

# EPA Checklist for Regional Haze SIPs Submitted Under 40 CFR 51.308

8/04/06

## **Purpose:**

This checklist has been prepared by EPA staff to use in reviewing regional haze SIPs to ensure that the SIPs have the necessary components. The checklist represents our best efforts to summarize the requirements of the regional haze rule but it is not a regulation and does not change or substitute for any legal requirements in the Clean Air Act (CAA) or the regional haze rule. Any decisions regarding the completeness of a particular SIP will be made based on the CAA and the relevant regulations. Therefore, interested parties are free to raise questions and objections to the checklist and its use in a particular situation.

## **Acronyms and Terms:**

BART is Best Available Retrofit Technology

CAA is the Clean Air Act

CAIR is Clean Air Interstate Rule

EI is Emissions Inventory

FLM is Federal Land Manager

Glidepath is the linear rate of improvement sufficient to attain natural conditions by 2064

LTS is Long Term Strategy

RAVI is Reasonably Attributable Visibility Impairment

RHR is the Regional Haze Rule

RPO is Regional Planning Organization

RPG is Reasonable Progress Goal

## **Notes:**

1. This checklist is based on Appendix V to 40 CFR Part 51, and 40 CFR 51.308, as updated by the BART Rule (70 FR 39104, July 6, 2005), and the trading rule, as proposed in 70 FR 44154, August 1, 2005. This checklist will be revised if necessary, should that be necessitated by the final version of the trading rule.
2. All boxes should either be “Y” or “N/A” or the SIP may be deficient.
3. This checklist assumes the State will not be participating in a trading program, or other alternative measure to BART. If this is not the case, then additional/alternative regulations that appear in 51.308(e)(2) and (3) apply.
4. Only the requirements from 51.308 pertaining to the *current* RH SIP submission, and not those pertaining to future revisions and/or reports required under 51.308(f), (g), and (h) (except for a SIP commitment to do them), were included.

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5. The “1999 RHR” is 64 FR 35714, July 1, 1999.
6. The “2005 BART Rule” is 70 FR 39104, July 6, 2005.
7. The “BART Guidelines” is *Appendix Y to Part 51—Guidelines for BART Determinations Under the Regional Haze Rule*, 70 FR 39104, July 6, 2005.
8. The “Tracking Guidance” is the *Guidance for Tracking Progress Under the Regional Haze Rule*, EPA-454/B-03-004, September, 2003.
9. The “Attainment Guidance” is the *Draft Guidance for Demonstrating Attainment of Air Quality Goals for PM<sub>2.5</sub> and Regional Haze*, January 2, 2001.
10. The “Natural Visibility Guidance” is the *Guidance for Estimating Natural Visibility Conditions Under the Regional Haze Rule*, EPA-454/B-03-005, September 2003.
11. The “Baseline Memo” is a memo, *2002 Base Year Emission Inventory SIP Planning: 8-Hour Ozone, PM<sub>2.5</sub> and Regional Haze Programs*, dated 11/18/2002, from Lydia Wegman to the Regional Air Directors.
12. The “draft RPG Guidance” is the *Draft Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program*, dated November 28, 2005.
13. The “Visibility Monitoring Guidance” is *Visibility Monitoring Guidance*, EPA-454/R-99-003, June 1999.
14. The “EI Guidance” is the *Emissions Inventory Guidance for Implementation of Ozone and Particulate Matter National Ambient Air Quality Standards (NAAQS) and Regional Haze Regulations*, EPA-454/R-05-001, dated August, 2005.
15. The “Interim Fire Policy” is the *Interim Air Quality Policy on Wildland and Prescribed Fires*, April 23, 1998.

\* Requirements that do not apply to States without Class I areas are denoted by an asterisk.

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Y / N or N/A	<b>SIP Submittal Checklist for Regional Haze SIPs Submitted under 40 CFR 51.308</b>			
	<b>Regulation Citation</b>	<b>Regulation Summary (<i>not verbatim</i>)</b>	<b>Location in SIP</b>	<b>References</b>
	<b>Administrative Requirements from Appendix V to Part 51</b>			
	2.1(a)	Has a letter of submittal from the governor / designee, requesting EPA approval of the SIP been received?		
	2.1(b)	Has the State provided evidence it has adopted the legally enforceable portions of the plan in the State code or body of regulations; or issued the necessary permits, orders, consent agreements in final form?		
	2.1(c)	Has the State provided evidence it has the necessary legal authority under State law to adopt and implement the plan?		
	2.1(d)	Has the official State regulation /document been signed/stamped/dated by the appropriate State official indicating that it is fully enforceable by the State?		
	2.1(e)	Has the State provided evidence it followed all of the procedural requirements of the State's laws and constitution in the adoption/issuance of the plan?		
	2.1(f)	Has the State provided evidence that public notice was given of the proposed change consistent with procedures approved by EPA, including the date of publication of such notice?		
	2.1(g)	Has the State provided a certification that public hearings(s) were held in accordance with the information provided in the public notice and the State's laws and constitution, if applicable?		

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2.1(h)	Has the State provided a compilation of public comments and the State's response thereto?		
<b>Technical Requirements from 40 CFR 51.308</b>			
(b)	Was the SIP submitted no later than December 17, 2007?		
(d)	Did the State provide a table identifying each mandatory Class I Federal area located within the State and in each mandatory Class I Federal area located outside the State affected by emissions from within the State?		§ Visibility Monitoring Guidance
* (d)(1)	Did the State establish RPGs for each Class I area that provide for an improvement in visibility for the most impaired days over the period of the SIP, and ensure no degradation in visibility for the least impaired days over the same period?		§ p. 35730 of the 1999 RHR § p. 1-6 of the Tracking Guidance § Attainment Guidance § draft RPG Guidance
* (d)(1)(i)(A)	In establishing RPGs for each Class I area, did the State consider the costs of compliance, the time necessary for compliance, the energy and non-air quality environmental impacts of compliance, and the remaining useful life of any potentially affected sources, and include a demonstration showing how these factors were taken into consideration in selecting the goal?		§ p. 35731-33 of the 1999 RHR § draft RPG Guidance
* (d)(1)(i)(B)	Did the State submit the glidepath (i.e., rate of progress needed to attain natural visibility conditions by 2064) for each Class I area?		§ p. 35727-33, 35 of the 1999 RHR § Natural Visibility Guidance § p. 39124, 39143 of the 2005 BART rule § The Baseline Memo

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*	(d)(1)(i)(B) In establishing the RPG for each Class I area, did the State calculate the uniform rate of improvement in visibility and the emission reduction measures needed to achieve it for the period covered by the SIP?		§ p. 35732 of the 1999 RHR § draft RPG Guidance
*	(d)(1)(ii) If the State establishes a RPG < the glidepath, has it demonstrated, based on the factors in (d)(1)(i)(A), the rate of progress for the SIP to attain natural conditions by 2064 is not reasonable, and its RPG is reasonable?		§ p. 35732 of the 1999 RHR
*	(d)(1)(ii) If the State establishes a RPG < the glidepath, did it provide to the public for review as part of its SIP, an assessment of the number of years it would take to attain natural conditions using its RPG?		§ p. 35732 of the 1999 RHR
	(d)(1)(iv) In developing its RPG, has the State consulted with those States that may reasonably be anticipated to cause or contribute to visibility impairment in the Class I areas?		§ p. 35735 of the 1999 RHR
	(d)(1)(iv) If the State cannot agree with another State(s) that a goal provides for reasonable progress, has the State described in its submittal the actions taken to resolve the disagreement?		§ p. 35732 of the 1999 RHR
*	(d)(1)(vi) Has the State adopted RPGs that represents at least the visibility improvement expected from implementation of other CAA programs during the applicable planning period?		§ p. 35733 of the 1999 RHR
*	(d)(2)(i) Has the State calculated baseline visibility conditions for each Class I area for the most impaired and least impaired days using 2000 to 2004 monitoring data?		§ p. 35728-30 of the 1999 RHR § Natural Visibility Guidance § Attainment Guidance § Tracking Guidance

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*	(d)(2)(i) In calculating the baseline visibility conditions, did the State estimate the average degree of visibility impairment for the most and least impaired days for each calendar year from 2000 to 2004, and then determine the average of these annual values?		
*	(d)(2)(i) If the State has Class I areas without onsite monitoring data for 2000 - 2004, did the State use the most representative available monitoring data for 2000 - 2004 to establish baseline values, in consultation with the EPA Regional Office?		§ p. 35728-29 of the 1999 RHR § Visibility Monitoring Guidance
*	(d)(2)(iii) Did the State calculate natural visibility conditions for the most impaired and least impaired days by estimating the degree of impairment based on available monitoring information and appropriate data analysis techniques?		§ p. 35764, 35729-30 of the 1999 RHR § Natural Visibility Guidance
*	(d)(2)(iv)A Did the State calculate the number of deciviews by which baseline conditions exceed natural visibility conditions for the most impaired and least impaired days for the first planning period?		§ p. 35732 of the 1999 RHR
	(d)(3) Did the State submit a LTS that addresses visibility impairment for each Class I area, inside and outside the State, which may be affected by the State's emissions?		§ p. 35734-35 of the 1999 RHR
	(d)(3) Does the LTS include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the RPGs established by States having Class I areas?		§ p. 35734-35 of the 1999 RHR

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(d)(3)(i)	In establishing its LTS, did the State consult with other State(s) to develop coordinated emission management strategies for cases in which it has emissions that are reasonably anticipated to contribute to visibility impairment in any Class I area located in those State(s)?		\$ p. 35735 of the 1999 RHR
(d)(3)(i)	In establishing its LTS, did the State consult with other State(s) to develop coordinated emission management strategies for cases in which those State(s) have emissions that are reasonably anticipated to contribute to visibility impairment in any Class I area located within the State?		
(d)(3)(ii)	In establishing its LTS, where multiple State(s) cause or contribute to impairment of the same Class I area, did the State include all measures necessary to obtain its share of the emission reductions needed to meet the RPG for the area?		\$ p. 35735 of the 1999 RHR
(d)(3)(ii)	In addressing (d)(3)(ii), above, if the State participated in a RPO, did it ensure it included all measures needed to achieve its apportionment of emission reduction obligations agreed upon through that process?		\$ p. 35735 of the 1999 RHR
(d)(3)(iii)	In establishing its LTS, did the State document the technical basis, including modeling, monitoring and emissions information, on which it is relying to determine its apportionment of emission reduction obligations necessary for achieving reasonable progress in each Class I area it affects?		\$ p. 35735 of the 1999 RHR \$ EI Guidance

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(d)(3)(iii)	In addressing (d)(3)(iii), above, did the State identify the baseline emissions inventory on which its strategies are based?		§ p. 35728 of the 1999 RHR § Baseline Memo §EI Guidance
(d)(3)(iv)	Did the State identify all anthropogenic sources of visibility impairment considered by it in developing its LTS, including consideration of major and minor stationary sources, mobile sources, and area sources?		§ p. 35735 of the 1999 RHR § EI Guidance
(d)(3)(v)(A)	In developing its LTS, did the State consider the emission reductions due to ongoing air pollution control programs, including measures to address RAVI?		§ p. 35737 of the 1999 RHR
(d)(3)(v)(B)	In developing its LTS, did the State consider measures to mitigate the impacts of construction activities?		§ p. 35737 of the 1999 RHR
(d)(3)(v)(C)	In developing its LTS, did the State consider emissions limitations and schedules for compliance to achieve the reasonable progress goal?		§ p. 35737 of the 1999 RHR
(d)(3)(v)(D)	In developing its LTS, did the State consider source retirement and replacement schedules?		§ p. 35737 of the 1999 RHR
(d)(3)(v)(E)	In developing its LTS, did the State consider smoke management techniques for agricultural and forestry management purposes, including plans as currently exist within the State for these purposes?		§ p. 35736 of the 1999 RHR § Interim Fire Policy
(d)(3)(v)(F)	In developing its LTS, did the State consider enforceability of emissions limitations and control measures?		§ p. 35737 of the 1999 RHR

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	In developing its LTS, did the State consider the anticipated net effect on visibility due to projected changes in point, area, and mobile source emissions over the period addressed by the LTS?		§ p. 35737 of the 1999 RHR
*	(d)(4) Did the State submit with the SIP a monitoring strategy for measuring, characterizing, and reporting of regional haze visibility impairment representative of all Class I areas within the State?		§ p. 35744 of the 1999 RHR § Attainment Guidance § Tracking Guidance § Visibility Monitoring Guidance
*	(d)(4) Did the State coordinate the above monitoring strategy with the RAVI monitoring strategy in § 51.305?		§ p. 35717, 37, of the 1999 RHR
*	(d)(4)(i) Did the SIP provide for the establishment of any additional monitoring sites or equipment needed to assess whether RPGs to address regional haze for all Class I areas within the State are being achieved?		§ p. 35744 of the 1999 RHR § Attainment Guidance § Tracking Guidance § Visibility Monitoring Guidance
*	(d)(4)(ii) Did the SIP establish procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at Class I areas both within and outside the State?		§ p. 35744 of the 1999 RHR § Attainment Guidance § Tracking Guidance § Visibility Monitoring Guidance
	(d)(4)(iii) For a State with no Class I areas, did the SIP establish procedures by which monitoring data and other information are used in determining the contribution of emissions from within the State to regional haze visibility impairment at Class I areas in other States?		§ p. 35744 of the 1999 RHR § Attainment Guidance § Tracking Guidance § Visibility Monitoring Guidance

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*	(d)(4)(iv)	Did the SIP provide for the reporting of all visibility monitoring data to EPA at least annually for each Class I area in the State?	§ p. 35744-45 of the 1999 RHR § Visibility Monitoring Guidance
	(d)(4)(v)	Did the SIP include a statewide EI of pollutants that are reasonably anticipated to cause or contribute to visibility impairment in any Class I area?	§ Attainment Guidance
	(d)(4)(v)	Did the EI include emissions for a baseline year, emissions for the most recent year for which data are available, and estimates of future projected emissions?	§ p. 35728-29 of the 1999 RHR § Visibility Monitoring Guidance § Attainment Guidance
	(d)(4)(v)	Did the SIP include a commitment to update the EI periodically?	§ EI Guidance
	(d)(4)(vi)	Did the SIP include other elements necessary to assess and report on visibility (e.g., reporting, recordkeeping, etc.)?	
	(e)	Did the State submit a SIP containing emission limitations representing BART, and schedules for compliance with BART, for each BART eligible source that may reasonably be anticipated to cause or contribute to any impairment of visibility in any Class I area?	§ BART Guidelines
	(e)(1)(i)	Did the SIP include a list of all BART-eligible sources within the State with supporting documentation?	§ BART Guidelines

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(e)(1)(ii)	Did the SIP include a determination of BART for each BART-eligible source in the State that emits any air pollutant which may reasonably be anticipated to cause or contribute to any impairment of visibility in any Class I area?		§ BART Guidelines
(e)(1)(ii)(A)	Did the SIP include a determination of BART based on an analysis of the best system of continuous emission control technology available, and associated emission reductions achievable for each source subject to BART within the State?		§ BART Guidelines
(e)(1)(ii)(A)	In the BART analysis, did the State take into consideration the technology available, the costs of compliance, the energy and nonair quality environmental impacts of compliance, any pollution control equipment in use at the source, the remaining useful life of the source, and the degree of improvement in visibility which may reasonably be anticipated to result from the use of such technology?		§ BART Guidelines § p 39107, 127 of the 2005 BART Rule
(e)(1)(ii)(B)	Did the State determine BART for fossil-fuel fired power plants > 750 megawatts pursuant to the BART guidelines?		§ BART Guidelines § p 39108 of the 2005 BART Rule

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(e)(1)(iii)	If the State has determined that technological or economic limitations on the applicability of measurement methodology to a particular source would make the imposition of an emission standard infeasible, has the State prescribed a design, equipment, work practice, or other operational standard, to require the application of BART, as an alternative to a BART emission standard?		§ BART Guidelines
(e)(1)(iii)	If the State adopted a design, equipment, work practice, or other operational standard alternative to BART, did the State, to the degree possible, set forth the emission reduction to be achieved, and provide for compliance by means which achieve equivalent results?		§ BART Guidelines § p 39172 of the 2005 BART Rule
(e)(1)(iv)	Has the State required each source subject to BART to install and operate BART as expeditiously as practicable, but no later than 5 years after approval of the SIP?		§ p 39158, 70, 72 of the 2005 BART Rule
(e)(1)(v)	Has the State required each BART source to maintain the required control equipment and establish procedures to ensure such equipment is properly operated and maintained?		§ p 39172 of the 2005 BART Rule
(e)(4)	If the State is using its participation in CAIR to exempt BART-eligible EGU's from BART, has it included supporting documentation?		§ p 39136-42 of the 2005 BART Rule
(e)(4)	If the State is using its participation in CAIR to exempt BART-eligible EGU's from BART, did it include provisions for a geographic enhancement to the program to address RAVI BART under § 51.302(c)?		§ p 39143, 57 of the 2005 BART Rule

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(e)(6)	If a facility is seeking an exemption under §51.303(a)(2)–(h) for any of its BART-eligible emission units, has the appropriate documentation been included in the SIP?		§ §51.303(a)(2)–(h)
(f)	Has the State included a commitment it will submit its SIP revision, as specified in 51.308(f), <i>by July 31, 2018</i> , and every ten years thereafter?		§p 35745 of the 1999 RHR § Section 110(a)(2)(H) of the CAA
(g)	Has the State included a commitment it will submit its SIP report, as specified in 51.308(g), <i>by an exact date named</i> , that is within 5 years from submittal of the initial SIP?		§p 35745 of the 1999 RHR § Section 110(a)(2)(F) of the CAA
(h)	Has the State included a commitment it will, at the time of the submission of the SIP report, also submit a determination of the adequacy of its existing Regional Haze SIP revision, as specified in 51.308(h)?		§p 35745 of the 1999 RHR § Section 110(a)(2)(F) of the CAA
(i)(1)(i)-(ii)	Did the State, by November 29, 1999, identify in writing to the FLMs the title of the official to which any FLM can submit recommendations on the implementation 51.308 including, (i) identification of impairment of visibility in any Class I area(s); and (ii) identification of elements for inclusion in the visibility monitoring strategy required by §51.305 and 51.308?		§ p. 35747-48 of the 1999 RHR
(i)(2)	Did the State provide the FLM an opportunity for consultation, in person and at least 60 days prior to holding any public hearing on the SIP (or its revision)?		§ p. 35747-48 of the 1999 RHR

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(i)(2)(i)-(ii)	Did the above consultation include the opportunity for the FLMs to discuss their: (i) assessment of impairment of visibility in any Class I area; and, (ii) recommendations on the development of the RPG and on the development and implementation of strategies to address visibility impairment?		\$ p. 35747-48 of the 1999 RHR
(i)(3)	Did the State include in the SIP a description of how it addressed any comments provided by the FLMs?		\$ p. 35747-48 of the 1999 RHR
(i)(4)	Does the SIP provide procedures for continuing consultation between the State and FLMs on the implementation of 51.308, including development and review of SIP revisions and 5-year progress reports, and on the implementation of other programs having the potential to contribute to impairment of visibility in Class I areas?		\$ p. 35747-48 of the 1999 RHR