an API quality designation signifying they have been tested.

Detroit Diesel favors the recycling of waste oil and permits the use of re-refined oils in all engine product lines, provided the re-refined oil meets the SAE Viscosity, API and Military specifications.

Bob added that some companies don't hydrotreat their oils. Evergreen does hydrotreat its products and there is an industry approved definition of re-refined oil. API, the Western States Petroleum Association (WSPA), Evergreen, and Safety/Kleen have all agreed on that re-refined oil means a lubricant base stock or oil base that has been derived from used oil and meets all the following criteria:

Processed using a series of mechanical or chemical methods, or both, including, but not limited to, vacuum distillation, followed by solvent refining or hydrotreating;

Capable for meeting the Physical and Compositional Properties, in addition to the contaminants and toxicological properties, as defined under the American Society for Testing and Materials (ASTM) D6074-99 standard, and;

Processed into a material that has a quality level suitable for use in a finished lubricant.

This definition ensures that fleets using re-refined oil will be using a product equivalent to oil produced from virgin crude.

Phil Garthe voiced concern about establishing a re-refined oil contract, specifically manufacturers biding that do not hydrotreat their products. Bob Sulnick stated that DGS could set the hydrotreat standards as a provision in the contract.

Phil Garthe asked if most of the light fleet was covered. Bob Sulnick replied that it was.

Phil inquired as to what was the base stock used for CJ-4 (oil used in heavy diesels) and if Evergreen could re-refine oils used in CNG vehicles. Bob replied that he was unsure of the answers to both questions but would find the answers for Phil. Phil stated

that Caltrans is currently using four different ISO grades of tractor hydraulic oil due to specialized equipment and that the warranties on this equipment will be voided if the wrong oil is used.

Phil Garthe also voiced concern that Clatrans could have storage and cross-contamination problems associated with the use of re-refined oils.

Steve Butler asked Bob Sulnick if re-refined oils were compatible with oils already in the system. Bob replied that they were.

Phil Garthe said he would provide Bob Sulnick with a list of all the oils currently used by Caltrans and Bob replied that he would provide Phil with a list of all the oils produced by Evergreen Oil.

Presentation by Exxon Mobil 1

The following was presented by Roger Hood, representative of Exxon Mobil.

Synthetic oils are petroleum based and can mix freely with regular motor oil. Base stocks are synthesized and the best compounds for anti-wear/anti-oxidization are taken. Then an additive system is mixed with the base stock. The strength of synthetic oils is in the additive system rather than the base stock. The additive system is a custom blend and can be built for a variety of applications. Synthetic oils have a higher volatility threshold, meaning they do not boil off as quickly as lower grade oils. This leads to a longer life span and the ability to use synthetic oils with an extended oil drain interval. The used oil waste stream can be reduced by 50% by combining synthetic oils with extended drain intervals. Synthetic oils are also designed to work in extreme temperatures.

Phil Garthe asked if Mobil 1 was approved to work in CNG vehicles. Roger Hood replied that Mobil 1 would work in CNG vehicles and that no specific approval grade for CNG engines existed.

Ed Benelli asked Roger to describe any fuel savings and cost savings associated with the use of synthetic oils. Roger replied that a savings of up to 2% in fuel economy can be achieved through the use of synthetic oil. Roger added that it was difficult to compare fuel savings and cost savings and it is almost impossible to pinpoint an actual cost savings. Ed questioned whether any cost savings could be achieved through the use of synthetic oils, given that synthetics cost up to 3 times as much as regular oil. Roger replied that the true savings associated with synthetic oil come from less oil consumption, less vehicle down time, and that equipment will stay cleaner and last longer.

Ed Benelli inquired about the fleet program, specifically if synthetic oil could be used in vehicles under warranty and if an extended drain interval would void a vehicles warranty. Roger replied that each fleet is evaluated taking into consideration such factors as the number of vehicles involved, where the vehicles are operated and under what types of conditions the vehicles are operated. Roger added that vehicles within the fleet would have to stay within the parameters of the extended drain interval and use oil analysis. If this procedure was adhered to, Exxon Mobil would stand behind equipment for oil related failures. Ed asked if the Mobil 1 extended product performance warranty would apply to fleets. Roger replied that it would not because fleet vehicles might use an extended oil drain interval longer than 15 thousand miles.

Ed Benelli asked Roger to explain the parameters used for oil analysis. Roger replied that a Total Base Number (TBN) is used for large diesel vehicles, as well as the amount of soot produced. A TBN is also used for gasoline engines and the amount of viscosity is also considered. A TBN is used for CNG vehicles and many other factors are also used, such as nitrogen levels.

Phil Garthe asked Roger about whether synthetic oils break down sooner than regular oils. Roger replied that they do not and that is why they are suited for use with extended drain intervals. Phil also asked if there was a difference between synthetic oils and "full" synthetic oils. Roger replied that there are blends available but the better of the two was full synthetic oil. Phil added that he would like a list of all the synthetic oils produced by Exxon Mobil. Roger said that that he would supply Phil with such a list.

Steve Butler asked if there were other manufacturers with products comparable to Mobil 1. Roger replied that there were other comparable products but that Exxon Mobil could provide the volume needed by the State and that Exxon Mobil might be the only manufacturer with that capability. Steve Butler asked if Exxon Mobil products were capable of being recycled. Roger replied that they were. Both Steve and Ed Benelli voiced concern over the use of synthetic oils in older vehicles. Roger replied that Exxon Mobil produced high mileage oil for older vehicles and that Mobil 1 was compatible with all seal materials used, as long as the seals are in good shape to begin with.

Rick Shedd asked Roger to supply the committee with any information related to studies conducted on Exxon Mobil products. Roger assured Rick that he would provide such material, along with testimonials.

Rick Shedd thanked Roger and the committee members for attending and the meeting was adjourned at 10:50 a.m.