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**SUBSTITUTE HOUSE BILL 1171**

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**State of Washington**

**65th Legislature**

**2017 Regular Session**

**By** House Environment (originally sponsored by Representatives Orwall, Fitzgibbon, Gregerson, Tarleton, Pollet, and Santos)

READ FIRST TIME 02/13/17.

1 AN ACT Relating to directing the completion of a study of certain  
2 environmental impacts, including ultrafine particulate emissions,  
3 associated with aircraft traffic in areas impacted by airport  
4 operations; adding a new section to chapter 70.94 RCW; and providing  
5 an expiration date.

6 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

7 NEW SECTION. **Sec. 1.** A new section is added to chapter 70.94  
8 RCW to read as follows:

9 (1) The department of commerce, in consultation with the  
10 department of health and the department of ecology, is directed to  
11 complete a study by September 1, 2019, regarding air quality  
12 implications of air traffic at the international airport in  
13 Washington with the highest number of total annual departures and  
14 arrivals.

15 (2)(a) The study must consist of an assessment, to be completed  
16 by the University of Washington school of public health, of the  
17 concentrations of ultrafine particulate matter, barium, aluminum,  
18 radioactive thorium, cadmium, chromium, and ethylene dibromide in  
19 areas surrounding and directly impacted by air traffic generated by  
20 the airport. For purposes of this section, the areas near the airport  
21 that are described as the focus of various components of the study

1 and the potential second phase of the study must encompass areas  
2 within ten miles of the airport in the directions of aircraft flight  
3 paths and areas within ten miles of the airport where public agencies  
4 operate an existing air monitoring station. The assessment must:

5 (i) Monitor and evaluate the concentrations and characteristics  
6 of ultrafine particulate matter and the substances listed in (a) of  
7 this subsection in areas impacted by high volumes of airport traffic,  
8 including the patterns of spatial distribution of ultrafine  
9 particulate matter and the substances listed in (a) of this  
10 subsection. To the extent practicable, the assessment must attempt to  
11 distinguish between ultrafine particulate matter and the substances  
12 listed in (a) of this subsection that is attributable to aircraft  
13 sources and ultrafine particulate matter and the substances listed in  
14 (a) of this subsection that originates with other sources;

15 (ii) Compare concentrations of ultrafine particulate matter and  
16 the substances listed in (a) of this subsection in areas surrounding  
17 or directly impacted by high volumes of airport traffic against  
18 concentrations of ultrafine particulate matter and the substances  
19 listed in (a) of this subsection in locations in the ambient  
20 environment that share similar characteristics, but that are not  
21 surrounding or directly impacted by high volumes of airport traffic;  
22 and

23 (iii) Analyze the gaps and uncertainties in health information  
24 associated with ultrafine particulate matter and the substances  
25 listed in (a) of this subsection and whether sufficient information  
26 is available to support a second phase of the study described in (b)  
27 of this subsection being completed in a manner that provides  
28 informational value.

29 (b) The department of commerce must coordinate with local  
30 governments in the areas addressed by the study to share the study  
31 results and to solicit public feedback in a manner that is inclusive  
32 of community members. The department of commerce must, after  
33 evaluating the results of the study in (a) of this subsection,  
34 consider whether to recommend proceeding with a second phase of the  
35 study, which would include:

36 (i) An analysis of options to reduce or mitigate emissions or  
37 public health impacts of ultrafine particulate matter and the  
38 substances listed in (a) of this subsection from aircraft, including  
39 but not limited to the use of alternative fuel sources or particulate  
40 filters by aircraft, building insulation, air filtration, and

1 education. In evaluating emission reduction or mitigation options,  
2 the department of commerce must consider the anticipated costs and  
3 feasibility of each option, including the potential role of the  
4 federal aviation administration;

5 (ii) An analysis of the rates of exposure to ultrafine  
6 particulate matter and the substances listed in (a) of this  
7 subsection by low-income residents, communities of color, senior  
8 citizens, port employees who work at the airport, and other  
9 communities that may be disproportionately impacted by ultrafine  
10 particulate matter and the substances listed in (a) of this  
11 subsection pollution. This analysis must consider public health data  
12 maintained by the department of health or local health jurisdiction,  
13 to the extent such information is available;

14 (iii) An analysis of the scope of risks posed by ultrafine  
15 particulate matter and the substances listed in (a) of this  
16 subsection air pollution in communities adjacent to and directly  
17 impacted by the airport and air traffic in both absolute terms and  
18 relative to the risks posed by other types or sources of air  
19 pollution or other pathways of exposure to pollutants in the  
20 environment; and

21 (iv) An analysis of other direct and indirect environmental  
22 impacts to the areas surrounding the airport that are attributable to  
23 increased volumes of air traffic, including noise pollution,  
24 aesthetic impacts, and the loss of habitat.

25 (3) Consistent with RCW 43.01.036, the department of commerce  
26 must report its findings from the study to the appropriate committees  
27 of the legislature by December 1, 2019. The report must include a  
28 summary of findings on the prevalence of ultrafine particulate  
29 matter, barium, aluminum, radioactive thorium, cadmium, chromium, and  
30 ethylene dibromide pollution in areas surrounding and directly  
31 impacted by the airport, and a recommendation regarding whether  
32 sufficient ultrafine particulate matter, barium, aluminum,  
33 radioactive thorium, cadmium, chromium, and ethylene dibromide  
34 information is available to validate proceeding with a second phase  
35 of the study.

36 (4) This section expires June 30, 2022.

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