

Montgomery-Gibbs Environmental Coalition

AVIATION UPDATE 2020

The Dangers of Leaded General Aviation Fuel

- Presented by Sandra Stahl, MGEC Executive Director



General aviation planes & jet planes get aerodynamic lift differently and use different types of fuel

General aviation planes are powered by a piston engine with a drive shaft linked to a spinning propeller which produces thrust.



Jet planes produce thrust by increasing pressure of the air drawn into the engine before it exits out the exhaust nozzle



Toxic leaded aviation fuel is only used in propeller planes

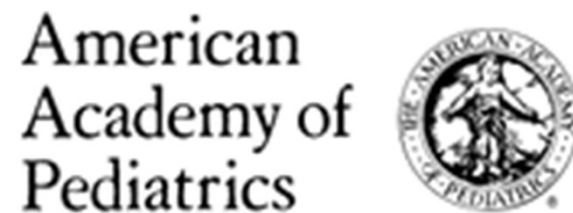
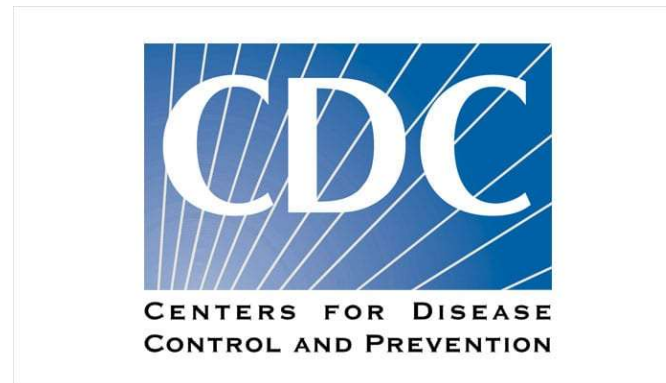


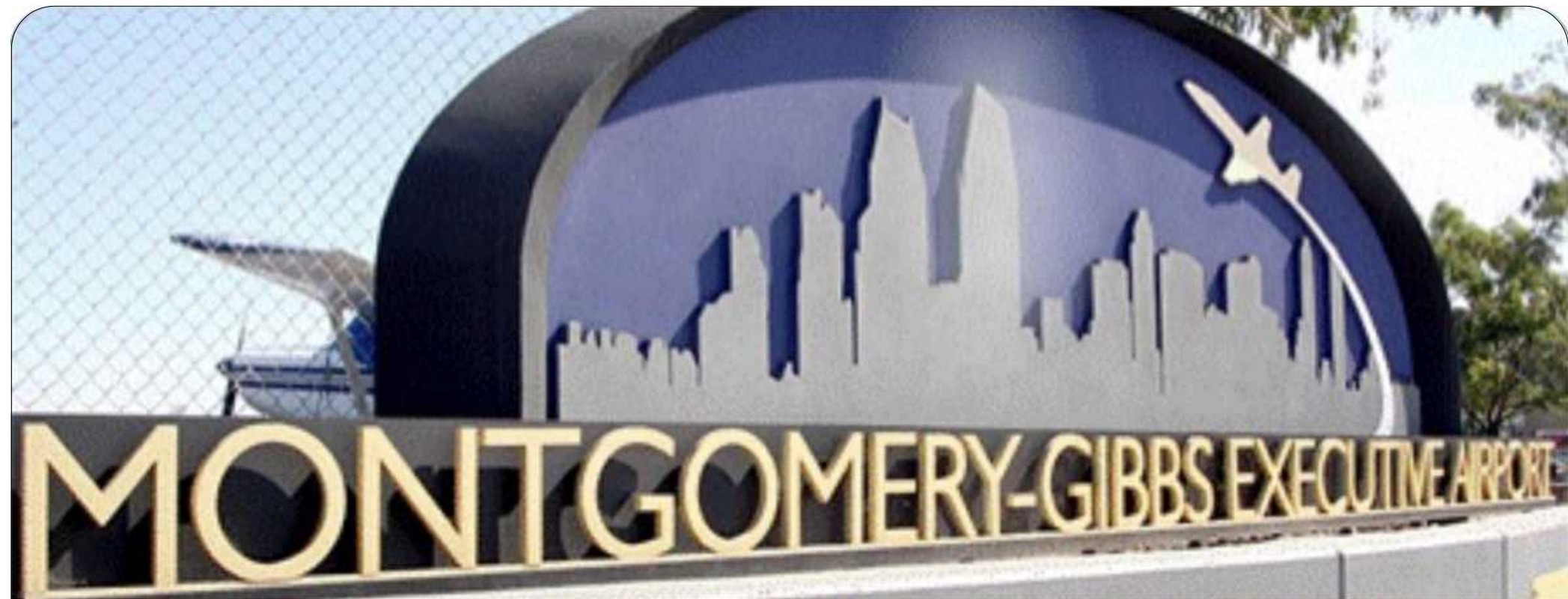
Lead (Pb) is a heavy metal - the same as arsenic & mercury and all three are very dangerous, appearing on the World Health Organization's list of 10 chemicals of major public concern.

Lead is dangerous because it is a neurotoxin



Medical experts agree that there is no safe level of exposure to lead





MONTGOMERY-GIBBS EXECUTIVE AIRPORT OPERATIONS GENERATE

1.442 tons of toxic lead each year

Master Plan Environmental Overview

Working Paper 4 | Environmental Overview

Table 4.3 – Baseline 2017 Aircraft Emissions (metric tons) at MYF

Source	CO	NO _x	PM ₁₀	PM _{2.5}	SO _x	VOC	Pb	CO ₂
Aircraft - Total	4,233	0.011	0.005	0.005	0.005	0.103	1.442	14,287

Note: All emissions were modeled using AEDT as the model and FAA Aviation Emissions and Air Quality Handbook, Version 3 Update 1 (2015) aside from Lead (Pb) which utilized guidance given in the Handbook, specifically Equation A1-3 – Lead Emission Calculation.

Summary and Recommendations
Further analysis of air quality and GHG emissions may be needed to qualitatively and quantitatively identify whether there would be an impact from increased airport traffic and growth associated with airport expansion under the proposed master plan parameters.

Biological resources (including fish, wildlife, and plants)
This section describes the existing biological conditions at the Airport, including vegetation communities, jurisdictional waters and wetlands, sensitive natural communities, special status species, critical habitat, and regional conservation planning context. A summary of applicable regulations also is provided, as well as a ranking of biological constraints.

Regulatory Setting
Biological resources in the project site are subject to regulatory review by federal, state, and local agencies. Under CEQA, impacts associated with a proposed project or program are assessed with regard to significance criteria determined by the CEQA Lead Agency (in this case, the City) pursuant to CEQA Guidelines. Proposed actions at the airport would also be subject to FAA review under NEPA pursuant to the guidance provided in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* and FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*. Biological resources-related laws and regulations that apply include federal Endangered Species Act (FESA), Clean Water Act (CWA), Migratory Bird Treaty Act (MBTA), CEQA, California Endangered Species Act (CESA), Porter-Cologne Water Quality Control Act, California Fish and Game (CFG) Code, Multiple Species Conservation Program (MSCP) Subarea Plan (SAP), and the City's Environmentally Sensitive Lands (ESL) regulations and Biology Guidelines (City 2012).

With respect to the proposed project, the U.S. Fish and Wildlife Service (USFWS) will be responsible for reviewing issues related to federally listed species not covered by the MSCP, including San Diego fairy shrimp, Riverside fairy shrimp (if present), San Diego mesa mint, spreading navarretia (if present) and San Diego button-celery (if present), and MSCP covered species that may require consultation due to a federal action on the property (coastal California gnatcatcher), pursuant to the FESA, and migratory birds pursuant to the MBTA. The U.S. Army Corps of Engineers (USACE) will be responsible for reviewing issues related to waters of the U.S. The Regional Water Quality Control Board (RWQCB) will be responsible for reviewing issues related to waters of the State pursuant to the CWA and State Porter-Cologne Water Quality Control Act. The California Department of Fish and Wildlife (CDFW) will be responsible for reviewing issues related to vegetated and unvegetated streambeds pursuant to the CFG Code, rare plants regulated by the Native Plant Protection Act, and nesting birds and raptors pursuant to CFG Code.

The City is the lead agency for the CEQA environmental review process in accordance with state law and local ordinances. During CEQA review, the City will be responsible for reviewing project issues per the CEQA Significance Thresholds for Biological Resources, and the City's ESL Ordinance and Biology Guidelines. The City will also be responsible for reviewing the proposed project with respect to conservation planning related to the City's MSCP SAP, specifically in regard to project impacts

20 Montgomery-Gibbs Executive Airport | Master Plan SDA Airports

FACT: LEAD IS TOXIC

It is harmful to everyone and

DAMAGES:



BRAIN



KIDNEYS



LIVER



BLOOD



REPRODUCTIVE
SYSTEM

Young children

are most vulnerable. Their nervous systems are still developing and they absorb 4-5 times more than adults, which can cause:

- Intellectual disability
- underperforming at school
- Behavioural issues



In adults

lead exposure increases the risk of:

- ischaemic heart disease
- stroke



In pregnant women

lead exposure damages many organs but also affects:

- the developing foetus



There is no safe level of lead exposure



World Health
Organization

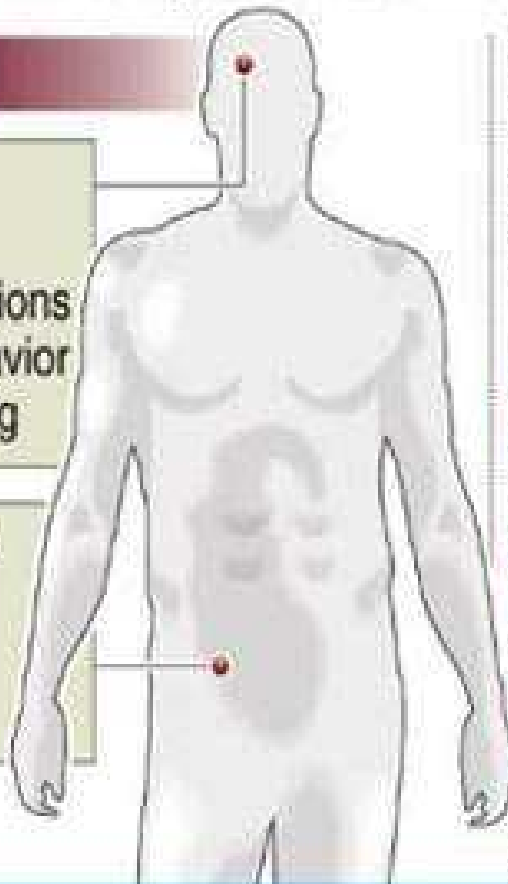
Lead poisoning

Lead buildup in the body causes serious health problems

Symptoms

- Headaches
- Irritability
- Reduced sensations
- Aggressive behavior
- Difficulty sleeping

- Abdominal pain
- Poor appetite
- Constipation
- Anemia



Additional complications for children:

Lead is more harmful to children as it can affect developing nerves and brains

- ▶ Loss of developmental skills
- ▶ Behavior, attention problems
- ▶ Hearing loss
- ▶ Kidney damage
- ▶ Reduced IQ
- ▶ Slowed body growth

AFP

Source: MedlinePlus/Mayo Clinic

Toxic lead from general aviation fuel (1.442 tons annually) not only pollutes the air, but falls down on our community contaminating the soil & grass and persists forever
and
you bring it into your house on your shoes



Our children play outside in grass and soil contaminated with toxic lead from general aviation planes



Edible plants grown in lead contaminated soil absorb the lead and then you eat it



Remember lead is a neurotoxin & there is no safe level



THE SOLUTION



Solution



- The Federal Aviation Administration has certified unleaded UL94 fuel for use by the majority of general aviation airplanes
- Unleaded UL94 fuel is being sold at many General Aviation airports around the country
....but not at Montgomery-Gibbs Executive Airport

Many Pilots Prefer Unleaded UL94

- Unleaded UL94 aviation fuel doubles maintenance intervals
 - increases spark plug life
 - overall decreases engine wear and tear
 - significantly decreases deposit build-up



PROOF

San Carlos Airport in California, near San Francisco, is the first in the state to offer UL94. The San Carlos (FBO) fuel vendor, Rabbit Aviation, reports pilots fly in special just to fill up with UL94 because of its benefits



so, what's the
problem?

The problem is that the City of San Diego refuses to offer unleaded UL94 alongside the toxic leaded avgas that only a minority of general aviation planes need to use for safety



Montgomery-Gibbs Environmental Coalition petitioned the Mayor & all Council members asking that the city find a vendor to offer unleaded fuel at city airports, or that the city become its own vendor



The city Real Estate Assets Department which runs the airport answered back, instead of the Mayor or a council member, failing to mention the option of opening contract bids for a vendor to offer unleaded fuel at Montgomery-Gibbs Executive Airport (MYF)

Given the business conditions at MYF, City staff recommends that fuel services are best provided by the private sector, not the public sector. City staff does not believe competing with the private sector or replacing the private sector for fuel services is a prudent business decision.



Since the request to find a vendor to offer unleaded UL94 was ignored, Montgomery-Gibbs Environmental Coalition presented a Ballot Proposal to the City Council Rules Committee last July seeking to let voters decide if the city should offer unleaded at city airports to reduce the public health risk of exposure to toxic lead from aviation fuel. It was denied and referred back to the Real Estate Assets Department.

All this brings a question. What is going on in City Hall behind closed doors?



Montgomery-Gibbs Environmental Coalition

If you are concerned about this public health threat to you and your family, please flood the Mayor's office and your City Council member's office with emails and phone calls demanding that unleaded aviation fuel be offered alongside the toxic leaded avgas that only a minority of general aviation planes absolutely need to use for safety.

PUBLIC OUTRAGE IS NEEDED!