

Preliminary Comments on the PA from Dr. David Peden

Introduction and Background for the Policy Assessment (Chapter 1) - Chapter 1 provides introductory information including a summary of the legislative requirements for the NAAQS, an overview of the history of the SO_x NAAQS and the decisions made in the last review, and a summary of the scope and approach for the current review.

1. Does the Panel find the introductory and background material to be clearly communicated and appropriately characterized?

This was well done and well communicated

Current Air Quality (Chapter 2) - Chapter 2 provides information on emissions (section 2.1), air monitoring methods and network (section 2.2), and current air quality (section 2.3).

2. To what extent does the Panel find this information to provide useful context for the review and to what extent is the information presented appropriately characterized and clearly communicated?

This was well done as well. The temporal displays were very helpful and the descriptions of emissions, monitoring and current air quality was good

Review of the Primary Standard (Chapter 3) - Chapter 3 summarizes the approaches for the last and current review of the primary standard for SO_x (section 3.1), presents key evidence-based (section 3.2.1) and exposure/risk-based (section 3.2.2) considerations in the review, preliminary staff conclusions (section 3.2.3), and also identifies key areas of uncertainty and data gaps (section 3.3).

3. Consistent with the established NAAQS process, and the approach for the last and current reviews, the discussions of the health effects evidence and exposure/risk information have been organized around a set of policy-relevant questions for the review. Does the Panel consider the document to provide the appropriate level of detail in addressing these policy-relevant questions?

The policy focus of these questions was very helpful and does provide a rationale framework for the discussions of the NAAQS. Reference of other relevant documents was appropriate and the detail level was appropriate.

4. The discussion of the health effects evidence (e.g., section 3.2.1) draws from the most recent information contained in the second draft ISA for SO_x and information from the previous review described in previous Air Quality Criteria Documents. a. Does the draft PA accurately reflect the key aspects of the currently available health effects evidence for SO_x as characterized in the

1 *second draft ISA and the extent to which it differs from that available at the time of the last*
2 *review? b. Does the draft PA accurately reflect key uncertainties in the currently available*
3 *health effects evidence for SOx, including with regard to concentrations eliciting effects in*
4 *people with asthma, populations at risk, and the extent to which these uncertainties may differ*
5 *from those existing at the time of the last review? c. Does the Panel find the presentation to be*
6 *technically sound, clearly communicated, and appropriately balanced?*

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8 4a: The Draft PA does accurately reflect essential elements of health effects evidence for SOx on
9 human health and asthma specifically

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11 4b: The draft PA does appropriately reflect the uncertainties in currently available health effect
12 data. There will likely be no new controlled human exposures, and various factors that have
13 never been included in these assessments (no data in severe or persons under age 12)

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15 4c: Yes

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17 5. *The discussion of the quantitative analysis of exposure and risk (section 3.2.2) draws from the*
18 *analyses described in the draft Risk and Exposure Assessment (REA). a. Does this discussion*
19 *accurately reflect the analyses contained in the draft REA, as well as associated key*
20 *uncertainties and public health implications? b. Does the Panel find the presentation to be*
21 *technically sound, clearly communicated and appropriately balanced?*

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23 5a: This portion was an accurate reflection of the REA.

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25 5b: Generally, yes. Not sure ethnic, population subset data were assessed.

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27 6. *This document has integrated health evidence from the second draft ISA and risk and exposure*
28 *information from the draft REA as it relates to reaching preliminary staff conclusions about the*
29 *adequacy of the current standard (section 3.2.3). a. Does the Panel view this integration to be*
30 *technically sound, clearly communicated, and appropriately characterized? b. Does the*
31 *document appropriately characterize the results of the draft REA, including their significance*
32 *from a public health perspective?*

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34 6a: yes

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36 6b: yes

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38 *What are the views of the Panel regarding the staff's discussion of considerations related to the*
39 *adequacy of the current standard? Does the discussion provide an appropriate and sufficient*
40 *rationale to support preliminary staff conclusions?*

41
42 The EPA staff have made a superb argument for the appropriateness of the of the current SOx

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1 standard to protect asthmatics and other populations

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3 *8. What are the views of the Panel regarding the key uncertainties and areas for additional*
4 *research and data collection that are identified in the draft PA (section 3.3)? Are there*
5 *additional areas that should be highlighted?*

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7 I found no significant deficiencies in the PA

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