

Who Is Innospec?

Oregon Aviation Watch (OAW) extends sincere gratitude to guest author Gary Keller. His dedicated efforts towards addressing the injustices, excesses, and health risks posed by the aviation sector, including the elimination of lead from aviation fuel, are deeply appreciated. It is an honor and privilege to work with him in pursuing these shared goals.

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ALL of the Tetra-Ethyl Lead (TEL) that is available for use in general aviation (GA) piston driven planes in the US was made by Innospec. In fact, the vast majority of this toxic fuel additive is manufactured solely to serve general aviation planes that have not been regulated for unleaded fuel use.

Per wikipedia:

"Innospec Inc., formerly known as Octel Corporation and Associated Octel Company, Ltd., is a specialty chemical company. It comprises three business units:

- Fuel Specialties, responsible for the development and supply of additives for fuels and which also includes the company's activities in its Oilfield Chemicals division,
- Performance Chemicals, which focuses on products for the Personal Care industry and also provides products for the Polymers markets
- **Octane Additives, which is the last remaining non-Chinese producer of tetra-ethyl lead (TEL) used in the manufacture of [100LL avgas](#) throughout the world.**

They are headquartered in Englewood, Colorado, and have major regional centers in the United Kingdom and Singapore, along with international offices and processing facilities in China, UAE, Cyprus, South Korea, and India." [1]

The Innospec website notes that in 1948, the company, Associated Ethyl Co Ltd, was acquired by Shell, BP, Texaco, Mobil and Chevron. The company name was later changed to Associated Octel, and later still to Innospec. [2]

Located in that history and fortunately for the children of the world, the Clean Air Act of 1970 stopped some of the TEL that Innospec was producing; however, reading more about their company history, there seems to be a few omissions.

In a March 2010 litigation release, the U.S. Securities and Exchange Commission wrote:

"From 2000 to 2007, Innospec routinely paid bribes to sell Tetra Ethyl Lead ("TEL"), a fuel additive that boosts the octane value of gasoline, to state owned refineries and oil companies in Iraq and Indonesia. TEL was a significant source of revenue for Innospec; however, TEL sales were declining due to the passage of clean air legislation in the U.S. and abroad. Innospec also paid kickbacks to Iraq to obtain contracts under the United Nations Oil for Food Program (the "Program"). Innospec's former management did nothing to stop the bribery, and in fact authorized and encouraged it. In addition, Innospec's internal controls failed to detect the illicit conduct, which continued for nearly a decade. In all, **Innospec made illicit payments of approximately \$6,347,588 and promised an additional \$2,870,377 in illicit payments to Iraqi ministries, Iraqi government officials, and Indonesian government officials in exchange for contracts worth approximately \$176,717,341 in revenues and profits of \$60,071,613.**"[3]

In the October 2013 version of *Lead Action News*, Australia's "The Lead Group" further elaborates:

"Even though in 2010 Innospec was found guilty, they were only fined \$40.2 million for bribing Indonesian and Iraqi officials. This is despite the bribery netting Innospec \$60 million – thus proving that even after being caught bribing, they can turn a profit from TEL for MOGAS. Innospec is an inspiration to its own staff and other corporations, to bribe foreign officials to buy their toxic products, no matter what the public health and crime increase consequences."[4]

In a June 2010 article, The Guardian also commented on this cesspool of corruption:

"A decade ago, Octel decided to remain the world's only manufacturer of TEL for cars, after it was banned in the US and Europe. They used high profits from non-western countries to diversify into other products and to pay back investors, mainly US hedge funds run by Connecticut billionaire Jeffrey Gendell. According to prosecutors, the strategy included the corrupt blocking of health campaigns.

In Iraq, bribes were paid in 2007 to sabotage field trials of MMT, a non-lead alternative additive. In Indonesia, money was poured into a 'defence of lead' campaign to pay off local politicians. The phase-out of TEL was successfully delayed for five years. One Octel executive wrote: 'As you are aware, Indonesia was planning to go lead free in 2000 ... this obviously did not happen for a number of reasons and since 1 January 2000 until the present, we have supplied 28,390 tons of TEL ... generating \$277 million in revenue.'"[5]

Have they learned anything from this litigation?

Innospec continues, undeterred in their pursuit to inundate us with TEL in the form of leaded aviation fuel. From their website they crow this:

"As a business, we actively assist in the global phase-out of TEL...."[6]

That would mean that their strategy to accomplish the global phase out is the continued production of TEL.

They are quite proud of this major accomplishment. The Innospec website includes a greenwash document with these statements:

"Our Octane Additives business is the world's only manufacturer of tetraethyl lead (TEL) products."[7]

"We use our extensive market knowledge to support those countries which continue to depend on TEL, as they make the transition to unleaded gasoline. Through the phase-out period, we ensure the continuity of TEL while also providing comprehensive support and guidance on how best to manage the changeover."[8]

The US finally ended leaded fuel in 1996 for cars. Other countries, with the "help" of Innospec, continued their use of leaded petrol until this year (2021).[9]

Why should our children fear them?

The Wikipedia article on lead notes:

"In the late 19th century, lead's toxicity was recognized, and its use has since been phased out of many applications. However, many countries still allow the sale of products that expose humans to lead, including some types of paints and bullets. Lead is a neurotoxin that accumulates in soft tissues and bones; it damages the nervous system and interferes with the function of biological enzymes, causing neurological disorders, such as brain damage and behavioral problems. Lead also affects general health, cardiovascular, and renal systems."[10]

Why does Innospec make TEL in England and then send it to US refineries to make leaded aviation fuel?

One of the reasons is because the United States allows the exposure of humans to lead emissions from general aviation aircraft. According to the EPA's National Emissions Inventory (NEI) data, it is in the amount of approximately 468 tons each year.[11]

The same year (2017) that all this lead was outpouring into our skies, the outpouring of their stewardship resulted in \$59M in Octane Additives (TEL) sales for Innospec.[12]

How dire is the problem?

"It does not matter if a person breathes-in, swallows, or absorbs lead particles, the health effects are the same; however, the body absorbs higher levels of lead when it is breathed in."[13]

Multiple studies have shown that children who live near airports have higher levels of lead in their blood. It is widely accepted that there is no safe level of blood lead. Even small levels of exposure are linked to permanently lowered IQ and other cognitive, behavioral, and health harms.

In a study made public in August 2021, it was noted that, in the U.S., it is estimated that sixteen million people, including about **three million children**, live within a kilometer of airports that service piston-engine aircraft (PEA).[14]

EPA's 2017 National Emissions Inventory (NEI) notes that piston-engine general aviation aircraft are responsible for 70% of all lead emissions nationwide each year.[15] Ironically, the U.S. spends millions of dollars removing old lead while completely ignoring the new lead released every single day.

One of the most egregious routes through which people receive these lead emissions is flight school activity. The touch-and-go practice maneuvers at low altitudes over our homes, schools and day care centers contribute a great deal to the lead emissions – and the noise pollution. States who have this menace thrust upon them consistently have the highest amount of lead emissions with well over 70% of their total emission levels due to general aviation aircraft. Notably, too, flight instruction is commonly hyper-concentrated onto airports where one or more companies make substantial revenues importing student pilots from around the world. FAA regularly asserts that regulations prevent their mitigating this concentrated impact; the regulations, of course, were created by and for aviation users, mostly with zero regard for impact on the adjacent communities.

In December 2018, the Santa Clara Board of Supervisors approved a study to determine "whether there was any link between lead-based airplane emissions at Reid-Hillview Airport and blood lead levels of children living near the airport." [16]

The study, led by Dr. Sammy Zahran, "...analyzed blood lead levels of children within 1.5 miles of Reid-Hillview Airport, piston-engine aircraft activity at the airport, and weather and prevailing winds for the study period to establish whether there is a significant relationship between airplane emissions and blood lead levels. Dr. Zahran and his team reviewed over 300,000 blood lead records provided by the California Department of Public Health, flight records from the Federal Aviation Administration, and weather data available from Dark Sky." [17]

Here is one of the conclusions from Dr. Zahran's study published in August 2021:

"The Flint water crisis from start to finish unfolded in less than a year and a half. By contrast at Reid-Hillview, the release of lead into the lived environment is a continuous, non-stop, daily unabated flow of an undeniably harmful toxicant. I remind you that we are talking about more than a thousand pounds of lead released annually on nearby populations." [18]

ALL of the Tetra-Ethyl Lead (TEL) that is available for use in general aviation (GA) piston driven planes in the US was made by **Innospec**.

Innospec notes in their Health, Safety and Well-Being section of their webpage: "Nothing is more important to us. We strive to be leaders in health and safety, safeguarding anyone that could be affected by our activities and operations." [19]

How exactly is Innospec safeguarding our children? Or anyone for that matter?

The children with elevated blood lead levels (BLLs) living near Reid-Hillview and all the other 20,000 U.S. general aviation airports have been affected by Innospec. Some with elevated blood levels similar to that found in the Flint Water Crisis (FWC). [20]

Due to pressure from the aviation industry through high paid lobbyists, our Environmental Protection Agency (EPA) has been unable to stop this monster. In light of Innospec's pervasive pattern of greed and corruption:

How can anyone protect his or her children from Innospec?

About the author:

Gary Keller retired after 35 years of public service in the fire department. Prior to that he served in the Army while stationed in Vietnam. Since retiring, in the capacity of long-time community activist, Gary is engaged in a grass roots effort to remove lead from aviation fuel. He works toward that goal as Environmental Director for Citizens Against Gillespie Expansions and Low Flying Aircraft (C.A.G.E. L.F.A.) along with Robert Germann, the CEO and Founder of C.A.G.E. L.F.A. Gillespie Field is located in El Cajon in San Diego County, California. [21]

Sources:

[1] [Innospec. Wikipedia](#). Last accessed on-line on 10-22-2021.

[2] [Company History. Innospec website](#). Last accessed on-line on 10-22-2021.

[3] [SEC FILES SETTLED FOREIGN CORRUPT PRACTICES ACT CHARGES AGAINST INNOSPEC, INC. FOR ENGAGING IN BRIBERY IN IRAQ AND INDONESIA WITH TOTAL DISGORGEMENT AND CRIMINAL FINES OF \\$40.2 MILLION](#). Litigation release No. 21454 / March 18, 2010. Securities & Exchange Commission v. Innospec, Inc., Civil Action No: 1:10-cv-00448 (RMC) (D.D.C.). Last accessed on-line on 10-22-2021.

[4] O'Brien, Elizabeth. [Innospec Nomination by the Lead Group for Public Eye Awards 2014](#). Lead Action News. Vol. 14 No. 1. (10-1-2013). Last accessed on-line on 10-22-2021.

[5] Leigh, D., Evans, R., Mahmood, M. [UK Firm Octel Bribed Iraqis to Keep Buying Toxic Fuel Additive](#). The Guardian. (6/30/2010). Last accessed on-line on 10-22-2021.

[6] [Octane: Responsible Tetraethyl Lead Supply and Stewardship](#). Last accessed on-line on 10-22-2021.

[7] Ibid.

[8] Ibid.

[9] Gamillo, Elizabeth. [Leaded Gasoline Use in Vehicles Has Now Officially Ended Worldwide](#). Planet Positive: A Smithsonian Magazine Special Report. (8-31-2021). Last accessed on-line on 10-21-2021.

- [10] [Lead. Wikipedia](#). Last accessed on-line 10-21-2021.
- [11] [2017 National Emissions Inventory \(NEI\) Data](#). Environmental Protection Agency (EPA). Last accessed online on 10-22-2021.
- [12] [Press Release: Innospec Reports Fourth Quarter and Full Year 2017 Financial Results](#). Innospec. (2-13-2021). Pg. 7. Last accessed online on 10-22-2021.
- [13] [Lead: Information for Workers](#). CDC: National Institute for Occupational Safety and Health (NIOSH). (Page last reviewed on 6-18-2021). Last accessed on-line on 10-25-2021.
- [14] Mountain Data Group. [Leaded Aviation Gasoline Exposure Risk at Reid-Hillview Airport in Santa Clara County, California](#). (8-03-2021) Pg. x. Last accessed online on 10-22-2021.
- [15] [2017 National Emissions Inventory \(NEI\) Data](#). Environmental Protection Agency (EPA). Last accessed online on 10-22-2021.
- [16] [Reid-Hillview Airport Airborne Lead Study. County of Santa Clara: Office of Communications and Public Affairs](#). Last accessed on-line on 10-24-2021.
- [17] Ibid.
- [18] [Santa Clara Community Meeting on the Reid Hillview Airport Lead Study \(8-11-2021\)](#). Last accessed online on 10-22-2021. Quote begins at the 33 minute 47 second mark in the recording.
- [19] [2020 Responsible Business Report. Innospec](#). Pg. 9. Last accessed online on 10-22-2021.
- [20] Mountain Data Group. [Leaded Aviation Gasoline Exposure Risk at Reid-Hillview Airport in Santa Clara County, California](#). (8-03-2021) Pg. xviii. Last accessed online on 10-22-2021.
- [21] [Citizens Against Gillespie's Expansion & Low Flying Aircraft. C.A.G.E. L.F.A.](#) Last accessed online on 10-25-2021.