
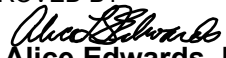


State of Alaska Department of Environmental Conservation  Policy and Procedure Procedure		POLICY AND PROCEDURE NUMBER 04.02.108	PAGE 1 of 4
		EFFECTIVE DATE May 5, 2021	
SUBJECT Worker Housing Aggregation and Modeling		SUPERCEDES Ambient Air Quality Issues at Worker Housing – Oct. 8, 2004	
SECTION Air Quality Division	CHAPTER Permit Processing	APPROVED BY  Alice Edwards, Director	

PURPOSE

Establish a procedure for assessing, quantifying and modeling emissions from worker housing-related emission units.

BACKGROUND

Many stationary sources in Alaska provide on-site worker housing. The Department has not consistently included emissions from fuel-burning emission units (EUs) that directly support worker housing units at or near a stationary source when assessing a permit applicability determination. ADEC's inconsistency has led to different monitoring, record-keeping, and reporting requirements between various Permittees for their worker housing EUs.

To correct this inconsistency, the Department intends to treat worker housing consistent with this policy and procedure in all future permit decisions. This updated Policy and Procedure also carries forward the *Ambient Air Quality Issues at Worker Housing* provisions developed in the previous, October 8, 2004 version of Policy and Procedure 04.02.108, as to when housing areas should be treated as “ambient air” and included in a permit applicant’s ambient demonstration.

Worker housing may be a support activity

Support activities are part of the stationary source for permitting purposes. According to the Region 10 office of the U.S. Environmental Protection Agency (EPA), worker housing owned or operated by a stationary source constitutes a support activity for that stationary source if 50 percent or more of the services provided by the housing units are used to support the stationary source. When worker housing constitutes a support activity, its emissions must be included in the potential-to-emit calculations for the permitted source. These calculations may affect the

classification of the stationary source in a new source review permit application or affect a permit avoidance strategy.

Ambient Air Considerations

“Ambient air” is defined in Alaska and federal regulations as outside air to which the public has access. Ambient air typically excludes that portion of the atmosphere within a stationary source’s boundary.¹ However, areas within the property boundary that are accessible to the public are treated as ambient air. Typical examples include public roads, rivers, parks and even other sources located within the boundaries of a geographically larger source. EPA has also clearly stated family housing areas within military reservations are ambient air.²

POLICY

Determining Applicability of Worker Housing-Related Emissions:

The Department believes that most worker housing provided by Alaskan Permittees constitute support activities for their stationary source. The Department will treat all worker housing as support activities unless the Permittee demonstrates to the Department’s satisfaction that their worker housing is not a support activity (see below).

When reviewing a permit application in which the Permittee states that their worker housing is not a support activity, staff shall assess whether the permit application contains an adequate demonstration that this is the case. The demonstration must show that less than 50 percent of the beds being provided are dedicated to workers and contractors. The demonstration should also describe:

- where the housing is located in relation to the stationary source
- who they allow to lodge at their housing
- the maximum number of beds allocated to employees/contractors,
- the total bed count,
- the resulting ratio of employee/contractor beds to total beds, and
- how the Permittee advertises the availability of lodging, if at all.

The Department recognizes that some worker housing EUs may qualify as “insignificant EUs” under the Title V permit program. However, staff shall count all emissions at the stationary source, including emissions from insignificant EUs, when determining a stationary source’s permit classification.

When reviewing a permit application for an existing stationary source, staff shall also assess whether all housing emissions have properly been accounted for in previous permits for the source. In the

¹ The Alaska Legislature has given the Department of Environmental Conservation responsibility for managing and protecting ambient air. The Legislature has given the Department of Labor responsibility for worker safety, which includes the non-ambient air within a stationary source’s boundary.

² EPA Modeling Clearinghouse Information Storage and Retrieval System (McHisrs), “R-II Military Reservation Power Plant – April 83,” April 13, 1983.

event that corrections to housing emissions affect the adequacy of an Owner Requested Limit (ORL) to avoid a permit classification, staff will contact the Permittee to propose a revision to the ORL such that the permit classification can continue to be avoided.

Modeling Procedure for Worker Housing:

Staff shall use the following procedure when reviewing or conducting an ambient air quality analysis associated with a permit action, a permit-avoidance action, a petition to revise Air Quality Control Regulations, or 18 AAC 50.201.

Staff shall treat all worker housing areas that are deemed a support activity or otherwise part of the stationary source (including areas provided for families and off-duty activities) as ambient air, except when the following conditions are met.

1. The worker housing area is located within a secure or remote site, such as military bases with no family housing units, off-shore platforms, etc;
2. The worker housing area is for official business/worker use only; and
3. The operator has a written policy stating that on-site workers are on 24 hour call.

If the owner/operator allows for family or casual visits, then staff shall treat worker housing areas as ambient air, even if workers are on 24-hour call. Likewise, staff shall treat all worker housing areas that have uncontrolled access as ambient air, even if the workers are on 24-hour call. Staff shall treat worker housing areas at stationary sources with no written 24-hour call policy as ambient air.

Staff shall use and require the following approach for modeling worker housing areas.

- Place receptors in the general area surrounding the worker housing buildings (including mess halls, recreational centers, schools, etc) and all out-door support areas.
- Use a receptor density that is commensurate with the approach used to determine the receptor density at locations beyond the source's boundary.
- Do *not* use flagpole receptors to model impacts at buildings, *unless* the building has a balcony or a flat-roof that is accessible by the public or off-duty worker.

Staff may *not* use flagpole receptors to model impacts at open windows and building air intakes.³ When flagpole receptors are used, the modeled impacts are subject to ambient air quality standards, but not increments.⁴

Staff shall treat all worker housing that is determined to *not* be a support activity, or otherwise *not* part of the Permittee's stationary source, as ambient air.

³ EPA does not consider air at open windows and air intakes as ambient air, as stated in an April 13, 1992 letter from John Seitz (Director, OAQPS) to Daniel Gutman.

⁴ EPA Memorandum, "Applicability of PSD Increments to Building Rooftops," Joseph Cannon (Air and Radiation Assistant Administrator) to Charles Jeter (EPA Region IV Administrator), June 11, 1984.

AUTHORITY

See the footnotes.

IMPLEMENTATION RESPONSIBILITY

Program Manager.