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December 1, 2006

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SUBJECT: City of Los Angeles Comments on the Preliminary Draft 2007 Air Quality Management Plan

The City of Los Angeles (City) appreciates the opportunity to comment on the preliminary draft 2007 Air Quality Management Plan (AQMP) released by the South Coast Air Quality Management District (SCAQMD) on October 11, 2006. The City supports the clean air goals of the 2007 AQMP. Through the AQMP Advisory Group (AQMPAG) and the Scientific, Technical, and Modeling Peer Review Advisory Group (STMPRAG), the City has participated in the development of every AQMP since the 1991 AQMP.

The preliminary draft 2007 AQMP describes an aggressive emissions reduction attainment strategy for oxides of nitrogen (NOx) and volatile organic compounds (VOC), intended to achieve the federal fine particulate matter standard in 2014 and the 8-hour ozone standard in 2020. The clear emphasis of the strategy is on significant and expansive near-term NOx reductions. The strategy will be very expensive to implement and will markedly change how local governments and businesses operate and affect the lifestyles of the people in the South Coast Air Basin (Basin). Given the sacrifices that the SCAQMD is calling upon the Basin to make, all stakeholders, including local governments and the public, need solid assurances that this is the right path to attainment, that measures are cost-effective, and represent a responsible and prudent use of scarce resources. At this time, neither the preliminary draft 2007 AQMP nor its development process has led to those assurances. Historically, the goal of the SCAQMD has been to establish the technical foundation of the plan before control strategy discussions in order to inform and identify the most feasible, cost-effective methods of obtaining needed emission reductions. This goal is more crucial than ever given the significant additional reductions in both NOx and VOC that the preliminary draft 2007 AQMP contemplates beyond previous plans.

The comments in this letter and attachments are based on review of the incomplete preliminary draft of the 2007 AQMP, released on October 11, 2006. We intend to present additional comments on the AQMP, and will seek policy direction from the Mayor and City Council, as



supplemental information and subsequent documents are released. Specifically, the City will review the California Environmental Quality Act (CEQA) documents and Socioeconomic Assessment, as these materials are critical to fully assessing the proposed control strategies. The City expects that these documents will be released in a timely manner to allow a minimum of 60 days review by stakeholders.

The City's general comments appear below. Detailed comments on the control strategy development process and technical analysis can be found in Attachment A. Detailed comments on the proposed control measures in the preliminary draft 2007 AQMP can be found in Attachment B.

Strategy Development Process. The City is concerned that control strategy decisions have been made before all requisite technical work and its peer review (through the STMPRAG process) has been completed. For example, the California Air Resources Board (CARB) substantively changed EMFAC2007 just before its release in early November 2006, which SCAQMD staff feels could dramatically alter its baseline and attainment modeling. In addition, U.S. Environmental Protection Agency (EPA) technical staff made significant comments concerning the use of the MATES III data in the modeled attainment demonstration assessment for particulate matter smaller than 2.5 microns (PM_{2.5}). Both of these occurred after the release of the preliminary draft 2007 AQMP.

As indicated above, the proposed attainment strategy emphasizes extensive near-term NO_x reductions aimed at meeting the PM_{2.5} standard in 2014. As discussed in several forums throughout 2006, there are technically many potential attainment strategies to achieve both the PM_{2.5} and ozone standards, although other strategies, beyond those put forth, have not been substantively discussed in the AQMPAG and STMPRAG. Some of the alternative attainment strategies may not be feasible, but the SCAQMD has not clearly demonstrated that only the control approach in the preliminary draft 2007 AQMP is feasible or that it would be the preferred strategy for the Basin (e.g. least impact/greatest benefit). The City requests that the SCAQMD discuss alternative attainment strategies with the AQMPAG and STMPRAG and that the benefits, costs and risks of a range of potential attainment strategies within that "envelope" receive both technical and public/stakeholder review. The City believes that there is time for reflection and re-evaluation of the proposed attainment strategy even with the tight State Implementation Plan submittal schedule. See Attachment A for more detailed scientific and technical comments on the AQMP development process and attainment strategy alternatives.

Ozone Roundtable and Alternative Ozone Attainment Strategies. As noted in the SCAQMD's October 31, 2006 Ozone Roundtable, the implementation of the 2003 AQMP strategy will yield little, if any improvement in ozone levels for the next several years. This is the result of NO_x reductions outstripping recent VOC reductions. (At many Basin emission levels, reductions in NO_x must be accompanied by commensurate levels of VOC reductions, or ozone levels will remain the same or even increase). Yet the preliminary draft 2007 AQMP calls for an even greater emphasis on near-term NO_x reductions, if they can be found, and calls for significant NO_x reductions after the attainment of the PM_{2.5} standards. As noted above, we suggest a re-evaluation of this position.

City Initiatives. The City has several “green” initiatives, including, but not limited to, the Energy Climate Action Plan, energy efficiency rebates, water conservation programs, and the Million Trees and Green Roof initiatives. There is an overlap of many of these initiatives with AQMP control themes and measures, specifically energy conservation and greenhouse gas reductions. The City would like to work with SCAQMD to ensure that the efforts of the SCAQMD build upon and integrate with existing City initiatives and do not inadvertently impede them. Specifically, the City would like assistance with quantification methods to assess the air quality benefits, including greenhouse gas reduction and urban heat island benefits, of these programs to allow access to incentive fund programs.

Grant and Loan Funding. The City is concerned that the adoption of certain on- and off-road control measures may inhibit or prevent the use of existing or future grant and loan funding for emission reduction programs. Many of the proposed measures refer to incentive funding to assist with implementation. If, for example, the truck modernization measures become rules, would incentive funding potentially not be available to assist operators, as state funding may not be used to comply with rules and regulations? Specifically, adoption of proposed control measure ONRD-12 (Accelerated Replacement of Drayage Trucks) could interfere with funding programs crucial to meeting the goals of the recently adopted San Pedro Bay Ports Clean Air Action Plan (CAAP). As for stationary sources, facility modernization requirements contained in control measure MCS-01 may inhibit the ability of facilities to obtain energy efficiency rebates. The City would like to work with SCAQMD staff to address this issue.

Emissions Growth Management. Increases in emissions from growth in population and vehicle miles traveled will occur whether new or redevelopment projects are approved or not. Indeed, many redevelopment and transportation projects are intentionally designed to manage growth. The City is very concerned that control measure EGM-01 (Emission Reductions from New and Redevelopment Projects) will severely impact or even threaten large Community Redevelopment Agency-approved projects and large-scale transportation projects that are included in the Southern California Association of Governments’ (SCAG) Regional Transportation Improvement Plan. It is important to note that redevelopment projects are funded through tax increment financing and additional fees could inhibit or prevent some needed and beneficial development. Consequently, the City is concerned about the potential negative impact of this control measure on brownfields development, infill development and other socially and environmentally beneficial redevelopment. This control measure could also be duplicative of existing regulations on new development and redevelopment projects. See the discussion of proposed control measure EGM-01 in Attachment B for more details. The City is participating in the EGM-01 stakeholder group, and will present additional feedback through that process.

Facility Modernization. All permitted equipment operating in the Basin is covered by an existing rule structure that is based on the regular review of technology, and the application of declining emission allowances through rulemaking that utilizes ever-improving Best Available Control Technology (BACT) and Best Available Retrofit Control Technology (BARCT). This provides predictability to the regulated community, informed decision-making on the best compliance approaches given operational and economic considerations, and the ability to budget in advance for major capital improvements. Consequently, it is not clear why MCS-01 (Facility Modernization) is being proposed as an overlay regulation, superimposed on RECLAIM and

other stationary source rules. Please explain the justification for this apparent duplication and what additional benefits are to be derived.

Port-Related Proposed Strategies. As regards the proposed backstop measure and the establishment of triggers, standards and compliance requirements, it is hoped that the SCAQMD will work closely with the ports in the same collaborative manner that produced the recently approved landmark CAAP. For several of the proposed strategies, the cost-effectiveness is not yet determined. Also, many of the technologies outlined in the strategies are still in the testing or development phase. Many have not been used in port applications. Full testing should be completed before use of these technologies is required and for the City and regulated users to determine if the strategies represent the most feasible, cost-effective methods of obtaining needed emission reductions. In addition, the ports are named as implementing agencies in many of the strategies. While the ports have committed in the CAAP to use all the powers available to them to implement the control measures in the CAAP, the ports are not regulatory agencies. The City and the Port of Los Angeles want to work with SCAQMD staff to determine the Port's role and responsibilities as an implementing agency in the AQMP.

Control Measures. Through its departments, the City has compiled comments on the proposed control measures. The major themes were summarized above. Many City departments have expressed concern with the estimated cost associated with implementing the proposed control measures contained in the preliminary draft 2007 AQMP. City departments responsible for providing emergency services are particularly concerned about both the initial capital and ongoing operating costs for compliance. These costs include: purchase of new equipment and vehicles, increased fuel cost, additional labor, additional training, additional record keeping, and additional audits and inspections. As stated above, at a minimum, the City would like to see the cost effectiveness for each of the proposed control measures, as this information is not currently provided for many measures contained in the incomplete preliminary draft of the AQMP and the Socioeconomic Assessment has not been released. Overall, more detail is needed in the Emission Growth Management, Facility Modernization, port-related and other control measures for stakeholders and the public to understand their impacts and assess the feasibility. Specific comments on the control measures can be found in Attachment B.

The City appreciates the monumental task facing the entire region and looks forward to continue working with the SCAQMD on the path forward to cleaner air.

Sincerely,



Detrich B. Allen
General Manager

Attachment A: Preliminary Draft 2007 AQMP Strategy Development and Technical Analysis

Attachment B: Detailed Comments on Preliminary Draft 2007 AQMP Control Measures

Attachment A
Preliminary Draft AQMP Strategy Development and Technical Analysis

The preliminary draft 2007 AQMP released in October 2006 contains very little technical backup to support the selected emission control strategies for attaining the PM_{2.5} standard in 2014 and the 8-hour ozone standard in 2020. The document contains almost no information on the modeling performed to support the control plan selection, such as model performance evaluation and modeled attainment demonstration. Consequently, only general technical comments can be made on the process and technical underpinnings of the preliminary draft 2007 AQMP.

Preliminary Draft 2007 AQMP Control Strategy Development Process

The process for the development of PM_{2.5} and/or ozone attainment control plan usually includes the development of a conceptual model of the causes of the exceedances, development of air quality modeling databases and evaluation of these databases against available air quality data and against the conceptual modeling, evaluation of alternative control measures and their relative efficiency and effectiveness for improving air quality, identification of a potential attainment control plan and use of modeling in the attainment demonstration. The preliminary draft 2007 AQMP has failed to follow this process and instead has identified the control plan prior to completing the technical analysis needed to support its development. In particular, the modeled attainment demonstration test has not been performed. The document implies that there is only one attainment strategy (and carrying capacity). Given the magnitude and scope of the controls being considered in the draft 2007 AQMP control plan, the SCAQMD needs to be certain that such levels of controls are needed with the modeled attainment test being an important component of this process. The draft strategy may potentially depend too much on past control priorities and approaches. The City recommends that, rather than considering only the proposed control plan, the District discuss a realistic range of potential control strategy alternatives in the AQMP development process through stakeholder, advisory group, and public meetings.

In September 2006, EPA published draft final guidance for applying models for demonstrating attainment of the 8-hour ozone and PM_{2.5} standard. Based on presentations at the STMPRAG meetings, SCAQMD modeling staff is aware of this guidance and has indicated that they will be applying the guidance to subsequent modeling. Recognizing that EPA and CARB have recently revised and/or released key modeling and emission information, the City believes that the AQMP development process should ensure incorporation of and maximize the use of recent monitoring, emissions, and modeling technical innovations and guidance.

2007 AQMP Technical Analysis

Based on information presented at the AQMGAG and STMPRAG meetings, the technical analysis needed to support the selected emissions control plan is still under development. The SCAQMD is still working with EPA in adapting the PM_{2.5} model attainment demonstration test to the MATES III PM speciation data, so no formal PM_{2.5} attainment test has yet been performed. Very little information on model performance and attainment demonstration has been presented at these meetings so there is no basis to develop confidence that the selected control plan is the most efficient, effective and optimal for the region.

The impact of slowing air quality improvements and new air quality standards on the draft 2007 AQMP. The City commends the SCAQMD for convening the Ozone Roundtable and the quality of the panel. As noted at the October 31, 2006 Ozone Roundtable, the emissions environment has changed with the implementation of specific emission controls and a slowing of the improvement in ozone levels is not unexpected, given the mix of controls being implemented in the Basin. Also, the level and form of the federal air quality standards have changed. Experts at the Ozone Roundtable stated that ozone air quality may not be improved, and in fact may degrade in the near future, due to the need for controls to achieve the PM2.5 standard. Given the potential great health threats of PM2.5 compared to ozone and the earlier attainment date, we acknowledge that achieving the PM2.5 standard is very important. However, we need certainty that the selected emissions control path for PM2.5 is the correct one and that there are not alternative control paths that improve both PM2.5 and ozone air quality. The City recommends that sensitivity analyses be conducted to identify and assess alternative control strategies. The City believes that the 2007 AQMP overall control strategy should reflect both the latest analysis of the implementation of the previous AQMP control strategies and the nature and form of the new standards, since incremental improvements to previous AQMP strategies may not be the most effective (in terms of benefits or costs) to meet the new standards.

Attachment B
Detailed Comments on Preliminary Draft 2007 Control Measures

This Attachment includes specific comments on selected control measures in the preliminary draft 2007 AQMP (dated October 2006). Lack of comments on a particular measure does not necessarily imply concurrence. Commenting departments include: the General Services Department (GSD), Los Angeles Department of Transportation (LADOT), Los Angeles Department of Water and Power (LADWP), Los Angeles Fire Department (LAFD), Los Angeles Police Department (LAPD), Los Angeles World Airports (LAWA), Port of Los Angeles (POLA), Public Works, Bureau of Sanitation (BOS) and Department of Recreation and Parks (RAP). Comments appear in the order that measures are presented in Appendices IV-A, IV-B and IV-C.

Comments on Appendix IV-A:

Emission Reductions from Lubricants [CM #2007CTS-01]: Most of the lubricant manufacturers have not determined the VOC content in their lubricants and to establish a VOC content baseline for various categories of lubricants will be a complex, though necessary element of this strategy. Any mandated lubricant VOC content limit should require direct compliance from the manufacturer and not place the burden on the end users to ensure compliance, except on a voluntary basis. LAFD operates a machine shop to fabricate and make repairs to firefighting fittings and a vehicle repair shop that would fall under this measure.

Clean Coating Certification Program [CM #2007CTS-02]: In order for this control measure to be effective, a standard certification format, certification information, and a certification program must be implemented to identify coating products with lower VOC emissions. Identification and certification of super-compliant products could encourage greater use of such alternatives.

Consumer Product Labeling and Emission Reductions from Institutional and Commercial Cleaning Products [CM #2007CTS-03]: Much more information on the quantity and quality of low or zero VOC products is needed before mandatory use restrictions can be considered. User facilities must be assured that products work effectively and are not cost-prohibitive.

Emission Reduction from Gasoline Transfer and Dispensing Facilities [CM #2007FUG-02]: Currently, none of the City's unleaded fuel sites are governed by in-station diagnostic (ISD) requirements, since our fuel sites are below the 600,000 gallon per year throughput threshold. The only unleaded fuel site that comes close to the threshold is Parker Center (Police Headquarters at approximately 500,000 gals/year). It appears that there is no impact to the City from this proposal.

Emission Reductions from Cutback Asphalts [CM #2007FUG-03]: The use of emulsified asphalt instead of cut back asphalt in paving applications seems attractive especially with respect to the potential VOC emission reduction amount. The measure's background, however, did not address the durability and maintenance requirement of each type of asphalt. While it looks simple to implement this measure just by switching to the emulsified asphalt, the cost effectiveness of the control measure can not really be quantified because of the lack of analysis of the cost to maintain each type of asphalt, how long each type lasts compared to the other, etc.

The City requests additional information on costs and performance for emulsified asphalt applications.

Further NOx Reductions from Space Heaters [CM #2007CMB-03]: The City operates equipment that falls into this category. It appears that this proposed control measure would only impact manufacturers and not operators; however, additional clarification and cost information is requested.

Natural Gas Fuel Specifications [CM #2007CMB-04]: The following LADWP equipment is sensitive to changes in natural gas heating values: low-NOx boilers with lean premix burners, large gas turbines with dry low-NOx combustors and microturbines. Most of the increased NOx emissions resulting from the combustion of natural gas with a higher heating value would be controlled by the NOx control devices (e.g. selective catalytic reduction or SCR) already installed on in-basin electrical generating units. Only startup and shutdown emissions are uncontrolled. All power plant NOx emissions (in lbs of NOx) must be reported to the SCAQMD per Rule 2012. A NOx credit is later deducted for each pound of NOx emitted. If the higher heating value pipeline natural gas burned at power plants actually results in slightly increased NOx emissions, then these incremental NOx emissions would be included in the total emissions reported to the SCAQMD and the credits corresponding to these incremental NOx emissions will be deducted along with the rest of the NOx emissions. Consequently, application of this proposed measure to Regional Clean Air Incentives Market (RECLAIM) facilities seems unnecessary.

See also comments (below) on control measure LTM-02, which proposes a shave of NOx RECLAIM credits beginning in 2008 to offset the potential emissions increase due to the introduction of natural gas with a higher heating value.

Additional PM Emission Reductions from Rule 444 [CM #2007BCM-04]: LAWA currently performs training burns on-site in accordance with SCAQMD Rule 444. The Federal Aviation Administration (FAA) requires annual burn training per 14 Code of Federal Regulations (CFR), Part 139. LAWA opposes off-site training due to concerns regarding cost and safety issues from traveling to training in Utah or Texas. LAWA would also like to emphasize that propane does not adequately represent conditions for air fuel fires and the use of alternative fuels will likely result in increased costs. The LAFD and LAWA would be pleased to provide input on appropriate criteria for training burns, particularly for safety training applications.

Facility Modernization [CM #2007MCS-01]: Although the City participates in advancing Best Available Control Technology (BACT), the overall impact (cost and emission reduction effectiveness) of requiring today's BACT on existing sources must be considered. Energy costs and associated emissions to manufacture and operate new technology must be evaluated. Essential Public Services typically do not have the flexibility to decommission/retire existing equipment for upgrade due to regulatory and financial constraints. Furthermore, having an outside agency determine useful life or timetables for retrofitting will conflict with the City's normal budgeting process. The City's experience with retrofitting of stationary sources is that it is very costly and this cost must be planned and budgeted for well in advance.

This control measure could require the replacement of existing electrical generating units, operated by the LADWP, if they are deemed by the SCAQMD to be past their useful lifetime. As part of compliance with the RECLAIM program, the LADWP has made significant investments since 2001 to modernize its in-basin generating units. All of the LADWP's in-basin units now have SCR control devices that reduce NO_x by at least 90 percent. The LADWP proposes that this control measure be reworded to include language that states that permitted equipment previously upgraded to meet Best Available Retrofit Control Technology (BARCT) levels could continue to be used with no pre-specified equipment life.

In addition, the City currently operates hundreds of stationary emergency generators. Many of these emergency generators are currently regulated under Rule 1470. These engines typically operate for very few hours each year. In fact, the majority of the emergency generator run time is for testing, which is conducted monthly. Given the limited hours of operation for emergency engines, replacing the engines according to a pre-specified equipment useful life does not appear justified in terms of air quality benefit or cost-effectiveness. It is estimated that the cost to retrofit generators could be \$10,000 each or more. Furthermore, given the relatively low number of operating hours, the emission reduction benefit would be small. Since Rule 1470 has an established schedule for retrofitting/replacing stationary engines with emissions over a specified threshold, the City proposes that this control measure be reworded to include language which states that stationary emergency engines could continue to be used with no pre-specified equipment life.

SCAQMD Rule 1146.2 (amended May 5, 2006) requires that Type 2 boilers (400,000 Btu/hr to 2 million Btu/hr) comply with a NO_x emission rate of less than or equal to 30 parts per million (ppm). For this boiler size range and age, it may not be cost-effective to retrofit existing Type 2 Units to comply and replacement of the unit may be the least costly alternative. This control measure requirement practically results in cutting the average service life of a Type 2 boiler, which is typically 30 years (RS Means Costworks) to 15 years. Due to the number of Type 2 boilers operated by the City, this proposed control measure will have a significant impact on the City's budget. In our experience, the average cost of replacing a boiler within this size range is about \$60,000. There is obviously a concern about how this proposed control measure will affect the length of time the City can operate a Type 2 boiler before it must be replaced. The City requests that additional cost-effectiveness information be provided in the final draft AQMP and Socioeconomic Assessment.

This measure will cause major economic hardship for small facilities that have to salvage functional equipment to achieve BACT. The measure should investigate flexible and alternative incentives such as emission credits for facilities unable to benefit from traditional tax incentives. A stakeholder group should be formed to resolve these issues.

Urban Heat Island [CM #2007MCS-02]: The goals of this control measure are consistent with existing City policy and programs and current LADWP energy efficiency goals and programs. The GSD Building Maintenance Division currently is implementing "Cool Roofs" in our Capital Improvement Expenditure Program (CIEP) projects. Given the data to support the cooling properties of extensive green roofs (or "eco-roofs"), this strategy should be added as an approved

element of the roofing materials strategy. The City can provide more information, as requested. The City recommends that the SCAQMD form a working group to gather input from interested stakeholders, including the City of Los Angeles, to determine the amount of emissions credits or other financial incentives that can be created. LAWA notes that, for safety reasons and compliance with FAA regulations, it cannot implement light-colored, reflective roof projects and therefore requests an exemption for airports from this proposed control measure.

Energy Efficiency and Conservation [CM #2007MCS-03]: Similar to control measure MCS-02 above, the goals of this control measure are consistent with existing City policy and current LADWP energy efficiency goals and programs. The GSD Building Maintenance Division, in all of its CIEP and Municipal Improvement Corporation of Los Angeles (MICLA) projects, specifies mechanical and electrical equipment with the highest efficiency available in the market today. However, because the proposed SCAQMD program is above and beyond the state and federal mandated programs to achieve further emission reductions, the City agrees that a voluntary incentive program would be the most efficient and effective.

Emissions Reduction from Greenwaste Composting [CM #2007MCS-04]: The BOS collects 480,000 tons of yard trimmings annually which is a key component in the City's current 60%+ waste diversion rate, exceeding that mandated in AB939. The City has a goal of 70% diversion by 2020. Greenwaste composting is an environmentally sound and economically feasible practice to recycle diverted greenwaste. The BOS intends to participate in the rule making process involving greenwaste composting and provide input on the emission reduction opportunity from greenwaste operations. The City cautions that any new regulation must not threaten the existence of the composting industry. An alternate disposal of greenwaste to a landfill would jeopardize the City's ability to comply with diversion goals. This measure could also negatively impact the City's Department of Recreation and Parks.

Improved Start-up, Shutdown and Turnaround Procedures [CM #2007MCS-06]: This measure could have an impact on the City if extended beyond refineries. The City requests that the proposed control measure include additional clarification on what industries may be impacted and provide a process for industry-specific feasibility assessments and stakeholder involvement. Examples of potentially impacted City operations include the following:

LAWA must provide uninterrupted heating and cooling for its terminals. Current operating conditions, system efficiency demands and equipment at LAWA's Central Utility Plant (CUP) do not allow any room for operational procedure changes. The proposed measure could conflict with CUP service requirements.

The BOS utilizes digester gas, a byproduct of the wastewater treatment process, as a renewable energy to produce electricity. In an emergency situation, when digester gas cannot be consumed in its intended sources, a standby system of flares is used as control equipment to burn digester gas for a brief period. Additional limitations on flare operation associated with this type of non-continuously operating equipment could cause adverse economic burden with very small emission reduction potential.

At the LADWP's in-basin power plants, the startup and shutdown times for electrical generating units are already regulated very closely in the existing Title V operating permits. During the permitting process for these units, the SCAQMD evaluates the operational constraints and already requires the LADWP to reduce startup and shutdown emissions as much as possible. Furthermore, since these units are covered under RECLAIM, which has a declining cap that encourages emission reductions, the LADWP proposes that electrical generating units be excluded from this control measure.

Application of all Feasible Measures [CM #2007MCS-07]: Before advancing any BARCT, it should be evaluated to determine whether there are any adverse impacts on systems efficiency and that it results in overall environmental gain.

This proposed control measure also indicates that the SCAQMD will in effect make amendments to existing regulations and monitor technology changes to make those amendments. It would be helpful if the control measure identified specific sources and/or technologies that would likely be affected by this measure. The City assumes that any rule or rule amendment development would conform to state and SCAQMD rule development requirements, including public noticing and workshops...

Economic Incentive Program [CM #2007FLX-01]: This measure could increase the availability of emission reduction credits that are needed to support power system modernization projects. Furthermore, broader trading of mobile and stationary source emission reduction credits will provide flexibility to the current trading programs. The City proposes that, if the SCAQMD adopts this measure, the SCAQMD promptly establish an Economic Incentive Task Force that includes representatives from the U.S Environmental Protection Agency (EPA), California Air Resources Board (CARB) and other interested stakeholders, including LADWP and other City departments.

Emission Reductions from New or Redevelopment Projects [CM #2007EGM-01]: The City is participating in the EGM-01 stakeholder group and will provide feedback through that process.

Emission Budget and Mitigation for General Conformity Projects [CM #2007EGM-02]: The use of a mitigation fee is discussed as an option to offset emissions of general conformity projects, if that growth has not been accounted for in the Southern California Association of Governments' (SCAG) Regional Transportation Plan/AQMP baseline. Under proposed control measure MOB-3, ports would be prohibited from approving projects that exceed specific standards. The City requests additional clarification addressing whether port projects will be able to pay mitigation fees to offset emissions above conformity budgets. Further, POLA provided SCAG with its portwide cargo forecast for development of the 2003 AQMP. Therefore, the emissions associated with growth should be accounted for in any given project and conform to the State Implementation Plan (SIP). It is not clear whether proposed control measure EGM-02 would affect POLA's conformity requirements, and the City requests additional clarification.

A significant element of this measure is the establishment of a valid emissions budget for a source category, such as aircraft. As suggested in the preliminary draft, it is equally important to

accurately determine the emissions associated with the individual components that represent various projects and collectively add up to comprise the source category. Knowing the emissions budgets for each of these projects will lead to more accurate conformity determinations; this is a desirable objective. However, the method for allocating a percentage of a source category emissions budget on a first come first serve basis is inappropriate and would appear to give an advantage to projects based solely on the time they were proposed rather taking into consideration the merits of the project. This approach needs to be reevaluated, taking into account what projects are projected to occur during a planning cycle and distribute the allowable emission levels in a more equitable, meritorious and regionally beneficial manner. The City would like to note that some federal projects cannot be avoided, such as improvements to essential public services, including wastewater treatment plants; emission offsets must be available for these purposes.

At this stage, the total emissions budget for each source category should also be reviewed to ensure accuracy. In 2005, the SCAQMD contracted with the consulting firm of Eastern Research Group to conduct an emissions inventory of all aircraft operating at each of the commercial and general aviation airports in the Basin. They also prepared emission projections for future years. The title of their report was "Development of the 2002 Aircraft Emission Inventory and Projected Activity and Emissions for 2010, 2020, and 2030". The Revised Final was dated December 16, 2005. LAWA had an opportunity to review the initial assumptions, parameters and methodology for this inventory, as well as provide input to the draft findings and conclusions, and were satisfied as to the accuracy prior to finalizing the report. Below is a comparison between the aircraft emissions reported in the preliminary draft 2007 AQMP Base and Future Year Emission Inventories (Appendix III) and the 2005 report.

From Draft 2007 AQMP Appendix III, October 2006

Aircraft Base and Future Year Emission Inventories (Annual Average Tons/Day)

<u>Year</u>	<u>TOG</u>	<u>VOC</u>	<u>CO</u>	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>PM2.5</u>
2002	9.71	8.64	49.52	13.58	1.34	0.78	0.77
2010	13.25	11.79	67.19	19.37	1.89	0.98	0.96
2020	17.32	15.42	84.84	27.20	2.55	1.14	1.12

"Development of the 2002 Aircraft Emission Inventory and Projected Activity and Emissions for 2010, 2020, and 2030" –

Revised Final, December 16, 2005 (Tons/Day)

<u>Year</u>	<u>TOG</u>	<u>VOC</u>	<u>CO</u>	<u>NOX</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>
2002	7.41	6.62	47.57	12.88	1.28	0.79	0.60
2010	13.56	12.12	88.65	35.96	3.44	1.17	0.97
2020	16.62	14.86	106.39	43.93	4.20	1.34	1.14

There is a disparity between the two sets of emission figures. This disparity is particularly evident with carbon monoxide (CO) and NOx emission levels for inventories projected for future years. In the year 2010, the December 2005 report projected approximately 32% higher CO and 85% higher NOx emissions than the draft 2007 AQMP inventory. There were similarly high discrepancies in the 2020 projection. As indicated, LAWA had the opportunity to review the December 2005 report and was satisfied that it provided a relatively accurate representation of

aircraft emissions in the Basin. It is important that these inventories be as accurate as possible to ensure future conformity determinations are conducted in an equitable manner.

The City and LAWA look forward to working with SCAQMD staff to reconcile the aircraft emissions inventory in the preliminary draft 2007 AQMP with the emissions in the December 2005 report.

Emissions Mitigation at Federally Permitted Projects [CM #2007EGM-03]: As indicated above under proposed control measure EGM-02, POLA provided SCAG with its portwide cargo forecast for development of the 2003 AQMP. Therefore, the emissions associated with growth should be accounted for in any given project and conform to the SIP. It is not clear whether proposed control measure EGM-03 would affect the Port's conformity requirements, and the City requests additional clarification.

Mitigation Fee Program for Federal Sources [CM #2007MOB-01]: This proposed measure and the other measures proposing mitigation fees on airport or "federal sources" do not specify the level or amount of fee to potentially be levied. The level of fees with respect to available revenue is important as noted below.

How the revenue from mitigation fees will be spent is also a significant consideration with respect to airport-generated revenues. The proposed measure suggests that the revenue from fees would be used to address impacts in the vicinity of the facility, for example, an airport. It is recommended that, if this measure is considered, all fees would be dedicated to airport related sources of emissions. This could include alternative means of ground access such as remote passenger terminals or providing infrastructure to facilitate the conversion of ground service equipment. This is a reflection of the Federal Airport Administration's (FAA's) restriction on funds, under the context of revenue diversion, which prevents airports from using revenues generated on the airport for purposes not directly related to the operation of the airport. Use of mitigation fees for off site projects may be unacceptable under the FAA's prohibition of revenue diversion.

A more subtle, yet equally important, aspect of the ramifications of mitigation fees pertains to the potential competitive disadvantage the fees may place on an airline and an airport or other federally regulated facility. This type of measure imposes an unfair burden on airports if the fees are required only in the Basin. The airline industry is highly competitive and functions on very thin profit margins. Their financial fragility is reflected by the number of bankruptcies experienced among airlines. If a fee is imposed on only one region of the country then the airlines not operating in this region (or even operating at a relatively low level to other airlines) will enjoy an economic advantage. This can have the unwanted effect of diminishing or even eliminating airline service to this region. The only economically fair way to administer such a fee system is to apply it nationwide, as well as on international airlines flying in this country.

It is important to point out that other SCAQMD fee programs provide alternative means of reducing emissions. As an example, in the market based RECLAIM program, the operator of a facility subject to the program has an option of either retrofitting the facility to reduce emissions

or buying credits (essentially equivalent to paying fees) from other retrofitted facilities to meet the requirements of the program. Similarly, Rule 2202 provides a range of alternatives to comply with the requirements. The presumption in these and other examples is that operators of facilities have a reasonable expectation of being able to choose between the options and it becomes a business decision as to which choice is the most practical or feasible. This is not so readily the case when it comes to aircraft. To purchase a new aircraft to reduce emissions is often not a realistic option. Essentially there is no practical choice involved and it becomes a matter of simply paying the fee, thereby creating an unfair burden when compared to other businesses. This potential inequity should be taken into consideration when evaluating whether and what type of mitigation fee structure might be imposed on aircraft operations.

LAWA recommends that all of these factors be seriously evaluated if a mitigation fee structure is considered. LAWA also wants to ensure that this strategy does not overlap with EGM-01 (Emission Reductions from New or Redevelopment Projects). LAWA would like to participate in further discussions on these subjects and also recommends that the Air Transport Association (ATA) and other airport related trade organizations be included in such discussions.

Extended Exchange Program [CM #2007MOB-02]: This proposed control measure, which promotes the increased utilization of electrical engines in small off-road equipment and is projected to result in a net reduction of emissions for the Basin, is consistent with City policy and practice in on-road applications. Public agencies should be eligible to apply for this program, as well. The City would be pleased to look into opportunities to partner with the SCAQMD on this and similar programs.

Backstop Measure for Indirect Sources of Emissions from Ports and Port-related Facilities [CM #2007MOB-03]: The relationship between the San Pedro Bay Ports Clean Air Action Plan (CAAP) and the proposed backstop measure, if invoked, is unclear. Several elements in the proposed measure need additional resolution, including, but not limited to:

- how the emission targets and milestones would be established,
- what additional measures beyond those contained in the CAAP may be required,
- the options for implementing the backstop measure as it relates to Port Standards,
- the role of the SCAQMD Executive Director in the CEQA/NEPA process if a project is determined to not meet the Port Project Standards contained in the CAAP, and
- whether sources responsible for Port security and emergency services (e.g., LAFD fireboats) would be exempted.

The City and the Port of Los Angeles want to work in close cooperation with SCAQMD staff to resolve these and other issues.

Emission Reductions from the Carl Moyer Program [CM #2007MOB-04]: The City has been an active participant in the SCAQMD's Carl Moyer Program since its inception. Please note that, with new and upcoming regulations on public fleets, the types of projects funded over the next several years may move away from on-road and off-road vehicle replacement and upgrades. In the January 2007 final draft AQMP, please discuss the types of projects likely to be funded and their assumed emission reductions in more detail. The City strongly advocates the continuation

of Carl Moyer funding for public agency fleet projects and would be pleased to work with SCAQMD staff on this.

Reactivity Based Controls [CM #2007LTM-01]: To further reduce the VOC content of solvents and coatings is extremely challenging, considering that the VOC content limit of general cleaning solvents is already 25 g/l and the architectural flat paint VOC limit will be 50 g/l. The newly formulated products require frequent applications that are both costly and generate additional VOC emissions from more frequent applications. It is unclear how the potential VOC reductions were predicted.

This proposed control measure would require the use of reformulated products that may not be readily available on the market by the AQMP effective date. Any regulation must establish provisions for this potential unavailability. Also, the cost to purchase reformulated products could potentially affect City operations. Please provide more information on product performance and associated costs, including the costs and emission impacts of more frequent applications.

Further Emission Reductions from NOx RECLAIM Facilities [CM #2007LTM-02]: The LADWP has four in-basin power plants that are NOx RECLAIM facilities. It should be noted that the NOx RECLAIM allocations were shaved in 2005 by over 20 percent as a result of control measures in the 2003 AQMP. Further emission reductions from RECLAIM sources alone, especially when some have achieved BACT, will be difficult in the next 10-15 years and costly for the facilities.

Comments pertaining to the reduction of NOx allocations beginning in the year 2008:

- This proposed control measure would be implemented as soon as the year 2008 and should be listed among the Combustion (CMB) control measures rather than as a Long Term (LTM) control measure.
- The LADWP requests that the SCAQMD evaluate the impact this proposed shave may have on the RECLAIM market, especially how it will affect the cost and availability of NOx credits for the new electrical generating units that are expected to come on-line in the next few years.
- Most of the increased NOx emissions resulting from the combustion of natural gas with a higher heating value would be controlled by the NOx control devices (e.g. SCRs) already installed on in-basin electrical generating units. Startup and shutdown times are closely regulated under existing Title V operating permits.
- All power plant NOx emissions (in lbs of NOx) must be reported to the SCAQMD per Rule 2012. A NOx credit is later deducted for each pound of NOx emitted. If the higher heating value pipeline natural gas burned at power plants actually results in slightly increased NOx emissions, then these incremental NOx emissions would be included in the total emissions reported to the SCAQMD and the credits corresponding to these incremental NOx emissions will be deducted along with the rest of the NOx emissions. If the SCAQMD shaves the facilities' allocation of credits by an amount equal to the theoretically determined incremental NOx emissions, then the power plant will be charged twice for the same incremental NOx emission.

- The LADWP recommends that SCAQMD consider an option of allowing gas suppliers to pay into a mitigation fee program to offset the increased NOx emissions caused by the change in their product.

Comments pertaining to the reduction of NOx allocations beginning at some unspecified year in the future:

- During the future evaluation of technological advances in emission control retrofit technology, SCAQMD should also evaluate potential impacts to RECLAIM participants who have met BARCT levels and from which no additional emission reductions may be feasibly obtained.

Long-Term Control Measure for Fugitive Emissions [CM #2007LTM-03]: CARB has mandated the enhanced vapor recovery systems for Phase I and II operations at 98%+ vapor recovery. The added monitoring and control strategies may be costly to facilities that have just spent funds to meet the SB989 and EVR-related regulations. In addition, it is unclear how this measure is different from proposed control measure FUG-02, as both measures project emission reductions for the same time periods. Please provide more information.

Further VOC Reductions from Mobile Sources [CM #2007LTM-05]: This measure refers to aircraft as one of the targeted emission sources. If the proposal to accelerate the turnover of existing equipment may be applied to aircraft, please refer to comments under measure MOB-01 for the inherent difficulties related to this type of proposal.

The City recommends that any add-on emission control devices for passenger cars and light duty trucks take place at the Original Equipment Manufacturer (OEM) due to on-board space limitations and installation complexity for in-use vehicles. In order to keep the cleanest and safest vehicles in service and to control maintenance costs, the City adheres to a regular fleet replacement program with average vehicle replacement every 7-10 years. As a result, vehicles with OEM equipment will be introduced into the City fleet in the near term.

This measure represents a potentially significant impact/cost to the LAFD's fleet. The LAFD is willing to examine add-on technology, but it is imperative that the technology not impact vehicle performance. Please provide additional information in the upcoming documents for the 2007 AQMP.

The City maintains 26 helicopters that could be impacted by this proposed measure as well. The City recommends that helicopters be exempted from this measure because the helicopters are used for emergency operations and already fall under the strict regulations of the FAA. It would not be cost-effective to accelerate the turnover of City-owned helicopters.

Comments on Appendix IV-B:

Smog Check Improvements [CM #2007ONRD-01]: Overall, the elements contained in this proposed measure represent significant added cost for maintaining the City's approximate 21,000

vehicle fleet. Compliance will require additional equipment, labor, training, inspections and record keeping. One specific element in this proposed measure calls for use of "Enhanced On-Board Diagnostics" technology involving transponder/satellite monitoring, wherein OBD-II vehicles would be retrofitted with a transponder that would signal the Bureau of Automotive Repair (BAR) (through roadside detectors) when a malfunction is detected in the vehicle's emission system. These installations would be cost prohibitive for the size of our fleet. For the light duty vehicles alone, the cost is estimated at \$2.6-3.9 million, based on the final cost of the transponder. Not only would compliance be cost prohibitive, but because of the City's regular fleet replacement policy, the City would also be installing transponders in vehicles scheduled for salvage. To avoid this problem, at minimum, vehicles should be exempted that are within a prescribed number of years before scheduled retirement. The City has concerns about the cost-effectiveness of this proposed measure. The City also requests that the final draft AQMP clarify whether funding will be available from the SCAQMD to assist local governments to purchase transponders, and whether transponders can be removed and re-installed in other cars.

This control calls for a two-speed idle test. There is insufficient data to show that such a test would result in detecting high emissions. Please provide data to show the effectiveness of the two-speed test. Prior to the dynamometer testing being adopted, the argument was that an idle only test was not accurate enough to reflect "true" vehicle emissions. This control proposes re-instituting a test method that was previously deemed inadequate. The two-speed idle test element also indicates this test could potentially overlap with the other enhanced control methods discussed (e.g., enhanced OBD). Redundancy in costly measures must be avoided.

Another component of this proposal includes adding light and medium duty diesel vehicles to the Smog Check program to detect high NOx emitters. The City recommends that these vehicles first be added to the "Periodic Smoke Inspection Program" before consideration is given to including them in Smog Check. Since testing methods/protocols are not described in the proposed measure, it is not clear if additional equipment would be required or existing equipment would need to be modified. Either would result in substantial capital equipment expenses. Adding these vehicles to the "Periodic Smoke Inspection Program" will not require new equipment beyond what is currently in use.

The LAPD notes that the "Inspection of Motorcycles" element of this measure will result in additional labor and require the purchase of new testing equipment. At an estimated one hour per test, compliance would require about 400 labor-hours per year.

California Phase 3 Reformulation Gasoline Modifications [CM #2007ONRD-03]: The cost increase for the reformulated gasoline could increase the City's annual fuel budget significantly. It is estimated that a \$.04-.06 per gallon cost increase could result in an annual expense to the City of \$600,000 or more. Please provide further information in the Socioeconomic Assessment.

PM Testing for Light- and Medium-Duty Vehicles [CM #2007ONRD-05]: This proposal will likely result in substantial capital expenditures from equipping our facilities with new analyzers for particulate matter testing. The City has concerns about the anticipated air quality benefit and cost effectiveness, as this proposed measure will require testing of a very small percentage of our

fleet (estimated at 3-5 percent) at a very high cost per test. Please provide further justification for this proposed measure in the final draft AQMP and Socioeconomic Assessment.

Accelerated Retrofits of Heavy-Duty Vehicles [CM #2007ONRD-08]: The City has extensive experience in implementation of Verified Diesel Emission Control Systems (VDECS) for PM control. Over 1,200 such units have been installed on City vehicles to date. The City has encountered and resolved numerous problems with product availability and compatibility and wants to note that accelerating retrofits for heavy-duty vehicles may be costly and time consuming and require significant advance planning from a budget and logistics perspective. Further, requiring installation of new technology VDECS that achieve maximum potential NOx and PM control on units currently equipped with PM VDECS is an impractical and infeasible requirement. The City recommends that any vehicle already retrofitted with a PM VDECS be exempted from this measure until the usable life of that device has elapsed. Also, these requirements could make heavy-duty fleets ineligible for incentive funds. As discussed above under proposed measure MOB-04, to help ensure a reliable source of funds to support accelerated retrofits, the City strongly advocates the continuation of Carl Moyer funding for public fleets.

In-Use Emission Reduction from On-Road Heavy-Duty Vehicles [CM #2007ONRD-09]: Currently, the LAFD uses a 15-year replacement cycle for its heavy-duty vehicles. Emergency response vehicles may warrant special consideration in this and other related strategies. Please provide additional information on potential costs and benefits in the upcoming Socioeconomic Assessment.

Enhanced Inspection and In-Use Emissions Tracking of Heavy-Duty Vehicles [CM #2007ONRD-11]: The LAFD performs its own inspection/maintenance checks. This proposed control measure will result in increased cost for technology/computers to monitor engine performance. Software licensing/upgrades will also be required. Furthermore, the "enhanced" or additional idle and more frequent emission tests would require additional labor to perform these tests. As indicated above under proposed measure ONRD-09, emergency response vehicle fleets may warrant special consideration, including possible exemption or an extended compliance timeframe.

Further Emissions Reductions from Heavy-Duty Trucks Providing Freight Drayage Services [CM #2007ONRD-12]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues.

Construction/Industrial Equipment Fleet Modernization [CM #2007OFFRD-01]: The City operates approximately 375 pieces of non-emergency services-related construction equipment that could fall under this emission control measure. Although the majority of these construction vehicles are model year 1990 or newer, most of the current equipment is pre-Tier 2. This means that under this proposal, these units would have to be replaced by 2014. This is a significant expense. Repowering and retrofitting should be seriously considered as compliance options for off-road vehicles in this category.

In addition, the LAFD operates 10+ off-road construction vehicles (dozers, track loaders, etc) for wild land firefighting support. Given budgetary constraints controlling the existing fleet replacement program, it will be challenging for the LAFD to meet the 2014 goal of replacing older (i.e., Tier 0 and 1) engines with new on-road engines meeting 2010 emission standards. Please refer to above comments related to special consideration of emergency response fleets.

Overall, additional information, including cost and feasibility data, is needed to fully respond to this proposal.

Further Emission Reductions from Locomotives [CM #2007OFFRD-05]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues.

Clean Marine Fuel Requirements for Ocean-Going Marine Vessels [CM #2007OFFRD-06]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues.

Further Emission Reductions from Ocean-Going Marine Vessels and Harbor Craft while at Berth [CM #2007OFFRD-07]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues.

Further Emission Reductions from Cargo Handling Equipment [CM #2007OFFRD-08]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues.

Vessel Speed Reduction [CM #2007OFFRD-09]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues.

Further Emission Reductions from Ocean-Going Vessels [CM #2007OFFRD-10]: This proposed measure requires further clarification, resolution of implementation methods and reconciliation with the San Pedro Bay Ports CAAP. The City and the Port of Los Angeles look forward to working with SCAQMD staff to resolve these issues...

Emission Reductions from Aircraft [CM #2007OFFRD-11]: The difficulty of accelerating the replacement of aircraft fleets was discussed in our comments on control measure MOB-01. Beyond the EPA setting more stringent aircraft engine standards and reformulated jet fuel, emission surcharge fees should continue to be explored. An emission based landing fee would provide a financial incentive for airlines to use the aircraft already within their fleet that have low

emissions. Conversely, it would allow the airline the choice of paying a premium (or penalty) if it determined there was a need to continue the use of higher emitting aircraft in their fleet. In upcoming documents, please address the issue of competitive disadvantage, as noted in comments on other proposed airport- and aircraft-related measures.

Please note that newer aircraft engines tend to increase NOx emissions as VOC's are decreased. Until this problem is solved, objectives or criteria must be established to give guidance on which pollutants would be subject to emission based landing fees.

The LAFD requests an exemption for the six helicopters operated by the department that are responsible for providing emergency services. Please refer to above comments related to special consideration of emergency response fleets.

Lower Exhaust and Evaporation Standards and Fleet Modernization for Lawn and Garden Equipment [CM #2007 OFFRD-12]: This proposal would accelerate the turn-over of equipment through regulation and incentives, such as exchange programs. Given the City's existing equipment replacement budget and constraints imposed by the City's bond funding (e.g., if the purchase cost is over \$5,000, the asset must be maintained for a certain number of years), City eligibility for the exchange program and incentive funds will be critical in order to leverage available City resources to the maximum extent possible.

Recreation and Parks (RAP) staff are working to determine the availability of electric equipment suitable for the needs of RAP Golf and Park Maintenance operations. Existing electric equipment only works for an average of 30 minutes on a charge and this imposes an unacceptable constraint on efficient maintenance operations. There is also the cost of the infrastructure capacity of RAP facilities to provide an adequate number of charging stations for the equipment, and the impact of increased hazardous waste in the form of spent batteries. Please take these issues into consideration in the upcoming Socioeconomic Assessment.

LAFD requests an exemption from this proposed measure for certain equipment. LAFD uses small engines (under 25 hp) to power firefighting tools including chain saws, rotary saws, smoke ejectors and the Jaws of Life. Any regulation that increases the size, weight, or operating characteristics of the 2-cycle engines currently utilized would have a significant impact on emergency operations. Two-cycle engines have the advantage of operating in any position including complete inversion, allowing firefighters to use the saws to cut ceilings etc. Utilizing tools with this ability is critical to firefighters and rescue operations.

Emission Reductions from Airport Ground Support Equipment [CM #2007OFFRD-13]: An ambitious program has been initiated at LAX and LAWA is working with airline tenants and ground handlers to reduce emissions from ground support equipment. However, as indicated in the measure, the memorandum of understanding (MOU) between CARB and the Air Transport Association has been terminated and the provisions in that MOU should no longer be referenced. Our investigations into how ground support equipment operates and what equipment lends itself to conversion to battery operated have found that there are limitations in this sort of application. Some equipment is ideally suited for battery operation while it is impractical in other

applications. A central objective is to evaluate each type of equipment to match it with the most feasible alternative that will result in optimum emission reductions. More information is needed to fully understand this proposed measure, including an assessment of available equipment for specific applications.

Comments on Appendix IV-C:

Project ID: LAE0566: Expansion of LAX remote terminal flyaway shuttle bus system to be operated by LAWA between park-n-ride lots and LAX. LAWA has operated a flyaway service from Van Nuys Airport to LAX for many years and has developed an aggressive plan to add several more remote sites. A new flyaway service was recently initiated between Union Station in downtown Los Angeles and LAX, and various sites are currently being evaluated with the objective of ultimately having eight flyaway stations, including the existing Union Station and Van Nuys Airport stations, throughout the Basin. To be successful, these stations must provide secured baggage handling from station to terminal, full service airline ticketing and comfortable coach style buses to transport passengers directly to the airport terminals.

