

impacts associated with the daily air quality. Based on these comments, the EPA sees no basis for deviating from the approach proposed in this review. Thus, the EPA is taking final action to set an AQI value of 100 at 35 $\mu\text{g}/\text{m}^3$, 24-hour average, consistent with the final decision on the 24-hour $\text{PM}_{2.5}$ standard level (section III.F).

With respect to an AQI value of 150, this level is based upon the same health effects information that informs the selection of the level of the 24-hour standard and the AQI value of 100. The AQI value of 150 was set in the 1999 rulemaking at a level of 65 $\mu\text{g}/\text{m}^3$, 24-hour average. In considering what level to propose for an AQI value of 150, we stated the view that the health effects evidence indicates that the level of 55 $\mu\text{g}/\text{m}^3$, 24-hour average, is appropriate to use¹⁴³ in conjunction with an AQI value of 100 set at the level of 35 $\mu\text{g}/\text{m}^3$. The Agency's approach to selecting the levels at which to set the AQI values of 100 and 150 inherently recognizes that the epidemiological evidence upon which these decisions are based provides no evidence of discernible thresholds, below which effects do not occur in either sensitive groups or in the general population, at which to set these two breakpoints. Therefore, the EPA

concluded the use of a proportional adjustment would be appropriate. Commenters did not comment on this proposed approach to revising the AQI value of 150; thus, the EPA is taking final action to set an AQI value of 150 at 55 $\mu\text{g}/\text{m}^3$, 24-hour average.

Based on the air quality and health considerations discussed in section V of the proposal, the EPA concluded that it was appropriate to propose to retain the current level of 500 $\mu\text{g}/\text{m}^3$, 24-hour average, for the AQI value of 500. In addition, the EPA solicited comment on alternative levels and approaches to setting a level for the AQI value of 500, as well as supporting information and rationales for such alternative levels. The EPA also solicited any additional information, data, research or analyses that may be useful to inform a final decision on the appropriate level to set the AQI value of 500. Receiving no information with which to inform alternative approaches to setting an AQI value of 500, the EPA is taking final action to retain the current level of 500 $\mu\text{g}/\text{m}^3$, 24-hour average, for the AQI value of 500.

For the intermediate breakpoints in the AQI between the values of 150 and 500, the EPA proposed $\text{PM}_{2.5}$ concentrations that generally reflected a

linear relationship between increasing index values and increasing $\text{PM}_{2.5}$ values (77 FR 38965). The available scientific evidence of health effects related to population exposures to $\text{PM}_{2.5}$ concentrations between the level of the 24-hour standard and an AQI value of 500 suggested a continuum of effects in this range, with increasing $\text{PM}_{2.5}$ concentrations being associated with increasingly larger numbers of people likely to experience such effects. The generally linear relationship between AQI values and $\text{PM}_{2.5}$ concentrations in this range is consistent with the health evidence. This also is consistent with the Agency's practice of setting breakpoints in symmetrical fashion where health effects information does not suggest particular levels.

Table 2 below summarizes the finalized breakpoints for the $\text{PM}_{2.5}$ sub-index.¹⁴⁴ Table 2 shows the intermediate breakpoints for AQI values of 200, 300 and 400 based on a linear interpolation between the proposed levels for AQI values of 150 and 500. If a different level were to be set for an AQI value of 150 or 500, intermediate levels would be calculated based on a linear relationship between the selected levels for AQI values of 150 and 500.

TABLE 2—BREAKPOINTS FOR $\text{PM}_{2.5}$ SUB-INDEX

AQI category	Index values	Proposed breakpoints ($\mu\text{g}/\text{m}^3$, 24-hour average)
Good	0–50	0.0–(12.0)
Moderate	51–100	(12.1)–35.4
Unhealthy for Sensitive Groups	101–150	35.5–55.4
Unhealthy	151–200	55.5–150.4
Very Unhealthy	201–300	150.5–250.4
Hazardous	301–400	250.5–350.4
	401–500	350.5–500.4

In retaining the 500 level for the AQI as described above, we note that the EPA is not establishing a Significant Harm Level (SHL) for $\text{PM}_{2.5}$. The SHL is an important part of air pollution Emergency Episode Plans, which are required for certain areas by CAA section 110(a)(2)(G) and associated regulations at 40 CFR 51.150, under the Prevention of Air Pollution Emergency Episodes program. The Agency believes that air quality responses established through an Emergency Episode Plan should be developed through a collaborative process working with State and Tribal air quality, forestry and

agricultural agencies, Federal land management agencies, private land managers and the public. Therefore, if in future rulemaking the EPA proposes revisions to the Prevention of Air Pollution Emergency Episodes program, the proposal will include a SHL for $\text{PM}_{2.5}$ that is developed in collaboration with these organizations. As discussed in the 1999 Air Quality Index Reporting Rule (64 FR 42530), if a future rulemaking results in a SHL that is different from the 500 value of the AQI for $\text{PM}_{2.5}$, the AQI will be revised accordingly.

The EPA also received more general comments on AQI reporting, comments that did not pertain to setting specific breakpoints. One set of commenters (e.g., API and UARG), expressed the view that changes to the AQI are not appropriate. They noted that air quality is getting better, and in fact is better than when EPA established the AQI. These commenters stated that the proposed changes to the annual standard and the AQI would mean that the public would hear less often that air quality is good, and thereby would receive apparently inconsistent or misleading messages that air quality is

¹⁴³ We note that this level is consistent with the level recommended in the more recent EPA guidance (Harnett, 2009, Attachment B), which is in use by many State and local agencies.

¹⁴⁴ As discussed in section VII.C below, the EPA is also updating the data handling procedures for reporting the AQI and corresponding updates for

other AQI-sub-indices presented in Table 2 of appendix G of 40 CFR part 58.