Message

From: OConnor, Karina [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=094CBA90A0574D1B94BD8561EBD04EEF-KOCONN02]
Sent: 6/3/2019 9:12:57 PM
To: Kalandiyur, Nesamani@ARB [nesamani.kalandiyur@arb.ca.gov]
CC: Graham, AshleyR [Graham.AshleyR@epa.gov]
Subject: SC 2012 PM2.5 MVEBs - Question
Attachments: Final 2013 FTIP Technical Appendix.pdf

Nesamani – I'm reviewing the South Coast PM2.5 plan for the 2012 standard and have a few questions about the difference between the baseline on-road emissions and the budget on-road emissions. Our SIP lead (Ashley Graham) asked Scott King about the differences (see below) but we're not clear on his explanation.

	2019			2022			2025			2028		
	VOC	NO_X	$PM_{2.5}$	VOC	NO_X	$PM_{2.5}$	VOC	NO_X	$PM_{2.5}$	VOC	NO_X	$PM_{2.5}$
Baseline On-road Emissions*	82.49	166.52	19.8326	68.19	124.92	19.5098	58.43	84.89	19.4811	52.66	76.27	19.5414
Rounded	83	167	20	69	125	20	59	85	20	53	77	20
Budget On-Road Emissions**	82.52	168.13	19.81	68.22	126.26	19.48	58.51	86.26	19.44	52.68	76.28	19.50
Motor Vehicle Emission Budget	83	169	20	69	127	20	59	87	20	53	77	20

*Source: Total on-road mobile, paved road dust, and unpaved road dust are from Appendix III, Attachment A. Road construction dust is from Appendix III, Attachment F. – Emission Inventory
** Source: Table VI-D-3

First - With regard to differences due to VMT – the differences are too large to account for updated VMT estimates. SCAG's VMT estimates change very little with each update. For example, I've reviewed SCAG's RTPs from 2016-current and the baseline emissions (from EMFAC2014) for Nox for 2019 range from 166.6 to 166.8 tpd.

I'm not sure what Scott meant by SCAG calculates emissions differently. So I looked at the details in their conformity findings for the last several years. I noticed that they included "Baseline Adjustments" for Nox and VOC for 2019, 2030 and 2040. Across all RTP/TIPs, the adjustments are fairly consistent. (see table below) The conformity analysis references a March 12, 2012 letter from ARB regarding the source of the reductions.

	2019		2030		2040	
	VOC	NOx	VOC	NOx	VOC	NOx
Baseline Reductions	7.2	1.9	1.8	0 – 0.1	0.5	0

Since these looked like off-model reductions (possibly from Carl Moyer?), I wanted to make sure that they were appropriate for use with EMFAC2014. Rongsheng could not find the 2012 letter, but sent me the attachment (see Table 29A). However, it is not clear how the numbers in that table translate to the current" Baseline Reductions" used by SCAG. Also, while the 2019 Nox Baseline Reduction is close to the difference between the Emission Inventory on-road emissions and the Motor Vehicle Emission Budget's on-road emissions, there are no real differences in the VOC

estimates – so it's hard to say if this is correct without knowing where the baseline reductions come from. I have asked SCAG for more information on this.

This review raises several questions.
1) – It is still not clear why there is a 2 tpd difference between the Nox in the on-road emissions om the plan's emission inventory and the on-road emissions in the motor vehicle emission budget? Thoughts?
2) – I'm wondering if the Baseline Reductions used by SCAG are a carry over from an earlier version of EMFAC and shouldn't still be applied? Thoughts?

Thanks so much, Karina

From: Graham, AshleyR

According to Scott, there are two possible reasons for the small differences (see table below): 1) there may have been a new RTP or amendments to the RTP between the time that the District developed the baseline inventory and when CARB ran the budgets; and/or 2) CARB doesn't consider PTO emissions as on-road but SCAG does (and SCAG provides the mobile emissions numbers to the District for the baseline inventory). Scott noted that these differences were already discussed with EPA in the context of the ozone plans, although I think the situation with the ozone plans is different because I believe CARB provided updated budgets for ozone as part of the 2018 SIP update whereas they didn't provide updated budgets for PM2.5.

So far as I can tell, there weren't any amendments to the 2016 RTP/SCS prior to the submittal of the 2016 AQMP (it looks like the 1st amendment was adopted in April 2017 where as the 2016 AQMP was adopted in March 2017). I'm not sure what the magnitude of PTO emissions is and if that could reasonably explain the difference.

One last thought is that the requirement under 93.118(e)(4)(iv) is that the MVEBs are *consistent* with the requirements for RFP and attainment. I'm not sure if the differences between the baseline and budgets (~1%) are large enough to be considered inconsistent.