State of Alaska Department of Environmental Conservation **Policy and Procedure Policy**	POLICY AND PROCEDURE NUMBER **04.02.103**	PAGE **1 of 7**
	EFFECTIVE DATE **March 7, 2012**	
SUBJECT **Standard Conditions in Operating Permits**	SUPERSEDES **All Previous Editions**	
SECTION **Division of Air Quality**	CHAPTER **Permit Processing**	APPROVED BY **Alice E. Edwards, Director**

PURPOSE

Standard conditions for operating permits were adopted into regulation in April 2002. This guidance is to provide direction by the air permits program manager and AQ Director in certain aspects of how these standard permit conditions are to be applied.

Standard permit conditions are required by law when a permit condition is applied to more than one operation / facility. Periodic updates and revisions to standard conditions will occur over time. Guidance is provided below on several issues related to applying the standard permit conditions.

POLICY

This policy will apply to all staff in the air permits program. For the purposes of definition, a policy is a necessary set of standards, definitions, directives, or procedures that are otherwise not explicitly defined through applicable statute or regulations.

Topic #1: Delayed Effective Date for Operating Permits

The purpose of this direction is to provide a transition period for the permittee to take all necessary action to be compliant with the terms of the permit at the time the permit comes into effect.

Action: All operating permits are to be issued with an effective date of 30 days after the issuance date if the operating permit is being issued for the first time. Upon direction of the air permits program manager, a delayed effective date may be executed for a renewal of an operating permit.

Topic #2: Visible & PM Emissions Monitoring Requirement for Duel Fuel Fired Sources

A question of interpretation has been raised about how the standard condition applies to a gas-fired source that uses liquid fuel as a back-up fuel in situations of a gas curtailment or emergency. It is common that facility operators must fire the source on liquid fuel for short term test periods throughout the year to assure that the equipment will properly function on liquid fuel. Such test periods are usually a few hours or less in duration. Emission limitations for visible emissions and particulate matter do apply when the source is operating on the back-up fuel. However, the department and the regulated parties mutually recognize that the monitoring provisions of the standard permit condition for liquid fuel firing are not intended for a source that is only infrequently operated on the back-up liquid fuel.

Action: Permit staff shall clarify in the permit that sources using liquid fuel as a back-up fuel to replace gas fuel are not subject to the liquid fuel monitoring requirements of the standard permit condition until annual operations of the source exceed 400 hours per calendar year on liquid fuel.

The permit must include monthly monitoring of the hours of operation on liquid fuel. The permit must also require the applicant to notify the department and begin monitoring according to the liquid fuel plan no later than 15 days after the end of a calendar month in which the cumulative hours for the calendar year exceed 400.

The permit will not require monitoring of compliance with visible emission and particulate matter limits while in liquid fuel mode at less that 400 hours; however, the responsible official shall annually certify compliance with these limits.

Topic #3: Visible Emission and PM Monitoring Requirements for Small Sources Subject to Operating Limits.

A question has arisen about whether visible and PM emission monitoring is required under the standard permit condition for emission sources that do not qualify as insignificant because of an operational limit but otherwise have potentially insignificant emissions. Facility operators maintain numerous emission sources as standby equipment in case of a major failure of primary equipment.

Action: Permit staff shall clarify the permit to indicate that emission sources that do not qualify as insignificant because of an operational limit but otherwise have potentially insignificant emissions are not subject to visible and PM emissions monitoring requirements of the standard permit condition, but are subject to the compliance certification requirements. The permit must include appropriate monitoring, recordkeeping, and reporting to ensure compliance with the operational limit.

Topic #4: What is '"Gas" for Purposes of Visible Emission and Particulate Matter Monitoring for Gas-fired Sources?

The question has been raised as to whether process gas, refinery gas, reservoir natural gas or gas acquired from another oil & gas facility are considered to be 'gas' as that term is used in the standard permit condition for visible and particulate matter monitoring for gas-fired sources.

The standard permit condition does not require on-site visible emission monitoring if the source is fired by gas. This recognizes that natural gas provides clean combustion. Yet, some gaseous fuels contain an appreciable content of higher chain carbon molecules that may condense in piping, fuel delivery systems and combustion devices. Condensed liquids can result in visible emissions when those fuel components are burned in a combustion device that is designed to burn gas.

Action: Permit staff shall apply the standard permit condition for gas-fired sources when the gas fuel is:

1) gas from an oil & gas bearing geologic formation when the gas is conditioned to remove water vapor and liquids (either generated at the regulated facility or a nearby facility under the same or different ownership),

2) pipeline quality natural gas, or

3) facility process gas at an oil & gas processing facility s, not including refinery gas.

For purposes of this standard condition, gas does not include gas burned in a process or emergency flare. This policy does not prohibit staff from requiring additional monitoring where there is facility-specific evidence that the gas-fired sources do not operate smokelessly. It is the applicant's responsibility to demonstrate that equipment is adequate to remove liquids or that gas produced from operations other than those listed above will burn cleanly. Permit staff shall use source specific conditions for monitoring compliance with the visible emission standard unless information provided by the applicant makes it clear that using only the fuel they certify will be adequate in itself to assure compliance. It is not the permit writer's responsibility to prove that the proposed equipment is inadequate to remove liquids.

Topic #5: When Reduced Frequency Monitoring for Visible and PM Emissions is appropriate for Liquid Fuel Fired Sources

The standard permit condition for monitoring of visible and PM emissions for liquid fuel fired sources is based upon the principle of first establishing an initial record verifying the unit is achieving the emission limits. Once established, then a reduced frequency of those observations is invoked to assure ongoing compliance. The CAA via the Title V permit provisions represents the first time in the Alaska air permitting program that sources are required to establish an ongoing compliance record. Some operators assert that internal corporate processes have already resulted in a comparable compliance record being established for visible and PM emissions. Upon this premise, it is further argued that if a corporate record exist, then the facility should be allowed to request and be given fair consideration to receive a source or facility specific permit condition that would eliminate the need for creating the intensive up-front compliance verification record. In such cases, the reduced level ongoing monitoring provisions contained in the standard permit condition would become the initial schedule required in the permit.

Action: At the time of permit preparation, applicants may bring forward corporate records that reflect observations or tests of visible or PM emissions. The permit writer shall review the corporate records/data and consider any requests by the applicant that the permit specify a reduced observation schedule for visible and PM emissions. The permit writer shall provide the operating permits supervisor with a recommendation regarding reduced initial frequency. If the terms of the standard permit condition would otherwise apply to a given source except for consideration of a previously established corporate record serving in lieu of the initial record required by the standard condition, the operating permits supervisor may direct staff to waive the initial compliance verification schedule and establish a facility- specific reduced schedule consistent with the standard permit condition. If the permit writer, the operating permits supervisor, or both reject establishing a reduced schedule, they shall present the corporate request and record and their evaluation to the air permit program manager for a final decision.

When evaluating a request for a reduced visible and PM emission monitoring schedule, the permit writer will consider the criteria listed below. Other facts or criteria as appropriate and relevant may also be considered. Criteria:

- Department inspectors have not found a violation for visible or PM emissions in the last five years for the proposed sources,
- There is a written internal corporate policies adequate to show a pattern of compliance,
- There is physical evidence that the policies have been carried out, and
- There are no corporate policies that would discourage reporting.

The written corporate policies could include some or all of the following elements

- Routine internal reporting when employees see opacity during the course of their normal duties.
- Method 9 observations when opacity is observed
- Procedures for, or evidence of, prompt repairs
- Observations to assure that problems are corrected
- Periodic environmental audits
- Procedures for, or evidence of, timely excess emission reports to the department

The physical evidence that the written corporate policy is carried out could include.

- Written records
- Affidavits from the operators
- Repair orders
- Reports to the department

The department not finding violations during inspections is not sufficient to establish an adequate record. Department inspections are too infrequent.

Topic #6: Opacity Standards – New Six-minute average and old three-minute aggregate.

Both the new six-minute average and old three-minute aggregate standards are applicable requirements that must go into permits and have associated monitoring. The standard condition reiterates the six-minute standard but not the aggregate standard because we do not want to perpetuate in regulation a standard that we have replaced and have asked EPA to remove from the SIP.

Action: In the permit, reiterate both the new and old standards. Use the standard monitoring, record keeping and reporting of the standard condition for both forms of the standard. Do not add additional data reduction or duration of monitoring for the aggregate standard. When EPA approves the SIP change and we have updated our adoption by reference in 18 AAC 50.040(e), the aggregate standard can be removed from all permits. Make a notation in the permit that the aggregate standard will be deleted as an applicable requirement after EPA approves the SIP change and the department has so notified the permittee in writing.

Topic #7: Applicability of Standard Condition IX – VE and PM monitoring for liquid fired sources.

Visible emission requirements of conditions 1 – 4 of this standard condition apply to all liquid fired sources. Particulate matter requirements of conditions 5 – 8 apply only to diesel engines and liquid fired turbines.

Action: Use source specific conditions for monitoring, record keeping, and reporting for other liquid fired equipment.

Topic #8: Permit Numbering.

The standard conditions adopted in regulation have permit numbers for most cross references that must differ from the numbering in each permit.

Action: Under Alaska Law the content of a regulation is binding, not the formatting.

Change all cross references as necessary to fit correctly into each permit.

Topic #9: Source or Facility Specific Conditions.

Most standard conditions have a list saying when to use source or facility specific conditions. The conditions say "Circumstances where source or facility specific conditions more adequately meet 18 AAC 50 include…" "Include" has the legal meaning "include but are not limited to."

Action: You can also use source or facility specific conditions for reasons that are not listed if the facility specific condition would more adequately meet 18 AAC 50. The source or facility specific condition can be proposed by either the applicant or the department. You must explain in the statement of basis how the particular characteristics of the facility in question make the standard condition inappropriate.

Topic #10: Emission Fees – What are assessable emissions?

Questions have been raised about whether only the criteria pollutants [listed in 18 AAC 50.410(a)] are assessable. 18 AAC 50.410(a) was only in effect for the first six months of the current permit program. 18AAC 50.410(b) and AS 46.14.250(h)(1) specify fees for any air contaminant. "Air contaminant" is defined as a "regulated air contaminant" or "hazardous air contaminant" [defined in AS 46.14.990].

Questions have also been raised about when to add pollutants together for comparison to the 10 ton threshold for billable emissions. Each of the following is considered one contaminant:

- Sulfur oxides
- Nitrogen oxides
- VOCs
- Particulate matter

Particulate matter includes all size fractions not just PM-10, because total PM is regulated by several NSPSs.

Each Hazardous Air Contaminants is a separate contaminant that must be emitted or have a potential to emit in quantities of 10 tons or more to be billable. However, many hazardous air contaminants are also VOCs and the remaining contaminants are also PM, and must be summed together to determine the total VOC and total PM for billing purposes.

To be billable, the air contaminant must be listed in the permit as being emitted by the facility. The permit does not need to regulate that particular pollutant for the pollutant to be billable.

Don't double count. For example, if the facility emits 15 tons per year of benzene, count it as an assessable emission as either VOC or as a HAP but not both.

Questions have also been raised whether fugitive emissions and Non-road engine (NRE) emissions contribute to assessable emissions.

Staff should count fugitive emissions as part of a source's assessable emissions. Do not count NRE emissions to assessable emissions.

Why? Because our AK assessable emissions definition incorporates the federal "potential to emit" definition. Potential to emit does not exempt fugitive emissions, but does exempt secondary emissions. Secondary emissions include emissions from mobile sources. Non-road engines are a sub-class of mobile sources, so their emissions are exempt from potential to emit. Although other elements of AQC regulations pertain to fugitive dust exemptions (notably PSD applicability—project emission estimates only use fugitive dust contributions if from 28 specific identified categories), PTE and assessable emissions do not.

Action: When determining what contaminants are assessable, count every individual regulated air contaminant and hazardous air contaminant without double counting.

List every such contaminant emitted from the facility, whether or not the emissions are limited by the permit.

When tabulating the stationary source Potential to Emit and Assessable Emissions or changes thereof in a Technical Analysis or a Statement of Basis in support of permitting decisions, include fugitive emissions. You may elect to list the fugitive emissions or regulated non-road engine emissions in a separate row on the table with notes to clarify the methodology to estimate these fugitive emissions. You may also optionally elect to list NRE emissions regulated by a permit in a separate row with notes to clarify the methodology to estimate NRE emissions, such as drill rig engine emissions.

Use the fugitive emission component, **but not the NRE component** in the total Assessable Emissions value.

Use the total calculated Assessable Emission value in the Standard emission fee condition.

Topic #11: Coal Fired Boilers – Opacity Monitoring.

We have not adopted a standard condition for monitoring opacity for coal fired boilers, EXCEPT that we adopted a default condition for auditing the COMS.

Action: Except as discussed in Topic 12, use facility specific conditions for opacity monitoring for coal fired boilers.

Topic #11: Coal Fired Boilers – COMS Audits.

Concerns were raised about the standard condition for COMS audits and the default method we adopted into the Air Quality Control Plan. Commentators requested the department to develop source specific conditions that work with the actual COMS units in use. Assuring that readings are accurate is fundamental to using COMS. For source specific conditions, the applicant must provide adequate information for the permit writer to be sure that the condition will provide that assurance. Manufacturer information may be a good starting point. Concerns were raised about the frequency of quarterly audits for units older than April 9, 2001

Action: Use unit specific conditions if the applicant provides information that is adequate to show that the condition will assure compliance, and is more appropriate for the specific COMS unit. Use the default standard condition if such information is not provided.

The applicant may request less frequent audits. Use a unit specific condition if the applicant shows that less frequent audits will be adequate to assure compliance. Manufacturer's information may be useful. If this is uncertain, source specific conditions could be written allowing decreasing frequency based on the results of audits performed. Frequency could be scaled back incrementally—from every three months to six, and then from six months to a year. The applicant would have to support the request with measurable criteria for decreasing frequency for each audit procedure.

IMPLEMENTATION RESPONSIBILITY

The Division Director and Air Permits Program Manager.