# III.K.6 BEST AVAILABLE RETROFIT TECHNOLOGY CONTROL PROGRAM (BART)

EPA released the Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations; Final Rule, on July 6, 2005. The rule set out how states are to address the visibility impacts of certain stationary source (source) categories on federally designated Class I areas and to establish emission limits for sources. ADEC followed the federal BART rule and conducted an extensive BART process. This section provides an overview of ADEC's regulation and public process, followed by a review of the process and determination for each BART-eligible facility. It is important to note that the BART sources started following the 18 AAC 260 regulations in advance (beginning in May 2007) and adhered to the regulations prior to their promulgation in December 2007. One facility completed the BART process prior to the regulations being in effect and an additional initially identified source did not have to complete the process at all.

## A. Alaska BART Regulations Overview and Public Process

#### 1. Public Process for BART Determinations

An essential element of the BART process is an open public examination for the BART determinations for the affected sources to ensure that the process protects the visibility of Class I areas based on available scientific analysis.

This public process included identification of BART eligible sources and units; WRAP modeling to determine which identified sources were subject to BART; inclusion of regulations that allowed sources to apply for an enforceable Owner Requested Limit (ORL); and regulations requiring BART subject sources to analyze control technologies to enable ADEC to determine final enforceable emission limits and compliance.

To ensure that the BART process was clearly followed by sources, the BART guidelines were promulgated in Alaska Regulation 18 AAC 50.260. These regulations established the procedures sources would need to follow. Sources determined to be subject to BART were therefore required to implement emission controls unless they could verify through the process delineated in 18 AAC 50.260 that its emission units were not subject to BART.

## 2. BART Process in Regulations: 18A AAC 50.260

In April 2007, ADEC proposed regulations to adopt the federal BART rules into 18 AAC 50.260 to establish the process and specific steps for the BART eligible sources to follow to provide the analysis necessary for ADEC to make BART determinations. ADEC's regulations adopting the federal BART rules were promulgated on December 30, 2007. Those regulations clearly outlined the BART process, with required elements addressed in the regulation subsections summarized below.

In 18 AAC 50.260(a), ADEC adopts the federal BART guidelines and some revised definitions from 40 C.F.R. 51.301 applicable to the BART process.

18 AAC 50.260(b) specifies that sources subject to BART be identified in accordance with Section III of the BART guideline and sets the date by which ADEC will notify subject sources of their status.

18 AAC 50.260(c) establishes the procedures by which a source can request an exemption from BART by submitting a visibility impact analysis showing that the source is not reasonably anticipated to cause or contribute to any impairment of visibility in a Class I area. 18 AAC 50.260(c) also provides the procedure by which, if a source is denied an exemption, it can apply for an ORL under 18 AAC 50.225 that limits emissions to a level below which the source is not reasonably anticipated to cause or contribute to any impairment of visibility in a Class I area.

18 AAC 50.260(d)-(*l*) establish the process that sources that did not request or receive an exemption or an ORL must undertake to conduct control technology visibility impact analysis modeling.

- Subsection (d) establishes the procedure for the submittal and approval of a BART assessment modeling protocol.
- Subsection (e) establishes the timeline for submittal of an analysis that is consistent with Section IV of the BART guidelines.
- Subsection (f) identifies the pollutants of concern.
- Subsection (g) establishes that if an owner or operator applies the most stringent controls available that are consistent with the analysis conducted under (e), they will not be required to conduct a visibility impact analysis.
- Subsection (h) addresses the requirements that the visibility impact analysis must meet.
- Subsection (i) allows ADEC to request any additional information needed to complete the review of the analysis.
- Subsection (j) establishes the method ADEC will use to make a preliminary BART determination.
- Subsection (k) sets out the public notice procedures for a preliminary BART determination.
- Subsection (l) establishes how a final BART determination will be made after the public notice period.

18 AAC 50.260(m) establishes how a final BART determination may be appealed.

18 AAC 50.260(n) establishes the deadline by which a source must implement a final BART determination.

18 AAC 50.260(o) requires the owner or operator of a source required to install control technology to maintain the equipment and conduct monitoring, recordkeeping, and reporting in accordance with the final BART determination.

18 AAC 50.260(p) sets out how ADEC work on BART determinations would be billed.

18 AAC 50.260(q) sets out the definitions used in the section that are not found in 18 AAC 50.990.

## 3. Identification of BART-Eligible Sources

ADEC conducted a preliminary review of Title V permits to identify sources that could potentially be eligible for BART under the federal rule. ADEC then worked in conjunction with WRAP to identify BART eligible sources from this preliminary BART source list. WRAP contracted with Eastern Research Group, Inc. (ERG) to determine BART eligibility of the sources from the federal rule criteria based on age of emission units, size of source emissions, and the CAA list of stationary source categories. ERG produced its report in April 2005, which found that the following seven sources were determined to be eligible for BART:

- Chugach Electric, Beluga River Power Plant;
- Alyeska Pipeline Service Company, Valdez Marine Terminal (Alyeska);
- Tesoro, Kenai Refinery;
- Anchorage Municipal Light and Power, George Sullivan Plant 2;
- ConocoPhillips Alaska Inc., Kenai LNG Plant (CPAI);
- Agrium, Chemical-Urea Plant; and
- Golden Valley Electric Association, Healy Power Plant (GVEA).

## 4. Identification of BART Eligible Emission Units

ADEC conducted three workshops with the seven BART-eligible sources from January to March 2007. In the workshops, ADEC presented the federal BART Rule, explained what the rule would mean for the sources, and explained how it was determined which sources had BART eligible emission units and would be subject to BART. As part of this process, ADEC also established BART determination and compliance regulations.

In the first workshop, there were concerns from sources that the WRAP list of BART eligible emission units included units that should not be BART eligible. ADEC further examined the Title V permits of the seven sources to establish emission unit lists for each source that was BART eligible. Based on the analysis, ADEC contacted the sources in April 2007, with the list of emission units that were considered BART eligible. The facilities provided additional information on the emission units to ADEC. After review and analysis by ADEC and EPA of

the additional information, a final list of BART eligible emission units was established. Sources were notified in May 2007 of the final list of eligible emission units. One source, Chugach Electric Association, Beluga River Power Plant was determined to not be BART eligible due to the replacement of the BART-eligible emission units with ones that were not BART eligible (Documentation is provided in Appendix III.K.6.). The remaining six sources listed above were determined to have BART eligible emission units and followed 18 AAC 50.260.

## a. Preliminary Determination of Which BART-Eligible Sources are Subject to BART

Under 18 AAC 50.260 and the BART guidelines, BART status is determined by conducting a visibility impact analysis using emissions from the BART eligible emission units (at the identified source) to determine if they impact visibility at a Class I area. ADEC provided the results of WRAP and ERG's research and known emission rates to WRAP in 2005. WRAP conducted preliminary visibility impact analysis modeling to determine which sources could be reasonable anticipated to be causing or contributing to visibility impairment at two Class I areas in Alaska: Denali National Park and Tuxedni National Wildlife Refuge.

WRAP's preliminary modeling indicated that the seven facilities initially identified as BART-eligible sources could be reasonably anticipated to cause or contribute to visibility impacts at Denali, Tuxedni, or both. Based on the visibility impact modeling, all seven sources were determined to be subject to BART. A 0.5 deciview threshold was used to determine if a source was causing or contributing to visibility impairment.

#### b. Analysis of Visibility Impacts from Subject to BART Sources

The preliminary visibility impact modeling was conducted using potential to emit (PTE) emission data, rather than a more refined data set based on actual emission rate data that were available. As a result, the facilities were concerned that the WRAP modeling results showing that they all caused or contributed to visibility impairment at either or both of the Class I areas might not be accurate. ADEC reviewed the WRAP modeling data set methodology to ensure accuracy and provided more precise emission data for a revised impact modeling assessment.

A second visible impact modeling review of the data sets was conducted in conjunction with the FLMs of the federal agencies responsible for the Class I area, EPA staff, the sources, and their consultants. All parties agreed to develop a refined meteorological data set and the use of actual emission rates. Improvements to the meteorological data set and modeling protocols included an additional three-year meteorological data set (MM5). Additionally, the sources, ADEC, EPA, and the FLMs worked together to develop a more detailed CALMET modeling protocol using the additional meteorological data. The sources also used actual emission levels when they conducted the additional modeling.

A description of the outcome of the revised modeling for each facility is presented below. Generally, the use of the refined meteorology led to lower visibility impacts.

#### **B. BART Determination Process**

## 1. Chugach Electric Association, Beluga River Power Plant

Under the BART guidelines and 18 AAC 50.260(b), Chugach Electric, Beluga River Power Plant (Chugach) was not a stationary source that was BART eligible. Chugach was determined to not be BART eligible due to the replacement of the BART-eligible emission units with ones that were not BART eligible.

In April 2007, ADEC sent a letter to Chugach officials regarding the status of its BART eligible emission units. Chugach responded in April 2007 with information that the BART-eligible emission units had been replaced and the plant had become a "steam electric plant" after the BART timeframe. EPA concurred with ADEC on the reclassification of the source as having occurred after the BART timeframe.

DEC notified Chugach on May 7, 2007, that the facility was not subject to the BART Rule and would not need to do any further work relating to the rule (see correspondence in Appendix III.K.6).

## 2. Alyeska Pipeline Service Company, Valdez Marine Terminal

DEC determined that Alyeska Pipeline Service Company, Valdez Marine Terminal (Alyeska) met the requirements to be exempted from BART under 18 AAC 50.260(c)(4).

Alyeska participated in the extensive efforts in the spring and summer of 2007 to develop the MM5 data set which could be used to run more refined modeling analyses.

In accordance with the notification requirements in 18 AAC 50.260(b), ADEC notified Alyeska on December 28, 2007, that the facility was a BART eligible facility and would need to comply with 18 AAC 50.260. On July 13, 2007, Alyeska submitted to ADEC its draft Assessment of Potential Visibility Impacts in compliance with a request for exemption from BART under 18 AAC 50.260(c)(4). ADEC reviewed the submittal and requested some revisions to the analysis in October 2007. The revised analysis report was submitted on November 7, 2007. ADEC reviewed the revised modeling analysis and concluded that it showed that Alyeska did not cause or contribute to visibility impairment at either Tuxedni or Denali at or above 0.5 deciview.

ADEC notified the company of its BART exempt status on November 23, 2007 (see correspondence in Appendix III.K.6).

## 3. Tesoro, Kenai Refinery

DEC determined that Tesoro, Kenai Refinery (Tesoro) met the requirements to be exempted from BART under 18 AAC 50.260(c)(4).

Tesoro participated in the extensive efforts in the spring and summer of 2007 to develop the MM5 data set that could be used to run more refined modeling analyses. Tesoro also

participated in the development of the revised CALMET modeling protocol, which it then used to run additional modeling.

In accordance with the notification requirements in 18 AAC 50.260(b), ADEC notified Tesoro on December 28, 2007, that the facility was a BART eligible facility and would need to comply with 18 AAC 50.260. Tesoro submitted its modeling protocol to ADEC on January 22, 2008, and submitted additional information on January 25, 2008. ADEC reviewed the protocol, and it was approved on April 17, 2008.

Tesoro completed its modeling analysis and submitted the data in compliance with a request for exemption from BART under 18 AAC 50.260(c)(4) on May 16, 2008. ADEC contracted the review of the modeling analysis on July 1, 2008. The review and recommendation from the contractor was completed on August 12, 2008. ADEC reviewed the report and concluded that Tesoro's Kenai Refinery did not cause or contribute to visibility impairment at either Tuxedni or Denali at or above 0.5 deciview.

DEC notified the company of its BART exempt status on August 18, 2008 (see correspondence in Appendix III.K.6).

## 4. Anchorage Municipal Light & Power, Sullivan Plant

DEC determined that Anchorage Municipal Light & Power (Anchorage MLP) met the requirements to be exempted from BART under 18 AAC 50.260(c)(4).

Anchorage MLP participated in the extensive efforts in the spring and summer of 2007 to develop the MM5 data set which could be used to run more refined modeling analyses. Anchorage MLP also participated in the development of the revised CALMET modeling protocol, which it then used to run additional modeling.

In accordance with the notification requirements in 18 AAC 50.260(b), ADEC notified Anchorage MLP on December 28, 2007, that the facility was a BART eligible facility and would need to comply with 18 AAC 50.260. Anchorage MLP submitted its modeling protocol to ADEC on October 12, 2007. ADEC reviewed the protocol, and it was approved on January 8, 2008.

Anchorage MLP completed its modeling analysis and submitted the data in compliance with a request for exemption from BART under 18 AAC 50.260(c)(4) on March 10, 2008, and submitted additional information on March 22, 2008. ADEC contracted the review of the modeling analysis on July 1, 2008. The contractor found problems with the exemption modeling, and ADEC requested additional information from Anchorage MLP on August 7, 2008. The additional information was provided on August 27, 2008. The review and recommendation from the contractor was completed on October 2, 2008. ADEC reviewed the report and concluded that Anchorage MLP's Sullivan Plant did not cause or contribute to visibility impairment at either Tuxedni or Denali at or above 0.5 deciview.

DEC notified the company of its BART exempt status on October 3, 2008 (see correspondence in Appendix III.K.6).

## 5. ConocoPhillips Alaska, Inc. Kenai LNG Plant

ConocoPhillips Alaska, Inc. Kenai LNG Plant (CPAI) signed a Compliance Order By Consent (COBC) with ADEC. The COBC limits the hours of operation of the BART eligible units and requires the monitoring and recording of emissions from them to ensure NOx emissions remain at or below a maximum daily rate of 5,467 lbs.

CPAI contributed to the efforts in the spring and summer of 2007 to develop the MM5 data set which could be used to run more refined modeling analyses. CPAI also contributed to the development of the revised CALMET modeling protocol, which it then used to run additional modeling. However, from April 3, 2007, on, CPAI has disputed that the Kenai LNG Plant is a "fuel conversion plant" as defined in the Clean Air Act (CAA) and therefore holds that it should not be a BART-subject source. As a result of the position that the Kenai LNG Plant should not be defined as a "fuel conversion plant," CPAI submitted nearly all of its requests and applications under protest. ADEC and EPA conferred and agreed that, according to federal guidance, the Kenai LNG Plant is a fuel conversion plant and is therefore subject to BART (see EPA letter of November 14, 2007, provided in Appendix III.K.6). CPAI continues to maintain that it is not a "fuel conversion plant."

In accordance with the notification requirements in 18 AAC 50.260(b), ADEC notified CPAI on January 4, 2008, that the facility was a BART eligible facility and would need to comply with 18 AAC 50.260. CPAI submitted its modeling protocol to ADEC on February 1, 2008. ADEC reviewed the protocol, and it was approved on February 28, 2008.

CPAI completed their modeling analysis and submitted the data in compliance with a request for exemption from BART under 18 AAC 50.260(c)(4) on April 25, 2008. ADEC reviewed the analysis and denied the exemption request because the analysis showed that the maximum 24-hour change in visibility in at least one Class I area was greater than the 0.5 deciview threshold.

On May 14, 2008, ADEC notified CPAI of the denial of the exemption and of its option under 18 AAC 50.260(c)(5) to submit either a BART control analysis or an application for an ORL in accordance with 18 AAC 50.225.

CPAI submitted an application for an ORL on June 18, 2008. The required public notice was published on August 26, 2008. The public notice and public comment period were suspended on September 19, 2008, when CPAI concluded that it would be unable to meet the conditions of the ORL and requested that ADEC suspend the notice so that CPAI and ADEC could discuss establishing an appropriate schedule for reducing emissions. CPAI submitted a revised ORL application on November 17, 2008, along with revised modeling analysis. The ORL was publicly noticed on January 15, 2009, and the public notice was extended on both February 16, 2009, and March 2, 2009. Upon the conclusion of the public comment period on March 23, 2009, ADEC received comments solely from CPAI, on March 23, 2009. CPAI stated that it still

would be unable to comply with the schedule established in the ORL. It was determined that ADEC and CPAI would be unable to reach a satisfactory conclusion for issuing an ORL.

Prior to the end of the public comment period, ADEC and CPAI had begun discussing whether a COBC would be a more logical resolution to ensuring emission reductions from the Kenai LNG Plant given CPAI's position that it is not a "fuel conversion plant" and ADEC's desire to meet the requirements of the BART Rule. CPAI agreed to provide its control technology analysis to ADEC so that all options could be evaluated, including an ORL and the reductions that would result from a COBC.

DEC contracted to have the analysis reviewed and evaluated to determine whether the reductions that would be achieved by the proposed ORL would be at least equal to those that could be reasonably achieved by any of the other control options. The Department of Law (DOL), ADEC, and CPAI worked together to write a COBC that ensures that after December 31, 2013, the emissions from the identified BART eligible units at the Kenai LNG Plant will be limited to a level that would keep the plant from causing or contributing to visibility impairment in at least one Class I area at equal to or greater than the 0.5 deciview threshold.

The COBC was signed by all concerned parties and became effective on August 7, 2009 (see correspondence in Appendix III.K.6).

# 6. Agrium, Chem-Urea Plant

Under 18 AAC 50.260(e)-(*l*), Agrium, Chem-Urea Plant (Agrium) will have a zero emission limit for its BART eligible units.

Agrium participated in the extensive efforts in the spring and summer of 2007 to develop the MM5 data set which could be used to run more refined modeling analyses. Agrium also participated in the development of the revised CALMET modeling protocol, which they then used to run additional modeling.

In accordance with the notification requirements in 18 AAC 50.260(b), ADEC notified Agrium on December 28, 2007, that the facility was a BART eligible facility and would need to comply with 18 AAC 50.260. Agrium submitted its modeling protocol to ADEC on January 29, 2008, and submitted additional requested information on March 11, 2008. ADEC reviewed the protocol, and it was conditionally approved on April 18, 2008, with conditions requiring that the protocol be adjusted before running the model and analysis.

Agrium completed its modeling analysis and submitted the data in support of the requirement to submit control technology visibility impact analysis modeling under 18 AAC 50.260(d)-(e) on July 28, 2008. ADEC contracted the review of the modeling analysis on September 2, 2008. The contractor reviewed the analysis and asked that ADEC request additional information from Agrium on September 19, 2008. The additional information was received on October 9, 2008. However, because the plant was not operating and it was unknown when it might reopen, full control technology data was not available. Using the available data and analysis, the contractor provided a report on November 25, 2008. It was recommended at that time that it be determined

that the current controls would constitute BART and if the plant reopened in the future and reactivated BART-eligible units, a full BART Control Analysis would be done at that time. ADEC was unable to public notice the decision in late 2008 and when it prepared to public notice the preliminary BART determination in 2009, consultation with EPA revealed that the proposed determination would not be acceptable under the federal BART rules and that an alternative would have to be selected. A suggested alternative was to set the BART emission limits at zero and incorporate them into a future Title V permit. However, Agrium was in the process of having its Title V permit renewed and would be unable to operate any of the BART units after the BART deadline, even with a Title V permit, if that was the determination.

Extensive consultation among ADEC, EPA, and Agrium about alternatives resulted in Agrium notifying that ADEC that it would be requesting the suspension of the renewal of its Title V permit as well as the termination of its current Title V permit, as soon as permitting of an associated facility was complete. If Agrium later decides to reopen the Chem-Urea Plant, it will pursue applying for new air permits at that time.

Application for new air permits would require that all units to be in use at the facility be included in the PSD application process. As a result, all BART-eligible units at the facility would be reclassified as PSD units and therefore would not be considered BART units. The preliminary BART determination for Agrium was public noticed on August 17, 2009. That determination stated that Agrium will have a zero emission limit for its BART eligible units and will pursue new air permits if and when it plans to restart its facility. The public comment period ended on September 17, 2009. ADEC received comments supportive of the proposed determination from the U.S. Fish and Wildlife Service. The final determination was not changed from the preliminary determination. Therefore, Agrium will have a zero emission limit for its BART eligible units and will pursue new air permits if it plans to restart its facility.

In accordance with 18 AAC 50.260(*l*), ADEC notified Agrium and other concerned parties of the final BART determination on October 6, 2009 (See correspondence in Appendix III.K.6).

#### 7. Golden Valley Electric Association, Healy Power Plant (GVEA)

ADEC has determined that the BART emission limits for GVEA will be 0.20 lb/MMBtu for NOx, the current limit of 0.30 lb/MMBtu for SO<sub>2</sub>, and the current limit of 0.015 lb/MMBtu for PM.

In accordance with the notification requirements in 18 AAC 50.260(b), ADEC notified GVEA on December 28, 2007, that the facility was a BART eligible facility and would need to comply with 18 AAC 50.260. The BART eligible units at the source consist of one primary power generating unit, the 25-MW Foster-Wheeler Unit No. 1 (Healy 1), and one Cleaver Brooks standby building heater. GVEA undertook a full assessment of control options under 18 AAC 50.260(d)-(e) and used the WRAP modeling protocol. GVEA submitted its BART control analysis report on July 28, 2008.

ADEC contracted with Enviroplan to conduct a technical review of the GVEA BART control analysis on September 3, 2008. The contractor reviewed the analysis, and additional information

was requested from GVEA. GVEA submitted supplemental information on October 3, 2008; November 11, 2008; and December 10, 2008. The July 2008 GVEA analysis report was revised and resubmitted by GVEA on January 2, 2009, as a revised final BART control analysis report. GVEA provided additional relevant supplemental information on March 18, 24, and 30, 2009; and June 19, 2009.

Enviroplan recommended preliminary BART determinations for each BART-eligible source at this facility, consistent with 18 AAC 50.260(j). These proposed determinations were described in an April 27, 2009 "Findings" report, which concluded that the GVEA BART control analysis complied with 18 AAC 50.260(e) through (h); and it proposed BART for Healy 1 as the existing dry sorbent injection system (SO<sub>2</sub>); the addition of a SCR system (NO<sub>x</sub>); and the existing reverse gas baghouse system (PM<sub>10</sub>). For Auxiliary Boiler #1, the existing configuration, which is no air pollution control systems, was determined as BART.

ADEC reviewed, accepted, and public noticed Enviroplan's recommended preliminary BART determinations, as described in its April 27 Findings report. In accordance with 18 AAC 50.260, ADEC public noticed a proposed preliminary April 27, 2009 BART determination findings report for Golden Valley Electric Association's (GVEA) Healy Power Plant on May 12, 2009. ADEC accepted public comments from May 12, 2009 until June 15, 2009. Comments were received from the following:

- Frank Abegg, Fairbanks;
- Alaska State Representative Mike Kelly, Fairbanks;
- Don Shepherd, National Park Service;
- Sanjay Narayan, Sierra Club; and
- Kristen DuBois, GVEA.

In response to the public comments, the final BART determination differed from the preliminary determination. It found that BART for Healy 1 is the existing dry sorbent injection system ( $SO_2$ ), the addition of a selective non-catalytic reduction (SNCR) system to the existing low NOx burner with overfire air (NOx) and the existing reverse gas baghouse system ( $PM_{10}$ ). Final emission limits were established for  $SO_2$ , NOx and  $PM_{10}$ . The modeling analysis for Healy 1 indicated the SNCR system will provide a 0.62 deciview reduction for 51 days per year (3.359 to 2.739 deciview). The analysis of the Auxiliary Boiler showed the visibility impact was less than 0.5 deciview.

ADEC asked Enviroplan to incorporate the decisions in this Response to Comment document into its BART Determination Report regarding Golden Valley Electric Association's Healy Power Plant. This allows for consistency between the final decision documents. ADEC therefore considers Enviroplan's BART Determination Report as a valid description of the technical basis for the BART emission limits established under 18 AAC 50.260(l) for Healy #1 and Auxiliary Boiler # 1.

In accordance with 18 AAC 50.260(*l*), ADEC notified GVEA and other concerned parties of the final BART determination on February 9, 2010. (See correspondence in Appendix III.K.6.)

On February 24, 2010, GVEA sent a letter to ADEC requesting an informal review of the final BART determination. The informal review did not result in any substantial changes to the final BART determination, and the emission limits did not change. However, while conducting the informal review, ADEC staff discovered that there were some errors in the emission rates listed in the Final BART Determination Report as well as in emission rates used in the modeling for Auxiliary Boiler #1. The inaccurate rates in the report were corrected. Enviroplan reran modeling using the corrected emission rates for Auxiliary Boiler #1, and the visibility impact was still less than 0.5 deciview. The final report contains the revised modeling analysis. An unnecessary footnote was removed from the final report as a result of the informal review. GVEA challenged the shutdown statement in the final determination report. ADEC revised and clarified the statement in the report. From the informal review letter:

The Department fully expects the useful life of Healy Unit 1 will end in 2024, based on GVEA's representations in their BART submittals. If circumstances change and it makes sense to operate Healy Unit 1 beyond 2024, the Department will evaluate the situation at that time. The Regional Haze SIP provides additional opportunities to evaluate visible impacts of Healy Unit 1 under the reasonable progress process. In regards to a shutdown under the BART rules, GVEA should be aware that the BART guidelines (BART Guidelines 40 CFR 51, Appendix Y, Section IV.D.4.k.2) do provide for the implementation of BART of the shutdown of a BART eligible unit should that unit operate beyond the useful life presumed in the BART determination.\*

ADEC did not change any of the other issues that GVEA requested be reviewed.

#### C. BART Determination Summary

As described above, ADEC worked in conjunction with WRAP to determine which sources were eligible for BART determinations, and then assessed whether a BART determination would be required for each facility. The results of this process are summarized in Table III.K.6-1, which lists each of the facilities initially identified as being BART-eligible, and whether a BART determination was required for each, based on a review of the emission units at those facilities. Table III.K.6-2 then summarizes the BART determination findings (i.e., the average of 2002-2004 98th percentile delta deciview) for each facility, based on modeling analyses assessing the visibility impacts of those BART-eligible sources on Alaska's Class I areas. As the table shows, with the exception of the GVEA facility at Healy, none of the facilities exceeded the 0.5 delta deciview significance threshold. As described earlier and summarized in the table, a number of paths led to this conclusion. In the case of Chugach Electric, it was the finding that the facility was not subject to the BART rule. In the case of Agrium, it was the finding that the facility had closed and that it will have a zero emission limit for the BART eligible units if a decision is made to reopen the facility. For the remaining facilities, it was the result of agreements to limit emissions or the use of actual emission levels. As noted earlier, the application of BART at the

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<sup>\*</sup> In response to comments, GVEA notes that they continue to disagree that ADEC has authority to require the shut down of Unit 1 after 2024 if Unit 1 is otherwise complying with the emission limits established in the BART determination, which did not result from a contracted remaining useful life for Unit 1. See Final Environplan BART Report, page 16.

Healy Power Plant results in a reduction in the predicted number of days over the 0.5 deciview by an additional 51 days per year. Copies of the individual facility modeling analyses and agreements are contained in Appendix III.K.6.

Table III.K.6-1 Summary of BART-Eligible Facility Analysis

Facility	Subject to BART Analysis	BART Determination	
Chugach	No: Originally identified units replaced	N/A	
Alyeska, Valdez Marine Terminal	No: Modeled visibility impacts less than 0.5 deciview	N/A	
Tesoro, Kenai Refinery	No: Modeled visibility impacts less than 0.5 deciview	N/A	
Anchorage ML&P	No: Modeled visibility impacts less than 0.5 deciview	N/A	
CPAI	No: COBC limits emissions from units to levels that would have modeled visibility impacts less than 0.5 deciview	N/A – Handled by COBC	
Agrium	Yes	Facility is currently shutdown  – zero emission limit for BART eligible units	
GVEA, Healy Power Plant	Yes	NOx: 0.20 lbs/MMBtu SO <sub>2</sub> : 0.30 lb/MMBtu PM: 0.015 lb/MMBtu	

Table III.K.6-2 Summary of BART Determination Findings, 98<sup>th</sup> Percentile Delta-Deciview, 2002-2004

BART Sources	Tuxedni	Denali
Chugach	NA	NA
Alyeska, Valdez Marine Terminal	0.065	0.08
Tesoro, Kenai Refinery	0.425	0.041
Anchorage ML&P	0.23	0.36
CPAI	< 0.50	< 0.50
Agrium	-	-