

# HOUSE BILL REPORT

## HB 1171

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**As Reported by House Committee On:**  
Environment

**Title:** An act relating to directing the completion of a study of certain environmental impacts, including ultrafine particulate emissions, associated with aircraft traffic in areas impacted by airport operations.

**Brief Description:** Directing the completion of a study of certain environmental impacts, including ultrafine particulate emissions, associated with aircraft traffic in areas impacted by airport operations.

**Sponsors:** Representatives Orwall, Fitzgibbon, Gregerson, Tarleton, Pollet and Santos.

**Brief History:**

**Committee Activity:**

Environment: 1/24/17, 2/9/17 [DPS].

**Brief Summary of Substitute Bill**

- Directs the Department of Commerce to contract with the University of Washington School of Public Health in completing a study of ultrafine particulate matter, aluminum, barium, radioactive thorium, cadmium, chromium, and ethylene dibromide air pollution associated with airport traffic at the state's busiest airport.
- Requires the Department of Commerce to submit a report to the Legislature by December 1, 2019, addressing the findings of the study, and making recommendations as to whether sufficient information exists to proceed with a second phase of the study that would examine mitigation options and public health impacts from exposure to ultrafine particulate matter and other chemicals.

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### HOUSE COMMITTEE ON ENVIRONMENT

**Majority Report:** The substitute bill be substituted therefor and the substitute bill do pass. Signed by 5 members: Representatives Fitzgibbon, Chair; Peterson, Vice Chair; Fey, Kagi and McBride.

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*This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.*

**Minority Report:** Do not pass. Signed by 4 members: Representatives Taylor, Ranking Minority Member; Maycumber, Assistant Ranking Minority Member; Buys and Dye.

**Staff:** Jacob Lipson (786-7196).

**Background:**

Washington hosts more than a dozen international airports that have customs and immigration facilities that allow them to regularly accept international flights, plus several additional airports that can accommodate international arrivals if an incoming flight obtains prior permission to land. According to the United States Department of Transportation's Bureau of Transportation Statistics, Seattle-Tacoma International Airport is the busiest airport in the state, handling over 178,000 departures in 2016.

Under the federal Clean Air Act, the United States Environmental Protection Agency (EPA) sets National Ambient Air Quality Standards for criteria air pollutants. Particulate matter is treated as a criteria pollutant under federal and state clean air laws, which establish two classifications of particulate matter air pollution for purposes of setting air quality standards: coarse particulate matter (PM10), which includes particulate matter that is less than 10 microns in diameter; and fine particulate matter (PM2.5), which includes particulate matter that is less than 2.5 microns in diameter. Federal and state clean air laws do not define or set standards specifically for ultrafine particulate matter.

Under the federal Clean Air Act, the EPA also establishes a list of hazardous air pollutants that are regulated through the application of technology-based standards to categories of emissions sources. Radionuclides and ethylene dibromide, cadmium, and chromium compounds are among the 187 hazardous air pollutants identified in EPA regulations. Chromium, cadmium, and barium are also among the approximately 400 hazardous air pollutants identified by the Department of Ecology's rules, and for which emissions controls may be established for new sources of emissions.

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**Summary of Substitute Bill:**

By September 1, 2019, the Department of Commerce (Commerce) is directed to complete a study of air quality implications of aircraft traffic at the international airport in the state that has the highest total annual number of arrivals and departures.

To complete the study, Commerce must contract with the University of Washington School of Public Health to monitor concentrations and characteristics of ultrafine particulate matter, barium, aluminum, radioactive thorium, cadmium, chromium, and ethylene dibromide (target air pollutants) in areas impacted by high volumes of airport traffic. These areas must encompass areas within 10 miles of the airport that are in the direction of aircraft flight paths or that feature existing air monitoring stations. The evaluation must attempt to distinguish between aircraft and other sources of the target air pollutants and the evaluation must also compare concentrations of target air pollutants in areas impacted by airport traffic with other locations featuring similar characteristics except for proximity to a busy airport. Commerce

must submit a report to the Legislature by December 1, 2019, summarizing findings on the prevalence of target air pollutants in areas adjacent to and directly impacted by airport operations, and analyzing gaps and uncertainties in target air pollutant information. Upon the study's completion, Commerce must coordinate with local governments to share the study's results and seek public feedback.

In the 2019 report to the Legislature, Commerce must make a recommendation as to whether sufficient information exists to validate proceeding with a second phase of the study, which would address:

- the costs and feasibility of options to reduce or mitigate target air pollutant emissions;
- rates of exposure to target air pollutants in any disproportionately impacted communities;
- risks of target air pollutants in absolute terms and as pollution compared to risks posed by other sources or types of air pollution; and
- other environmental impacts associated with increased volumes of air traffic at the airport, including noise pollution, aesthetics, and wildlife habitat.

### **Substitute Bill Compared to Original Bill:**

The substitute bill adds new requirements to the Department of Commerce's (Commerce) study of ultrafine particulate matter emissions, including requiring an analysis of gaps and uncertainties in ultrafine particulate matter information. The scope of the study is also expanded to include the air emissions of barium, aluminum, radioactive thorium, cadmium, chromium, and ethylene dibromide. Commerce must coordinate with local governments in areas near the airport to share the results of the air quality study, and solicit public feedback. The scope of the study must encompass areas within 10 miles of the airport that feature an existing air monitoring station or that are in the airport's direct flightpath.

The second phase of study and associated 2021 reporting requirements are eliminated. Instead, Commerce must recommend, in conjunction with the submission of the report to the Legislature by December 1, 2019, whether sufficient information is available to validate proceeding with a second phase of the study. New criteria are included in the second phase of a study, should a second phase be carried out, including an analysis of public health impact mitigation options, and an evaluation of the role of the Federal Aviation Administration in any mitigation options.

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**Appropriation:** None.

**Fiscal Note:** Available.

**Effective Date of Substitute Bill:** The bill takes effect 90 days after adjournment of the session in which the bill is passed.

**Staff Summary of Public Testimony:**

(In support) The goal of this bill is to understand the public health impacts of operations at SeaTac airport, which brings jobs to the community but also health concerns from air traffic. Air quality is the most important environmental impact from airport operations that should be studied. People living near the airport are more susceptible to disease, and have been shown by public health data to be among the most impacted communities by environmental pollution. South King County has high rates of asthma, and high volumes of air traffic. The bill will help assess whether the communities near the airport are bearing too heavy a personal burden for the economic benefits that accrue statewide from the airport. Residents deserve to know about the risks that they face, and to reduce those risks where possible. The region has seen a massive increase in air traffic in recent years, and is nearing its capacity for safe operation. There have been a few studies of ultrafine particulate matter near other airports, and this study will build on those evaluations. Clean air regulators don't currently monitor or regulate ultrafine particulate matter emissions. This study will help with later determinations of how air quality impacts can be best mitigated. This bill is not intended to be a slight to the Port of Seattle or how SeaTac airport does business.

(Opposed) None.

(Other) The funding for the study contemplated in this bill is not in the Governor's budget. The fiscal note shows a cost of nearly \$900,000 to complete the study, most of which is for work to be completed by the University of Washington. It is appropriate for the Department of Commerce to oversee this study, since it is at the intersection of land use patterns, economic interests, and health impacts.

**Persons Testifying:** (In support) Representative Orwall, prime sponsor; Steve Edmiston; Robert Blix, Safe Skies Advisory Coalition; Shirlee Tan, King County Public Health Department; Candace Urquhart and Kent Palosaari, Quiet Skies Puget Sound; Anthony Hemstad, City of Des Moines; Joel Wachtel; Debbie Wagner, City of Burien and Quiet Skies Coalition; Sandra Mock; and Chelsea Hager, City of SeaTac.

(Other) Jamie Rossman, Department of Commerce.

**Persons Signed In To Testify But Not Testifying:** None.