

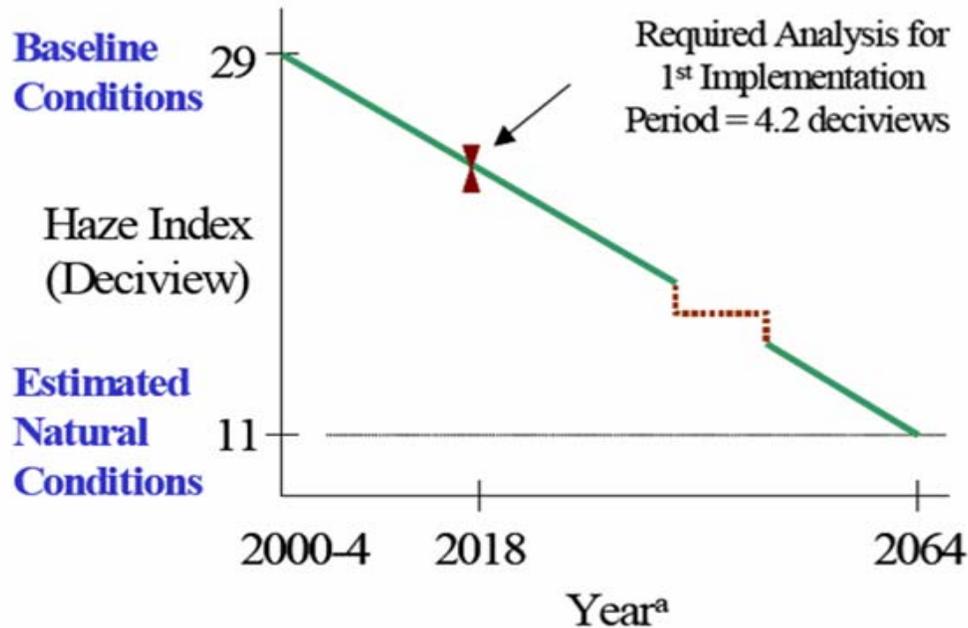
## Louisiana's Regional Haze Preliminary Plan (Nov 2, 2006)

The Air Quality Assessment Division is now focusing on Regional Haze planning activities in preparation to meet the requirements of the 1999 Regional Haze Rule amended on July 6, 2005 (70 FR 39104-39172).

<http://a257.g.akamaitech.net/7/257/2422/01jan20051800/edocket.access.gpo.gov/2005/pdf/05-12526.pdf> For Louisiana's Class I area, Breton National Wildlife Refuge, and for surrounding Class 1 areas in other states, the plan will address human and natural sources of haze, document the visibility conditions, and recommend the appropriate strategies to meet the long-term visibility goals. The way in which Louisiana will comply with the Regional Haze regulations is develop and implement a State Implementation Plan (SIP). The first planning period for the SIP extends to 2018. At that time, a revised SIP, with new reasonable progress goals is required for the next 10-year period. A periodic report on progress is due every five years. The process continues over time and EPA estimates the program will continue through 2064. There are several separate requirements to the Regional Haze (RH) State Implementation Plan (SIP): among them are Reasonable Progress and Best Achievable Retrofit Technology (BART).

### Reasonable Progress:

1. Louisiana DEQ will rely on the Central Regional Air Planning Association (CenRAP) for much of the technical work to be included in the Regional Haze (RH) State Implementation Plan (SIP), examples include: air modeling, SIP template, air emissions inventory, regional strategies to reduce visibility impairing pollutants (VIPs). CenRAP is a planning organization consisting of nine (9) states from Texas and Louisiana through the center of the US to Minnesota. The website address is <http://www.cenrap.org/>.
2. CenRAP's 2018 year modeling using CMAQ, a computerized air model, indicates that Louisiana's Class 1 Area's visibility is positioned just above the reasonable progress visibility glide slope. The RH rule requires states to develop rules to reduce VIPs so that Class 1 areas will have the same visibility as that of the natural visibility conditions in the year 2064. The year 2018 is a milestone toward that objective. The figure below is for illustrative purposes only and does not depict the Breton area's data.



**Figure 1-1** Example of method for determining mandatory Federal Class I area rate of progress to be analyzed in SIP development process. (<sup>a</sup> HI values for 2004 are based on 2000-2004 data, etc.)

3. Modeling projects estimate that only 81% of the VIP reductions needed to demonstrate that the Breton Class 1 area is on the reasonable progress glide slope will be attained in current and future federal programs without additional reductions in Louisiana. The modeling analysis used two light extinction algorithms, one existing and one new. Breton's estimated visibility projection is a little closer to the reasonable progress glide slope when the new algorithm is used; therefore, DEQ plans to use the new light extinction algorithm. The visibility impacts on Class 1 areas in other states from emissions from Louisiana's facilities will also be examined.
3. A CenRAP monitoring analysis indicates that reductions in sulfate emissions will improve visibility at Breton more than reductions in nitrate or particulate matter (PM) emissions. DEQ plans to emphasize sulfate emission reductions in the SIP. For the other visibility impairing pollutants, ammonia and VOC, DEQ, with the assistance of CenRAP analyses, intends to demonstrate that ammonia and VOC emission reductions do not improve visibility as well at Breton as does sulfate emissions reductions.
4. As part of reasonable progress, DEQ will evaluate the need for SO<sub>2</sub> emission reductions from facilities that are not subject to the Clean Air Interstate Rule.

#### BART

1. The BART provisions are a part of the overall plan that focuses on reducing emissions from large sources that, due to age, were exempted from other control

requirements in the Clean Air Act. The BART rule requires the installation of BART on emission sources that fit specific criteria and “may reasonably be anticipated to cause or contribute” to visibility impairment in any Class I area (generally national parks and wilderness areas). An emissions source is considered eligible for BART if it:

- > Falls into one of 26 listed categories
- > Has the potential to emit at least 250 tons per year of any visibility-impairing pollutant (primarily NO<sub>x</sub>, SO<sub>2</sub>, or PM); and
- > Existed on August 7, 1977, yet was not in operation before August 7, 1962.

However, the BART provisions do not cover all sources that may cause or contribute to visibility impairment in any Class I area.

2. An initial BART survey was completed in November 2002.
3. Due to the impact of Hurricanes Katrina and Rita to facilities in Louisiana and the number of facilities that did not respond to the initial survey, DEQ initiated a another BART Survey this summer, (2006). Those facilities not responding to the survey were contacted by phone. All surveys have now been returned or DEQ has verified the facility does not exist. It appears that there are about the same number of BART-eligible sources, but .the differences between the two surveys is being examined.
3. The initial list of BART-eligible sources was noticed in the LA Register (32 LR 509, March 2006). <http://www.doa.state.la.us/osr/reg/0603/0603POT.pdf>
4. The revised list was noticed in the LA Register (32 LR 2000, October 2006). <http://www.doa.louisiana.gov/osr/reg/0610/0610pot.pdf>
5. The state is performing CALPUFF modeling to screen the BART-eligible facilities in Louisiana. A modified option 2, as described in the July 6, 2005 BART guidelines, is being used (link is listed above). A description of the procedure follows:
  - i. Instead of creating a model facility with 500 tons of VIPs, 50 kms from the nearest Class 1 area, DEQ will model an actual facility. The facility will have parameters as close as possible to those stated above..
  - ii. If the screening model indicates no visibility impairment (less than 0.5 deciviews) then all facilities further away with less VIP emissions will be removed from the BART-eligible list. The next facility with more than 500 tons of VIPs will be screened until all facilities have either been removed or screened.
  - iii. DEQ will notice the list of BART sources that were not removed during the screening procedure.

- iv. DEQ plans on completing the BART analysis, not industry. The BART analysis will determine possible cost-effective controls that can be retro-fitted to BART sources.
  - v. DEQ has not determined (if there are BART sources) if a BART rule or compliance orders will be used to require the retro-fit of units.
6. Should BART-eligible facilities inquire, they are informed that they may submit screening or refined modeling to demonstrate no visibility impact at any Class 1 area. They must follow the CenRAP modeling protocol found on the CenRAP website and contact our modeler prior to any modeling. This modeling must be completed and submitted to DEQ by March 31, 2007. DEQ will use 0.5 deciview as the indication of visibility impact. If visibility impact is not demonstrated then that facility is removed from the BART-eligible list. Note: Removal from the BART-eligible list does not exempt facilities from the Reasonable Progress requirements if any are developed.