

Episode 56NK December 19, 2023. Video Excel Calculation of 3 day PurpleAir PM2.5 percentage above NAAQS

Congratulations to NEJAC for receiving an 8.8 million dollar grant for assessing emissions from (indoor residential) wood burning devices. I suggest that using data from resident-owned monitors hyper-localized next to indoor residential wood burners is an efficient, low cost way to assess emissions from indoor residential wood burning devices. The general steps are 1)Download 3 days of data from the PurpleAir map. 2)Copy the download and paste it into cell A6 of the Main Page of the Excel Sheet. Correlation to \$100,000 EPA monitor will automatically populate in columns E F and G for 432 rows representing 10 minute periods over a 72 hour (3 day) period.3)Select and Copy the 432 rows of 7 columns of data A7:G438 from the Main Excel Page 4)Paste 1 2 3 the data into cell A1 of the Yellow Sheet, 5)Paste 1 2 3 the data into cell A1 of the Orange Sheet 6)Paste 1 2 3 into the data into cell A1 of the Red Sheet. Then sort the 3 color sheets so that the colored cells are at the top of each sheet. Color sheets Yellow, Orange and Red have conditional formatting that makes 6A)cells in column E turn yellow when a number is above 12, 6B)cells in column F turn orange when a number is above 25, and 6C)cells in column G turn light red when a number is above 35 so 7a)In the Yellow Sheet choose the pre made Custom Sort of Column E by cell color Yellow on Top and Click OK 7b) In the Orange Sheet choose the pre made Custom Sort of Column F by cell color Orange on Top and click OK. 7c) In the Red Sheet choose the pre made Custom Sort of Column G by cell color Red on Top and click OK. 8a)Go to the Yellow Sheet and scroll down to get to the last row colored Yellow. Note the last Yellow row number and type that row number into E5 on the main sheet. 8b)Go to the Orange Sheet and scroll down to get to the last row colored Orange. Note the last Orange row number and type that row number into F5 on the main sheet. 8c)Go to the Red Sheet and scroll down to get to the last row colored Red. Note the last Red row number and type that row number into G5 on the main sheet. 9)Percentage of time for 3 days (72 hours) in 10 minute intervals that PM2.5 has been above 12 micrograms per meter cubed, above 25 micrograms per meter cubed and above 35 micrograms per meter cubed PM2.5 in the yard of the near neighbor will autocalculate in cells B4, C4 and D4 of the main page. In this way, air pollution affecting near neighbors of indoor residential wood burners can be assessed. This method of assessment will be transparent and understandable to near neighbors themselves and to the general public concerned about PM2.5 pollution from wood burning. The other method of regulating air pollution from indoor residential wood stoves has been a failure, according to the February 2023 report of the Office of the Inspector General (O I G) watchdog of the EPA, due to lobbying by the wood stove industry that resulted in huge loopholes to compliance to even the lax standards for indoor residential wood stoves (NSPS) which have been in place