Subject: Fireplace Emissions Revisions – 2014 Emissions Inventory for Regional Haze modeling

From: Washington State Department of Ecology – Air Quality Program

To: WRAP

Date: 6/27/2018

Washington Department of Ecology (ECY) has recently been evaluating our residential wood combustion emission estimates and the survey data that it was based on. Through that analysis, we believe our estimate of fireplace emissions for 4 counties in the Puget Sound area are grossly overestimated. We would like to replace the emissions for those 4 counties (King, Pierce, Kitsap, Snohomish) with emissions that the EPA RWC Tool provides.

Residential wood combustion is the largest source of PM2.5 during the winter in Washington, which will have implications on regional haze modeling. ECY is hereby requesting that WRAP replace fireplace emission estimates for 4 counties with revised emissions (see attached) so that regional haze modeling to be conducted in the future will benefit.

The SCC associated with fireplaces is 2104008100.

There were not enough Puget Sound Survey responses for fireplace usage, which residential wood combustion emissions were based on. Furthermore, model/monitor comparisons show that residential wood combustion emissions are grossly overestimated in the Puget Sound area. Replacing ECY’s estimate of fireplace emissions (which are in the 2014 NEI v2) with EPA’s estimate will increase model performance.

ECY utilized the EPA’s Residential Wood Combustion Tool (v3.2) to calculate fireplace emissions for the 4 counties of interest. See the attached spreadsheet for the revised emissions.