Martin Rubin, Director of Concerned Residents Against Airport Pollution
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Staff Report Body **[With comments by Martin Rubin in bold and bracketed]** *Martin Rubin is the Director of Concerned Residents Against Airport Pollution. He has more than 15 years experience addressing Santa Monica Airport's toxic emissions. The comments are meant to shed light on and question the facts and intentions of the Staff report.*

Executive Summary

A growing body of scientific evidence establishes that lead emissions from piston aircraft engines and black carbon and other emissions from turbine aircraft engines are detrimental to human health and to the environment. This is a world-wide challenge and a significant local problem. Studies performed at and around the Airport in recent years document the extent of the harmful emissions generated by its operations. In light of these scientific and technical studies and of Airport neighbors' first-hand reports about the impact of emissions on their lives, the City Council directed staff to return with a report providing alternatives for reducing aircraft emissions. **[After decades of community complaints, *finally,* the current Council directed staff...]** This report responds to that direction.

It provides information about aircraft emissions and efforts to reduce them; and it discusses alternatives for reducing emissions locally, including alternatives suggested by members of the community. The report discusses and recommends using lease provisions to limit fuel sales at the Airport to cleaner fuels **[other than unleaded avgas, show the evidence that there are cleaner fuels at the idle/blast stage for jet fuel]** and to require flight schools to switch to unleaded or low-lead fuels. Staff's recommendations also include requiring the businesses that sell fuel at the Airport to begin remediation of any contamination on their premises now and assessing the possible termination of third-party fuel sales and the assumption of such sales by the City, for whatever time period fuel continues to be sold, to ensure that sales are limited to the cleanest fuels available **[This amounts to smoke screen and mirror tactics giving false hope to impacted airport neighbors that there is real and significant remedies available that have been tested and that they will even be available for use at SMO].** Finally, staff recommends that Council direct staff to begin work on developing a cap on Airport emissions **[This is and has been a critical issue for**

decades that the City has dismissed.]. These actions are recommended as options for protecting the community's health and welfare, aligning Airport operations with the City's environmental values, and better shielding the City from liability **[shielding the City from liability has been more important to the City than protecting the health and safety of SMO neighbors for decades]**. The report also discusses other proposals, including banning aircraft based on engine ratings, terminating FBO leases, and closing the Western Parcel; and the report notes other possible alternatives.

Background

The adverse impacts of Airport operations have been a major source of concern to the community for half a century. And, the City's efforts to regulate those impacts have spawned legal disputes and litigation throughout that time. Detailed information about the history of the Airport and the legal battles relating to its operations is included in staff's report of March 24, 2015, among several others **[Is this a complete report? Does it include all legal items regarding SMO?]**.

The first efforts by the City to curtail adverse Airport impacts focused on the noise impacts of early jets. The City Council adopted a package of six ordinances, including a jet ban. Litigation erupted, setting the tone for the fractious decades that followed. The 1984 Settlement Agreement brought a brief hiatus to the City's disputes with the federal government; however, Airport neighbors, Airport businesses, and other aviation interests continued to make claims against the City. In the last fifteen years, disputes and litigation between the City and the federal government, Airport neighbors and Airport businesses have been virtually constant **[In other words, the 1984 agreement was a failure of the City to negotiate with the FAA to retain any real relief from noise]**.

- During this time, aircraft emissions from both jets and piston aircraft have been a growing source of concern and conflict. Most piston aircraft are fueled by aviation gasoline (avgas), which commonly contains the additive tetraethyl lead and therefore generates lead emissions that may be inhaled or ingested. At certain concentrations, such emissions may be toxic to the human nervous system, especially for children. Jet fuels do not contain lead. However, turbine engines on jet aircraft emit carbon dioxide and ultrafine particles, which threaten

both the environment and human health **[There are many more toxic compounds in jet exhaust - Dr. Witten statement ,"In my more than 19 years of jet fuel research for the U.S. Air Force, I only dealt with uncombusted jet fuel in my exposure models. There are two thousand different constituents in uncombusted jet fuel, including benzene and naphthalene (the ingredient in moth balls that gives them their smell) that have been linked to cancer. I have no estimate how many different toxic constituents there would be in combusted jet fuel. The combustion products of any burning substance, i.e., cigarette smoke, are filled with a huge number of oxygen radicals that are well known to be very harmful to living tissue. For example, it is estimated that one exhaled breath of cigarette smoke contains one million oxygen radicals. I cannot imagine what an idling jet engine would be emitting every second in terms of oxygen radicals; however, my best estimate would be in the hundreds of billions of oxygen radicals." Mark Witten, Ph.D. was a Professor of Pediatrics and Director of the Lung Injury Laboratory at the University of Arizona College of Medicine from 1990-2010. He was sponsored continuously during this twenty-year period by the U.S. Air Force Office of Scientific Research to study the effect(s) of jet fuel exposure on the lungs. He has published over 50 peer-reviewed manuscripts on jet fuel exposure on the lungs and in 2010 was the chief editor of a book entitled, "Jet Fuel Toxicology". Additionally, he has served as an expert consultant on jet fuel toxicology for the Australian Air Force.]**

The debates here in Santa Monica about how to address the adverse impacts of aircraft emissions reflect national and world-wide debate on the subject of emissions from commercial aircraft **[The City of Santa Monica has been a bystander to this debate even though it has been the poster child for extreme impacts. Again, protect the City from litigation by keeping quiet.]**. The Center for American Progress reports that aviation accounts for 13 percent of global transportation carbon dioxide emissions, and emissions from aviation are expected to quadruple by 2050 if left unchecked. Moreover, aviation's impact on air quality is not limited to carbon dioxide. Other greenhouse gases emitted by aircraft include water vapor, black carbon, nitrogen oxides and sulfur oxides; and their impacts are particularly detrimental because these gases are emitted by commercial aircraft directly into the upper atmosphere.

Governments around the world have taken varied approaches. The European Union (EU) introduced aviation into its emissions trading system in 2008. The EU estimates that including aviation in its trading system will reduce aviation emissions by more than 70 million tons annually.

The United States has moved much more slowly. The Environmental Protection Agency (EPA) sets emissions standards for aircraft engines, and the Federal Aviation Administration (FAA) certifies engines and enforces federal emissions standards. However these agencies have not yet established regulations governing aircraft emissions **[And the City is at best timid in initiating efforts to regulate emissions. The City has even rebuffed the efforts by then CA Assemblyman Ted Lieu to have the City record idle hold times of jet aircraft]**. In June of this year, the EPA announced the first steps towards proposing regulations. However, the agency also said that it would wait for current international negotiations limiting emissions before publishing final rules. Thus, the process will take years.

Meanwhile, the federal government continues to support development work on biofuels. And, the FAA touts development of its satellite-based air traffic management system (NextGen), which will reduce fuel consumption and attendant emissions because it will facilitate more direct routing and reduce circling while awaiting landing clearance to land. However, net environmental gains from this project appear highly unlikely given the projected increase in air travel **[This is the same FAA that reports that the jet aircraft emissions from SMO do not go into the community.]**.

While the federal government plods forward on efforts to reduce harmful aircraft emissions, efforts in California have yielded some success. For instance, last December, the Center for Environmental Health announced that litigation in Northern California had yielded a settlement whereby 30 companies that sell and/or distribute lead-containing avgas at 23 California Airports (including Santa Monica Airport) will offer for sale the lowest-lead fuel that is commercially available. They will also, upon request, make ethanol-free premium gasoline available. It is an FAA-approved fuel; and it is, or can be made compatible with more than 70 percent of piston aircraft.

The City's efforts to address aircraft emissions have been ongoing for at least fifteen years **[This statement is false and a smack in the face to Los Angeles residents**

impacted by toxic jet emissions. The City has been reactive, not proactive with regard to toxic emissions from SMO.] An ad hoc study group composed of members of the Environmental Task Force and the Airport Commission studied the issues and, in 2002, requested that the South Coast Air Quality Management District (AQMD) take various actions, including studying the impacts of General Aviation on air quality, characterizing levels of toxicity in communities around GA airports, and determining the impact of aircraft emissions on measured pollutant levels. **[This is, at best, a gross exaggeration of the City's efforts. The City's primary involvement was to make sure the focus was not solely on SMO. The study was less effective to showing the real SMO impacts due to the City's involvement. Then SMO Director Robert Trimborn even tried to keep me from attending the first AQMA advisory planning committee but backed off when informed that I was on the planning committee.]** AQMD conducted a study in 2006-7. It measured lead, carbon, ultrafine particulars and volatile organic compounds, among other things. The agency's conclusions included that lead levels in communities near the runway did not exceed federal standards and that the concentration of ultrafine particles was significantly elevated near runways during aircraft operations; but, in general, the Airport's impact on air pollution was difficult to distinguish from pollution caused by automobiles and other motor vehicles. **[The study was less effective because of input from SM officials that weakened the methodology.]**

In 2009, the City Council adopted an Airport Sustainability Plan as an addendum to the Sustainable City Plan. The Airport plan was reviewed and recommended by both the Task Force on the Environment and the Airport Commission. As to air quality, the plan requires: advocacy with federal and state agencies for reductions in emissions and alternative fuels, support for studies and monitoring of emissions to serve as the basis for advances in emission controls, and or reduced taxiing and hold times (which generate high concentrations of emissions). That plan has been implemented.

In 2010, the AQMD study was augmented when the suspension of all Airport operations for runway repaving presented an unusual opportunity to assess SMO's impacts. The AQMD concluded that the suspension of Airport operations resulted in a "substantial decrease" in measured ultra- fine particles and black carbon pollution. Measurements

taken on the eastern tarmac showed that concentrations of ultra-fine particles were 12 to 17 times higher when the Airport was operating. Measurements taken at the closest home showed that levels were four to seven times higher when the Airport was operating. Additionally, the AQMD reported that aircraft idling near the runway before and during departure generated very high concentrations of ultra-fine particles over short time periods. These concentrations were as high as 600 times background levels.

Also in 2010, the EPA conducted a study of lead emissions. The agency's primary purpose was to develop a modeling approach to quantify the effect of emissions from piston-engine aircraft on local ambient lead levels. A secondary purpose was to monitor air, soil and dust lead concentrations, including the possibility of lead-emission intrusions into indoor spaces. The EPA explained that SMO was selected because: the monitoring study conducted by AQMD laid a good foundation; SMO has excellent data collection regarding piston-engine aircraft operations; and Santa Monica is a busy general aviation airport within a densely populated location. In particular, the EPA noted that 6500 people live within 0.5 km of the Airport **[There is no safe blood lead level! I wonder how many live within 1.0 km of the airport. A July, 2011 study; A Geospatial Analysis of the Effects of Aviation Gasoline on Childhood Blood Lead Levels *Results: "Our results suggest that children living within 500 m of an airport at which planes use leaded avgas have higher blood lead levels than other children. This apparent effect of avgas on blood lead levels was evident among children living within 1000 m of airports. The estimated effect on blood lead levels exhibited a monotonically decreasing dose-response pattern, with the largest impact on children living within 500 m."]*.**

The EPA reported that its air quality monitoring showed modeled concentrations at two sites with three-month averages above federal air quality standards. The agency identified four factors as most significantly impacting concentrations of lead in the air: engine "run-up check" duration, taxi-out time, the percentage of twin-engine aircraft operations, and the lead concentration in the fuel. As to lead concentration in fuel, the agency noted that two samples of avgas had lead concentrations 20% higher than specifications established by the American Society of Testing and Matter, which

develops fuel specifications. Soil and dust samples showed no elevated lead levels above area averages on the Airport or in local parks. However, sampling taken inside two homes showed elevated levels (though the EPA speculated that sources other than the Airport might be involved). Reports and presentations on both these studies are available to the public at the Airport website.

In addition to the AQMD and EPA studies, scientists at UCLA also conducted studies. Those scientists concluded, among other things, that aircraft operations at SMO caused elevated concentrations of ultrafine particles and other pollutants downwind as far as 660 meters from the source **[As far as, but not limited to. - the smell of jet emissions goes out for over a mile. Not all compounds found in raw and spent jet exhaust have been studied. Some are highly toxic like benzene and naphthalene that have been linked to cancer.]** They surmised that the long downwind impact distance was primarily due to the large volumes of air craft emissions, which contain higher initial concentrations of particles than on-road vehicle exhaust. The UCLA studies were presented to the Airport Commission in 2014 and were the basis of recommendations that the Council consider adopting an ordinance that would restrict aircraft usage of the Airport based on engine ratings.

The Airport Commission also conducted a workshop on the development and marketing of alternative aviation fuels. **[These reports were presented by company representatives, pitching their product, handpicked by airport staff.]** Representatives described their companies' formulation of "drop in" jet biofuels, which they anticipated would be widely available within a few years. Because they blend directly with petroleum jet fuel, such fuels would eliminate or reduce the need to modify aircraft, aircraft engines or fueling infrastructure. A representative of another company described the Piston Alternative Fuels Initiative, which will facilitate FAA evaluation of unleaded fuels for propeller aircraft. He estimated that such fuels will be readily available by 2018.

In recent years, community members' complaints about emissions have increased. During the comprehensive Airport Visioning Process, the health impacts of aircraft emissions and the inconsistency of the Airport's adverse environmental impacts with the City's core values ranked high among community concerns. More recently, demands

for City action to curtail adverse impacts have continued to mount, with emissions and their impacts on human health and the environment becoming a primary community focus **[This is the first paragraph that I find to be truthful and unbiased]**.

This year, in response to those demands, the City Council has considered adverse Airport impacts on multiple occasions. **[In 1999, a health-risk assessment study showed elevated cancer risks, but the City did nothing: The Los Angeles Unified School District June 1999 report by Bill Piazza. "SANTA MONICA MUNICIPAL AIRPORT A REPORT ON THE GENERATION AND DOWNWIND EXTENT OF EMISSIONS GENERATED FROM AIRCRAFT AND GROUND SUPPORT OPERATIONS" http://areco.org/laschool.pdf]** On March 24, 2015, after considering a staff report on future options for Airport operations and land use, Council provided direction on Airport leasing policy, approving the general direction that action should be taken to reduce adverse impacts of Airport operations, through lease conditions and other lawful means. On May 12, 2015, Council gave direction on the specific subject of emissions. The motion was to direct staff to return to Council, as soon as possible, with strategies to reduce air pollution, such strategies to be practical, include lease provisions curtailing pollution, and minimize risks of preemption. Likewise, on July 14th, Council directed staff to, among other things, return with information about options for fuel sales, about regulating emissions through lease terms, and about environmental remediation. This report responds to those directions.

Discussion

There is certainly no dispute as to the paramount importance of addressing adverse Airport impacts in order to protect community health and our environment. Nor is there any dispute that harmful aircraft emissions pose risks to both. Moreover, they also pose liability risks to the City. Neighbors have previously sued the City over aircraft emissions and have threatened to do so again. Notably, in the larger, ongoing global effort to address harmful effects of aircraft emissions, even aviation interests acknowledge that emissions must be reduced and aircraft fuels must be improved. However, local governments face significant challenges in this area because the federal and state governments exercise substantial control. Given this practical and legal context, the question for Santa Monica is how best to act locally to reduce aircraft

emissions from the City's airport. **[The City has never tested addressing aircraft emissions at SMO. Who better?]**

Staff is recommending Council consideration of five possibilities for City action, each of which is discussed in this section:

1. Requiring fuel providers to convert to sales of cleaner fuels
2. Requiring fuel providers to begin the cleanup of any contamination on their leaseholds
3. Assessing the possible termination of third-party fuel sales and the feasibility of the City taking over that function to ensure that, so long as fuel is sold, it is the cleanest available
4. Requiring flight schools to convert to cleaner fuels
5. Assessing the development of a cap for Airport emissions

Additionally, this section discusses, but does not recommend, adoption of an ordinance regulating access to the Airport based on aircraft engine emissions. Also discussed, but not recommended, is the proposal from some community members to ameliorate adverse impacts, including emissions, by eliminating Fixed Base Operator (FBO) services or closing the Western Parcel. **[It has been argued that the City's ability to do this was diminished when the 1984 agreement expired. Marsha Moutrie disagreed. We believe she was wrong.]**

<u>Limiting Fuel Sales by FBO's Through Lease Provisions</u>

Staff proposed prompt action to reduce emissions (and other adverse impacts) contractually through leasing policy. The Airport leases all expired this year. This event is very important because it affords the opportunity for the City, as proprietor and landlord, to both increase rents to market value (so that residents are not at risk of subsidizing the Airport's operations) and to impose new requirements upon lessees.

Such requirements could relate to fuel sales. The type of fuels sold at the Airport will directly impact the composition of emissions. And, regulating types of fuels sold is a reasonable means to achieve the ends of protecting public health, safeguarding the environment and shielding the City from liability.

Currently utilized aircraft fuels yield emissions that endanger both public health and the environment. A wealth of evidence establishes this fact. The federal government acknowledges it and has joined the world-wide effort to develop cleaner fuels and limit aircraft emissions. Even the aviation community acknowledges the need for change. For example, the Aircraft Owners and Pilots Association (AOPA) has told the Environmental Protection Agency that AOPA is committed to "an unleaded future." However, progress on the development and distribution of cleaner fuels is frustratingly slow.

The ponderous pace is difficult to justify or even explain. Resources are available. As to jet aircraft, federal agencies, the military, and airline corporations are working jointly to develop and distribute biofuels. They are already widely available for commercial aircraft and are used as a "drop in" (meaning they are simply added to standard fuels and used in existing engines); but using biofuels as a drop in for general aviation aircraft is problematic. So efforts to formulate and market cleaner fuels for private jets are lagging behind.

As to piston-driven aircraft engines, unleaded and low-lead fuel are available. Some newer aircraft engines are designed to utilize them. Moreover, most older piston-powered aircraft can use them, once appropriate certification is obtained. Staff estimates that such certification costs between $500 and $1,000 per aircraft. Indeed, many aircraft owners would prefer to use cleaner fuels because they reduce engine "gunk".

The problem is making such fuels available sooner, rather than later. The future is, indeed, "unleaded", Santa Monica simply needs to hasten its coming for the community's health and welfare. Airport neighbors and persons living in surrounding communities complain that their yards are covered with soot, and they are afraid to let their children play outside. The situation is apparently most dire for neighbors living just west **[correction: east of the airport.]**of the Airport. Their homes are within 300 feet of the runway end. One neighbor, who traveled to Washington to testify to FAA officials in July, stated that she cannot even open her windows for fear that the emissions will permeate her indoor living space. **[Residents are continuously subjected to closing windows and doors for a distance of more than 1/2 mile from the east end of SMO. The <u>strong smell</u> of jet emissions is a clear warning.]**

These circumstances pose liability risks for the City, and the risks have increased in recent years. About 15 years ago, when neighbors last sued the City claiming damages for noise and emissions, significantly less information was available about aircraft emissions and their impact on health. Most important, the studies on Airport emissions, which are described in the Background section of this report, had not yet been done. The next such lawsuit may well be more difficult to defend**. [The City was aware of the 1999 LAUSD Health Risk Assessment, but they did not act in a fashion that showed they were concerned about the health of SMO neighbors. Will they now?]** While the risks posted by emissions to residents and to the City are clear and substantial, any potential harm to aviation interest in regulating fuel sales through reasonable lease terms is not. Establishing leasing requirements related to cleaner fuels need to be significantly detrimental to aviation interests. Such requirements would not deprive Airport users of access to the Airport. Nor would they preclude FBO's from doing business at the Airport.

Cleaner fuels exist, and fuel providers know that they must make them available in Southern California. As noted above, a litigation settlement reached in Northern California requires 30 companies that sell and/or distribute lead-containing aviation gas (avgas) to sell cleaner fuel. Both of the companies that sell fuel at the Airport are bound by that settlement agreement. Presumably, they have made progress on that mandate since executing the settlement agreement. Lease provisions requiring them to sell cleaner fuels would not impose new burdens. Instead, they would simply spur faster progress. **[Why hasn't the City posted Proposition 65 warnings on the observation deck at SMO? Nothing is stopping them.]**

Nor would aircraft owners be unduly burdened. Most piston-aircraft do not need avgas to operate. Ethanol-free premium automotive gas and unleaded aviation gasoline are compatible with 70% of piston aircraft. And, the FAA has approved their use with a Supplemental Type Certificate, which may be obtained by aircraft owners for a cost that staff estimates between $500 and $1000. As to jets, biofuels exist. Commercial carriers have been using biofuels for some time. Perhaps their distribution into the world of general aviation interests would be hastened by demands from those interests. **[Show**

the evidence that biofuels are cleaner fuels at the idle/blast stage. This amounts to false hope and green washing.]

Moreover, aircraft owners and operators have choices about where to buy their fuel. Lease restriction on what fuels are sold at SMO would, of course, not prevent any owner or pilot from purchasing fuel elsewhere.

Based upon all these considerations, staff recommends that Council provide direction to staff to develop lease terms that limit the sale of aviation fuels. Specifically, staff proposes that lease terms prohibit the sale of leaded fuels and highly polluting jet fuels after a date or dates certain. Council could consider different dates for the two classes of fuel depending upon the most current information on availability of cleaner fuels. After that date or dates, piston aircraft fuel sales would be limited to low lead or unleaded. Jet fuel sales would be limited to biofuels or other environmentally preferable fuel.

Requiring Lessees That Sell Aircraft Fuel to Begin Cleaning Up Any Contamination on Their Leaseholds

Current lease provisions make lessees responsible for environmental cleanup of the property. However, that responsibility is linked to termination of the leases. At present, the lessees that sell fuel are on hold-over status with short-term leases, while the Council awaits a staff report on subleasing and the possibility of its elimination. So, the lessees are not obligated to being cleaned up at present.

Council could advance the cleanup obligations as part of its ongoing effort to facilitate and protect City options for the land's future use. This approach may be prudent, given the fact that contamination levels would need to be thoroughly assessed before a remediation program could be devised and approved, the fuel providers do not have long-term leases at present, and the cleanup work could take years.

Assessing the Possibility of Eliminating Third-Party Fuel Sales and the City Taking over Fuel Sales, for However Long as Fuel is Sold at the Airport

At present fuel sales at the Airport are conducted by two lessees. As noted above, both of them are bound by a litigation settlement to sell cleaner fuels for piston aircraft when those fuels become available. However, how rigorously that settlement will be enforced is unknown. And, in any event, the settlement does not cover jet fuel sales. Therefore,

Council may want an assessment of the costs and benefits of the City taking over all fuel sales at the Airport.

Staff notes that historic precedent exists; the City sold aircraft fuel at the Airport in the past. Moreover, aircraft fuel can be sold from trucks – an approach that could facilitate any required cleanup of the underground tank facilities and avoid additional ground contamination.

Eliminating the Use of Leaded Fuels by Flight Schools **[Eliminate the flight schools!]**

In addition to limiting fuel sales through lease provisions, staff also recommends lease terms that require flight schools to use unleaded or low-lead fuels. This recommendation is based on several considerations including the physical circumstances of the Airport, the unusually large number of flight schools at the Airport, and the particularly adverse impacts of patterned flying on air quality.

SMO's physical circumstances make it a particularly poor location for flight training. Homes are in very close proximity to runway ends, and there are no runway safety facilities, partly because the runway ends are so unusually close to the Airport perimeter. Moreover, the runway is on a plateau above surrounding residential neighborhoods. This has led to the observation that taking off and landing there is a little like landing on the deck of an air craft carrier. Yet, in recent years, there have been as many as seven flight schools operating at once at the Airport; and there have been several accidents including flight-school students.

Complaints about the flight schools' impacts have been constant because patterned flying over a relatively small area in the vicinity of the Airport creates extremely detrimental impacts upon Airport neighbors. The factual basis of those complaints is confirmed by the results of studies describe in the Background section of this report. Thus, the dangers know to be associated with lead emissions, the particularly intense adverse impacts of patterned flying, the harm to adjacent communities, and the potential for City liability all justify prohibiting the use of leaded fuel by flight schools through lease terms.

Moreover, the harm to flight school operations would not outweigh harm to the community and potential harm to the City of incorporating such terms into flight school

leases. Most, if not all, of the aircraft presently used by the flight schools at the Airport can operate on unleaded or low lead fuel. One of the schools already utilizes an aircraft designed to operate on unleaded fuels. And certification is available for most, if not all, of the other aircraft used for flight training. Additionally, the unusually large number of flight schools at the Airport means that flight training would likely remain available at the Airport even if certain flight school operators made a business decision to leave the Airport rather than agreeing to lease terms prohibiting the use of leaded fuels.

Finally, to ensure fairness to flight school operators, staff suggests that current lessees be afforded a reasonable, but not extended, amount of time to obtain certification, convert their fleets or otherwise implement the proposed new requirement.

Developing the Possibility of a Greenhouse Gas Emissions Cap for the Airport

[I trust legal experts familiar with the community concerns regarding SMO who are outside of the City Attorney's office. Below and in red are some legal comments and arguments that I have received:]

[Pursuant to the federal case law, the City's local proprietary powers can be wielded to address only "peculiar local concerns" (such as the poisoning or deafening a nearby neighborhood), but not to address broader national or international concerns like global warming.]

Staff also recommends that Council give direction to begin work on developing greenhouse gas emissions cap for the Airport. Such a cap could afford another means of controlling adverse impacts on neighbors [GHG impacts on the neighbors???] and reducing the City's liability risks as owner and operator of the Airport.

[The City Attorney and the City Council members were each already given -- months ago -- the FAA-sponsored 2012 document entitled "Federal and State Regulations that May Affect Initiatives to Reduce Airports' GHG Emissions. If any of them had read it, they would know that the Airport Noise and Capacity Act (1990) -- which now applies to SMO as of July 2015 – most likely now applies to any GHG-reduction measures aimed at aircraft operations. See FAA treatise at p.19: "The statute refers to noise *or access* restrictions, so it is possible that ANCA could apply to some restrictions designed to reduce GHG emissions such as limitations on high-GHG-emitting aircraft, GHG caps, or emissions budgets that could also have the effect of reducing noise."

Also, the City Attorney should know well that the City's local proprietary powers can be wielded primarily to address "peculiar local concerns" (such as the poisoning or

deafening a nearby neighborhood), but not to address broad international concerns like global warming. *Santa Monica Airport Ass'n v. City of Santa Monica*, 481 F.Supp. 927, 938-939 (C.D. Cal. 1969), affirmed in *Santa Monica Airport Ass'n v. City of Santa Monica,* 659 F.2d 100 (9th Cir 1971).

This undertaking would be completely consistent with the City's commitment to [pretending to be] serving as a leader on environmental issues. It would advance the goals of the City's Sustainability Plan. It would also effectuate the City's Sustainability Rights Ordinance, whereby Council recognized that the peoples' rights include the right to clean indoor and outdoor air and that, to the full extent legally possible, short-term, private interest must be subordinated to the common, long-term interest of achieving environmental and economic sustainability for the community as a whole. Moreover, development of an emissions cap would also harmonize with President Obama's and Governor Brown's declared intent to reduce greenhouse gas emissions.

This effort would likely include, among other things: gathering information about and measuring Airport emissions; formulating proposals and models for the cap's operation; and crafting remedies for exceeding the cap. [again – the City's proprietary powers can be wielded to address legitimately only particular local concerns, not global policy issues] Presumably, potential remedies could include reducing or eliminating certain activities particularly likely to exacerbate or contribute to emissions. [This is exactly what Airport Commission's recommended ordinance would have done, but the City Attorney rejected it on specious grounds.] Flight training, fuel sales and other FBO operations might be among those activities.

At this point, an emissions cap is, of necessity, merely a very general concept. Doubtless such an effort would generate legal opposition, including challenges to the City legal authority to impose a cap. However, staff believes that the approach holds significant promise and that there is legal authority for the proposition that federal law does not preempt local plans for reducing emissions from sites or facilities (as opposed to moving sources such as vehicles or engines). See National Association of Home Builders v. San Joaquin Valley Unified Air Pollution Control District., 627 F.3d 730 (9th Cir. 2010). [This federal litigation was about the state acting as the state regulator – not acting as a municipal proprietor – which was imposing limitations on homebuilding and

development activities as indirect sources of criteria pollutant emissions. It stands for the legal rule that, here, the South Coast Air Quality Management District – i.e., can regulate indirect sources. The case does not address whether the SCAQMD's air-pollution regulatory powers are federally preempted vis-a-vis airports, which are subject to FAA authority and/or EPA's exclusive regulation of aircraft engine design.]

Obviously, developing this approach to reducing emissions would take time and resources. However, staff anticipates s that assistance would be available from the local environmental community and perhaps other sources.

This approach obviously involves many unknowns. Nonetheless, given the existing and mounting scientific evidence of the health and environmental risks posed by greenhouse gases [which, again pose a global concern – rather than a particular local concern of the type that municipal proprietary powers can affect], including those generated by Airport operations, the federal and state governments' efforts and calls to action, the community's demands for action, the unaccountably slow pace of the federal effort on regulating emissions, and the City's core commitment to sustainability, staff recommends evaluating this alternative.

Imposing Regulatory Limits on Aircraft Engines **[The City Attorney, Marsha Moutrie, may have wasted the best legal approach available to the City to get emissions under control; not only for Santa Monica Airport neighbors, but elsewhere around the country. What timeline does staff have in mind? This needed to be commenced twenty-five years ago. Impacted Los Angeles residents downwind of SMO and SM Residents subjected to air pollution when Santa Anna winds blow should not have their health and quality of life compromised due to SMO.] Clearly the legal department at SMO has performed poorly at best. The community has spoken out about issues of trust regarding the real motives behind all the legal efforts that have had results that proved to be harmful to the public health and safety of SMO neighbors. Yes, the FAA is responsible too, but the City more so as owner and operator of one airport, SMO. I put my trust in legal experts familiar with the community concerns regarding SMO who are outside of the City Attorney's office.]**

Community members prepare and presented to the Airport Commission a carefully considered and documented proposal for regulating emissions by ordinance. It has been discussed previously but is also discussed here because the regulation of emission by ordinance is an appealing approach.

Under the proposed ordinance, aircraft with emissions ratings for hydrocarbons and nitrogen oxides above specified levels would be excluded from the Airport. The proposed exclusion would be phased in, with the emissions limits being lowered over the phase-in period. Specifically the proposal was that no aircraft with engines rate 40 or more pounds per hour in hydrocarbons in idle mode or 200 pounds or more per hour in oxides of nitrogen in take-off mode should be prohibited from operating at the Airport. The ordinance would step these limits down every six months until the limits would be ten pounds per hour in hydrocarbons in idle mode or 80 pounds or more in oxide of nitrogen per hour in take-off mode. Thereafter, the proposed ordinance would require a 5% reduction each year, unless the Airport Commission decided to forbear on further reductions.

Staff respects the careful thought and extensive work that went into the development of this proposal. It is evidence-based and rationally conceived, and the evidence provided by the study is both informative and useful to the City in formulating policy on emissions. However, as explained in staff's report to Council of March 24, 2105, the federal Clean Air Act preempts local regulation of aircraft engines and emissions. Section 233 of the act provides that "No state or political subdivision thereof [when it is acting as a regulator – as opposed to when it is acting as a proprietor] may adopt or attempt to enforce any standard respecting emissions of any air pollutant from any aircraft or engine thereof unless such standard is identical to a standard applicable to such aircraft under (this Act)." In State Air Resources Board v. Department of the Navy, 431 F. Supp. 1271 (ND Cal. 1977), the federal court explained that "The preemptive intent of Section 233 is explicit; the states [when they are acting as regulators – as opposed to when they are acting as a proprietors] are clearly preempted from adopting or enforcing regulation respecting emissions of any air pollutant from any aircraft or engine thereof... ." The court went on to explain that Congress intended to preempt state and local regulation of aircraft emissions because allowing the states [acting they are as regulators – as

opposed to they are acting as a proprietors] to set 50 different standards for "moving sources" of pollution would (in the words of the Supreme Court) amount to impermissible harassment of the national aviation system and industry. [The *Navy* court then went on to rule that the State of California – acting as regulator – could indeed regulate the Navy's aircraft engine test facility as a stationary source. The opinion and its reasoning have nothing to do with whether a state or its subsidiaries (cities and county) can wield their municipal proprietary powers to limit the use of their proprietorships...]

This means that, although the suggested ordinance appears to have considerable merit, the City Council does not have the authority to adopt it because the Council, like other state and local bodies, has no power to adopt regulations governing aircraft emissions. [when it is acting as regulator, but it does have the power to do so when it is as the proprietor] They are the province of the federal government as illustrated by the EPA's action of last June, when the EPA announced that it would begin initial efforts toward proposing regulations on aircraft engine emissions [yes, but the EPA was acting properly as the preemptive regulator – as opposed to acting as a proprietor].

Proponents of the ordinance have argued [correctly] that preemption does not apply because the City's proprietary powers (as owners of the Airport) trump the preemptive effect of the Clean Air Act. Moreover, proponents of the ordinance and others have argued that, despite long odds, the City should adopt the proposed ordinance because of the importance of protecting the environment and public health and because they believe the City has little to lose and everything to gain.

Unfortunately, staff must disagree on both points. As explained in the [specious] staff report of March 24, 2105, the court decision cited in support of adopting the ordinance is inapposite. Rather than establishing that airport proprietors are not preempted from regulating emissions, it actually stands for the proposition that states (and cities) may base purchasing decisions about purchasing equipment on emissions, much as Santa Monica does in purchasing motor vehicles. [If this were true, then the City of Santa Monica could not have successfully invoked its proprietary powers as the landlord of its land in which a gasoline pipeline was buried by a lessee in *Shell Oil Co. v. City of Santa Monica*, 830 F.2d 1052 (9TH Cir. 1987). It did so even though the City had purchased

nothing at all. See also *Sprint Spectrum L.P. v. Mills*, 284 F.3d 404 (2d Cir. 2001), wherein the local agency purchased nothing, and was acting solely as a landlord: In sum, we conclude [i] that the [federal statute] does not preempt non-regulatory decisions of a local governmental entity … acting in its proprietary capacity; [ii] that the School District acted in a proprietary capacity, not a regulatory capacity...; [and iii] that the conditions … are conditions that a private property owner would be free to demand.... Accordingly, the School District's attempt to enforce [its limitation], is not preempted by the [federal statute].]

As to potential risks, banning certain types of aircraft through regulatory action would undoubtedly provoke litigation. Aviation interests have already expressly threatened to challenge any attempt to ban aircraft based on emission ratings. Moreover, the FAA could, itself, institute action against the City. It could commence a Part 16 administrative proceeding, as it did when the City attempted to ban larger and faster jets to achieve runway safety. [The City's argument was based solely on the fear of a catastrophic accident, which was held to be irrational and unsupported due to the City's total lack of any evidence indicating that larger and faster jets were especially prone to catastrophe.] Or, it might issue a cease and desist order in the pending Part 16 proceeding, as it did previously in the runway safety litigation [ditto]. If the FAA instituted a legal action, it would also likely seek a federal court injunction to halt implementation of the ban, just as the FAA did during the runway safety litigation [ditto]. If history is any guide, a federal court would do so [this is not true – the administrative law judge in the C&D ban hearing expressed an interest in the intervener's complaint about neighboring environmental harm, but explained that the particular dispute between the parties as framed by the City – i.e., a C&D ban based solely on the fear of a catastrophic aircraft crash – was not about such environmental effects]; and, depending upon its breadth, such an injunction could prevent the City from taking future actions to reduce the Airport's adverse impacts while the City and the community await resolution of the disputes about the grant expiration and the City's authority to control its land. This would be a significant loss of local control.

The existing litigation will probably take years to resolve. During that time, it is crucial that the city protect [by not ever wielding] its proprietary authority to reduce adverse impacts of airport operations through lease terms, continue to repurpose the non-aviation land to recreational use, and assess and address needs for remediation. Thus, staff recommends against regulating emission by an ordinance limiting Airport access. [Query: How can the City one day have its pie-in-the-sky GHG emissions cap without limiting airport access?]

Terminating FBO Leases or Closing the Western Parcel in Order to Reduce Operations and Adverse Impacts, Including Emissions

Some Airport neighbors have proposed terminating the FBO leases or removing the Western Parcel form aviation use to reduce operations and attendant adverse impacts. As to the FBO's, these residents argue that the City was obligated to maintain FBOs at the Airport only by the 1984 Agreement. Now that it has expired, they argue that the City, as proprietor/landlord, has the authority to terminate leases and thereby end the provision of aviation services, including fuel sales. As to the Western Parcel, they argue that it is not covered by the Instrument of Transfer; so, the City can close it now.

However, the FAA contends that the grant conditions remain in effect until 2023, and the agency interprets the grant conditions to require the provision of basic aviation services, which are among those provided by FBO's. And, the Western Parcel is covered by the grant conditions. Thus, shutting down the FBO's or attempting to close the Western Parcel would very likely trigger another Part 16 proceeding.

Residents favoring these approaches argue that the FAA might simply step aside and allow the FBO's to close or the Western Parcel to be removed from aviation use; and, in any event they echo the view that the City has little to lose and much to gain. The appeal of these proposed approaches in readily understandable. Without aviation services, Airport operations would decline, which would diminish impacts. Without the Western Parcel, the Airport's runways would be shortened and many aircraft, particularly larger jets, would be unable to use the Airport.

Staff agrees with the premise that, in order to protect community health, safety and welfare, the City must depend upon and effectuate its rights as proprietor and landlord. Staff also agrees that the litigation is taking a frustratingly long time. Indeed, much longer than it should in the case of the Part 16 proceeding wherein the FAA has extended its own deadline for issuing the initial Part 16 decision three times without meaningful explanation. Also, the City has waited months for the oral argument in the Ninth Circuit, though this waiting time is typical for that court. Meanwhile, Airport neighbors continue to suffer adverse impacts from Airport operations; and their frustrations mount.

Nonetheless, staff cannot agree that the City should simply notify the FAA that the City is shutting down FBO's or closing the Western Parcel. Staff's considered opinion is that these actions would not bring faster relief and both would pose significant risk to the City's short-term ability to reduce adverse impacts and perhaps even to its long-term success in achieving ultimate goals.

The argument that the FAA might simply agree to allow the City to close the FBO's or the Western Parcel is not supported by history or any applicable evidence. In the past, particularly during the runway safety dispute, the federal government acted aggressively to stop the City from curtailing operations. The FAA, itself, commenced the Part 16 proceeding challenging the City's ability to conform usage of the Airport to its federal designation, which reflects its facilities. The Agency also issues a cease and desist order in that case, arguably stretching its authority to do so because it had not yet held a hearing. Moreover, when the case moved from the agency and into the court, the Justice Department assigned some of its most experienced and able attorneys to the runway safety litigation. Those same senior attorneys have been assigned to the current federal litigation, filed by the City to establish its authority to control use of the land. These are simply not the actions of an entity ready to step aside and duck a fight.

And, there is other evidence of the FAA's determination to keep SMO in operation. The FAA continues to push for long-term leases for its facilities at the Airport. Also, it is designing Nextgen on the assumption that SMO will continue to operate. And, senior FAA staff has told the City, they are "not in the business of closing airports." Thus, the federal government's conduct gives no hint that it is willing to allow the City to make a

different use of the City's land now occupied by the Airport. As Congressman Lieu's Chief of Staff confirmed at the meeting in Washington this summer, the FAA simply has no intention of voluntarily letting go of SMO.

The hope that it might is apparently based on the agency's actions as to other airports with different circumstances. It is true that the FAA occasionally agrees to allow an airport to close or steps aside from a closure fight (usually leaving the fight to private aviation interests). The example most often cited is Miegs Field in Chicago where Mayor Daily had the runway bulldozed in the middle of the night. However, the facts of that situation are quite different than Santa Monica's. For example, Miegs Field was on land owned by the Chicago Park District and leased to the City for airport usage; and the Park District refused to renew the lease to the City. Thus, in contrast to Santa Monica, the owner of the land was not the operator of the Airport. This meant, among other things, that the land owner was not federally obligated through the receipt of airport improvement grants. Moreover, the FAA did not view Miegs Field as vital to aviation interests, given other airports in the vicinity. Its relative inaction on the Miegs closure probably reflects this fact and the federal and state politics surrounding the controversy. In any event, the Miegs experience does not establish bulldozing a runway as a viable means of asserting local control over an airport. And, it certainly does not establish a precedent upon which Santa Monica can rely given the difference in the circumstances.

The FAA previously determined that use of the Airport was a local land use matter after expiration of the 1984 Settlement Agreement, but the agency reversed its position on local control years ago. For the last few years, it has continuously asserted that Santa Monica has ongoing grant obligation until 2023, that the FAA has perpetual reversionary rights as to the land occupied by the Airport, and that the Airport's continued operation as a reliever for Los Angeles International Airport is vital to national interests. These assertions and the Agencies other actions belie the supposition that the FAA would stand idly by if the City acted to shut down FBO's or close the Western Parcel to aviation use.

Instead, the likely result would be a federal injunction that would preserve the status quo and could prevent the City from taking any action to bring relief to Airport neighbors while the legal disputes are ongoing. Therefore, staff opposes attempting to reduce

emissions and other adverse impacts by either terminating FBO leases or attempting to close the Western Parcel to aviation use.

Unfortunately, there are no shortcuts to establishing the City's authority to control use of the land. The City can only establish control by judicial decision or Congressional action. Congressional action is possible, but very unlikely in the near future. The legal process is slow; however, it does achieve results, and is ongoing.

While it is, the City's decision about the Airport should be carefully considered in order to maximize the chances of ultimate success in the courts. The land is the City's most valuable physical asset. And, the community demands that the land be used in a manner that serves the community's interests. The struggle for control and locally-determined use of this City asset is more likely to succeed if conducted strategically and thoughtfully with a constant eye on the ultimate prize.

However, this does not mean that the City's ultimate goals are unattainable or that adverse impacts cannot be reduced while the City moves towards its long-term goals. Reduction of emissions through lease provisions is one area where gains may be attained in the relatively near future and should be pursued.

Alternatives

Instead of taking action as the Airport's proprietor and operator, the City could wait on external developments to alleviate the problems posed by emissions. As described in this report, cleaner fuels already exist and they are becoming available. The two fuel providers at the Airport have already agreed in settlement of litigation brought by the Center for Environmental Health to begin providing cleaner fuel. Also, aircraft engines are becoming more efficient. However, this progress is slow. And, meanwhile the community suffers, the City is at legal risk, and the Airport operates in a manner that is inconsistent with the City's core environmental values. Therefore, staff recommends against waiting for the federal government or aviation interests to solve the community's emissions problem.

Council could also consider incentivizing emissions reductions. For instance, Council could explore committing City resources to assisting lessees and aircraft owner/operators with a conversion to clean fuels in order to speed up the process. For example, the City could subsidize all or a portion of the cost of obtaining the certification

necessary to use low lead or no lead fuel. Staff is not recommending this approach at this time for reasons including cost and a likely lack of community support.

Or, as discussed above, the City could ban certain aircraft with certain engine ratings, terminate FBO leases, or attempt to close the Western Parcel. These actions would please some. However, they would likely not achieve the short term goal of achieving relief from adverse impacts and could be very detrimental to accomplishment of the City's long term-goals. Such actions would be very likely to draw legal challenges from aviation interests or the FAA, itself. The City would likely not prevail against those challenges and might very well end up enjoined from further action to alleviate adverse Airport impacts. Thus, staff recommends against these alternatives. However, Council may wish to consider more moderate measures, such as reducing the hours of FBO operations to curtail adverse impacts or ending all aviation leasing on the Western Parcel in order to minimize adverse impacts and prepare for potential future uses. Overall, staff continues to counsel a steadfast but measured approach including: regaining control of the land through the pending legal proceedings and by working with members of Congress; effectuating the voters' vision for the land by repurposing the non-aviation land and taking other steps to ready the land for the future; and using all lawful means to reduce adverse impacts of Airport operations. And, if certain of the particular measures recommended in this report for reducing emissions prove to be unworkable or inadequate to reduce emissions, Council can always explore additional measures.

Next Steps

If Council directs staff to modify lease provisions relating to fuel sales and use, staff will work to modify the leases and report back to Council. Depending upon Council's exact direction and the results of staff's work, that report will either be made by Information Item or in conjunction with the report to Council on subleasing. Staff will also return with information on costs and benefits of taking over all fuel sales and on developing an emissions cap if so directed. **[Next steps: Stand up behind what you say publically and use all the elements that the community, the scientists, and your excellent Congressional Representatives have brought to you.]**

Financial Impacts and Budget Actions

Modification of lease provisions, including limitations on fuel sales and restriction on flights schools' use of specific fuels could impact Airport revenues, though impacts are difficult to predict. If Council takes action that fosters litigation, there will be costs, which

are also difficult to predict because they depend on the nature of the challenge. The costs of exploring a greenhouse gas emissions cap are unknown at this time. Consulting services would obviously be required. So, costs could be significant. Likewise cost of taking over all fuel sales would need to be assessed. **[If the City were to stand strong behind doing what's right, then they could be free once and for all of this public health and safety menace. The costs would be then reduced to "0". Rip the bandage off of the wound - quickly!]**