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TO: BOARD OF DIRECTORS

THROUGH: ARTHUR T. LEAHY *AL*
CHIEF EXECUTIVE OFFICER

FROM: BRYAN PENNINGTON *B.P.*
EXECUTIVE DIRECTOR, ENGINEERING & CONSTRUCTION

SUBJECT: UPDATE ON GREEN CONSTRUCTION POLICY IMPLEMENTATION

ISSUE

The Metro Board approved the Green Construction Policy (GCP) in 2011 to reduce the air quality impacts of Metro's construction projects in surrounding communities. Staff is required to report back to the Board periodically regarding the implementation status of the policy.

BACKGROUND

The GCP was adopted by the Board in 2011. By adopting this policy, Metro is committed to using greener, less polluting construction equipment and vehicles, and will implement best practices to reduce harmful emissions in all construction projects performed on Metro properties and rights-of-way. Metro's GCP applies only to Metro contractors and Metro construction projects. Implementation of the policy began in the Summer 2012.

The GCP provides requirements for (a) identifying and mitigating diesel exhaust emission impacts on human health and the environment from on-road and off-road equipment used during Metro construction and development activities; and (b) implementing appropriate Best Management Practices to complement equipment mitigations. The ultimate goal is to reduce harmful air emissions (particularly particulate matter and nitrogen oxides) from construction equipment while minimizing any significant impact to cost and schedule in any existing construction project.

DISCUSSION

Metro continues to implement the Green Construction Policy requirements in all applicable Metro construction projects, and projects performed on Metro rights-of-way, including the following Measure R projects – Crenshaw/LAX Transit Corridor, Purple Line Extension (Advanced Utility Relocation Projects currently) and Regional Connector

Projects. To document and report conformance with the GCP, Metro staff regularly performs the following:

- Reviews contractor GCP specification required submittals for accuracy and completeness including the certificate of compliance and on-road, off-road and portable equipment inventory;
- Conducts periodic GCP conformance inspections of Metro projects currently implementing the GCP (and under construction) to document the conformance status of the project; as well as assist contractors in meeting the GCP requirements and applicable air quality regulatory requirements. All identified deficiencies are documented, corrective actions issued, and follow-up conducted until the deficiencies are resolved.

Metro has begun to quantify and report diesel emissions reductions resulting from the implementation of the GCP on a whole range of Metro construction projects, including the Crenshaw Light Rail Construction project. For this fiscal year, staff calculated the emissions of GCP-compliant equipment used at all of the current construction sites and compared those with calculated emissions for the same equipment that do not have the required engine retrofits or most updated engine. The results of this comparison are as follows:

- Carbon monoxide and carbon dioxide emissions appears to be the same;
- Decrease in nitrogen oxide emissions by 90% using GCP-compliant equipment;
- Decrease in particulate matter emissions by ~50% to 70% using GCP-compliant equipment;
- Decrease in Reactive Organic Gasses emissions: 30% to 70% using GCP-compliant equipment.

There is no significant incremental increase in GCP implementation cost at any of these current projects.

Metro has conducted GCP awareness training at the request of the contractors to assist them with understanding and meeting the GCP requirements. Metro has provided electronic documents in Microsoft Word and Excel formats for all who are bidding on our projects to streamline the recording and submittal of equipment and fuel use data. Metro has also assisted the contractors in understanding and applying exceptions provided in the policy for equipment, specifically at pre-bid conferences.

Metro has cooperated with the six (6) Los Angeles County Council of Governments (COGs) as the avenue to conduct general public outreach activities. Each COG represents a regional voice within the County with a mission to preserve and enhance the respective local and regional quality of life, advocating for mutual interests and promoting the policy for the benefit of their respective residents, businesses and

visitors. The COGs provide direct access to representatives from over 90 Cities and a forum to promote the use of greener, less polluting construction equipment and vehicles and best practices, including Metro's GCP, to reduce harmful diesel emissions within the Los Angeles Air Basin.

Consequently, Metro has conducted five (5) workshops over the past 12 months in an ongoing effort to ensure that the regulated community is aware of the California Air Resources Board (ARB) and South Coast Air Quality Management District (SCAQMD) requirements governing construction equipment: on-road, off-road, and generators, and to provide updates regarding the implementation status of the GCP. The workshops were conducted at the following:

- Westside COG, Santa Monica, CA in August 2013;
- South Bay Cities COG, Redondo Beach, CA in August 2013;
- San Fernando Valley COG (Mobility Summit), Burbank, CA in March 2014;
- Gateway Cities COG, Paramount, CA in May 2014; and
- San Gabriel Valley COG, Monrovia, CA in May 2014.

Additional workshops are being planned for FY15. Among those potential cooperating organizations include the Las Virgines-Malibu COG, American Public Works Association's Southern California Chapter, Associated General Contractors of California, Engineering Contractor's Association and similar organizations.

Metro launched its Green Construction Equipment Initiative website (www.metro.net/projects/gcp) towards the end of FY13; but was further enhanced during this fiscal year. The website includes an overview of Metro's GCP and a toolbox of resources, including a GCP Fact Sheet, ARB/SCAQMD Compliance Guide, Construction Equipment Funding Resources Guide, ARB/SCAQMD Training Course Guide and useful links to regulatory agency websites. The overall audience includes Metro contractors as well as by prospective contractors that are interested in pursuing business opportunities with Metro and would like to learn more about Metro's GCP. The website and toolbox were reviewed towards the end of this fiscal year; and are currently being updated with additional useful information.

NEXT STEPS

Staff will continue to implement the policy and provide a regular status throughout the year if requested by the Metro Technical Advisory Committee, and Sub-Committees. Staff will continue to regularly report back to the Board to document additional progress of Green Construction Policy implementation.

ATTACHMENT

None.