



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

# Memorandum

Subject: **ACTION:** Program Guidance Letter 12-09  
Eligibility and Justification Requirements for  
Noise Insulation Projects

Date: August 17, 2012  
Rev. November 7, 2012

From:

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To: PGL Distribution List

The reason for this PGL is to reconfirm the two-step requirement for eligibility for residential and other noise insulation projects. The AIP Handbook interprets 14 CFR Part 150 to require that structures be located in the existing or forecast yearly day-night average (DNL) 65 decibel (dB) noise contour (or, under limited circumstances, a lower dB noise contour formally approved by a local government to determine compatibility of residences), *and* that noise insulation project be designed to achieve interior noise levels of 45 dB to qualify for federal funding.

## 1. Two-Step Requirement for Eligibility.

FAA has become aware that there may be confusion and ambiguity in our guidance about the second step, that interior noise levels must be 45 dB or greater for a residence or other eligible structure, such as a school, to be eligible for AIP funding for noise insulation.

Title 14 CFR Part 150, Airport Noise Compatibility Planning, establishes the amount of noise reduction (NLR) that must be achieved through noise attenuation measures for a residence or school to be considered normally compatible with airport noise. See, Note 1 of Table 1, 14 CFR Part 150, Appendix A.<sup>1</sup> FAA Order 5100-38, the original AIP Handbook (Handbook) dated November 24, 1986 reflected this NLR requirement as a design objective for noise insulation projects. It clarified that residential noise insulation must be designed to achieve a 50 dB interior noise level when the project is completed (paragraph 711.) Later revisions to the Handbook lowered the design objective to 45 dB in all habitable rooms. The current Handbook continues to require that a residential noise insulation project be in the existing or forecast DNL 65 dB contour and be designed to

<sup>1</sup> It states that residences and schools are not normally considered compatible with airport noise levels above 65 DNL dB unless insulation projects to reduce outdoor to indoor noise by at least 25 to 30 dB have been incorporated. "Normal residential construction can be expected to provide a [noise level reduction] of 20 dB, thus the reduction requirements are often started as 5, 10, or 15 dB over standard construction..."

achieve target interior noise levels of 45 dB in habitable rooms to be eligible for AIP funding.<sup>2</sup> Accordingly, residences and schools that already have interior noise levels of less than 45 dB are not generally eligible for AIP funding, with some equitable exceptions.

## **2. Age of Structure.**

The policy that the FAA will consider funding eligibility for noise insulation measures under 14 CFR Part 150 only for noncompatible development which existed as of October 1, 1998, remains unchanged. New incompatible land uses created by subsequent airport development may also be eligible for funding consideration.

## **3. Upcoming Revisions to FAA Advisory Circular 150/5020-1, Noise Control and Compatibility Planning for Airports.**

The revision to FAA Advisory Circular 150/5020-1, Noise Control and Compatibility Planning for Airports is not part of this PGL.

## **4. APP-400 Review of Residential Sound Insulation Programs.**

In FY 2013 The Office of Airport Planning and Programming will begin a review of regional compliance with this guidance to ensure program consistency.

## **5. Revisions to AIP Handbook.**

Attachment 1 to this PGL contains the replacement paragraph 812 Noise Insulation Projects of FAA Order 5100-38C, the AIP Handbook, in its entirety, effective as of the date of this PGL.

## **6. Requirements for Ongoing Noise Insulation Programs.**

Specific requirements for ongoing noise programs for Fiscal Years 2012, 2013, and 2014 have been developed. Attachment 2 details the specific requirements for ongoing noise insulation programs.

## **7. Communication with Residents and Others Impacted by Noise Insulation Programs.**

Early communication with all residents that are in the DNL 65 dB contour is important. The Sponsor must explain the two-step requirements to residents that are *currently* in the DNL 65 dB contour.

Further, it is important for the residents to understand that if noise contours change, a neighborhood that was previously identified as potentially noise impacted may no longer be impacted. The sponsor must also explain how the program will be phased. The Sponsor must let residents know that final determinations of which residences will be noise insulated will only be made after sampling and testing has been completed. Clearly explaining the noise insulation

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<sup>2</sup> “The design objective of a residential noise insulation project generally should be to achieve the requisite NLR when the project is completed. (This is mathematically equivalent to achieving a DNL of 45 dB in all habitable rooms.)” FAA Order 5100.38C, Paragraph 812b(1). This is mathematically equivalent to achieving a DNL of 45 dB ~~44 dB~~ because, application of 25 dB NLR to the 70 yearly DNL range in Table 1, Appendix A, Part 150, and application of 30 dB NLR to the 75 yearly DNL, both result in interior noise levels of 45 yearly DNL.

program process to residents will help prevent unrealistic expectations of residents who may later be found to be outside of the noise impact areas or whose homes already provide sufficient sound insulation.

## **8. Use of the Term ADO**

For the purposes of this PGL, the term ADO means the FAA Airports District Office or Regional Office in regions that do not have Airports District Offices.

## **9. Applicability**

The provisions set forth in this Program Guidance Letter do not apply to noise insulation projects for which construction has been completed. Construction being completed means that final payment has been made to the contractor doing the sound insulation work on the residence or public building. Paragraph 580 concerning environmental mitigation projects, which generally refers to Chapter 8 of the existing AIP Handbook on noise compatibility projects, does not change.<sup>3</sup>

## **10. Relationship to Type of Funding**

The requirements of this PGL apply to AIP grant funded projects. Under 49 USC §40117(a)(3)(D) and (E), PFC funds may be used for noise compatibility planning and project, although the project only has to be *approvable* under 14 CFR Part 150, and does not necessarily have to have been *approved* under 14 CFR Part 150. This means that an airport does not have to have a 14 CFR Part 150 Record of Approval in order to conduct residential sound insulation projects using PFC funds.

Projects that are funded with airport revenue must meet the requirements of the 49 USC §47107(b)(1) and §47133; Grant Assurance 25, and the FAA policy for revenue use as described in 64 Federal Register 7696<sup>4</sup>. In general, the requirement is that the revenue must be used for the capital and operating expenses of the airport or local airport system. Sound insulating structures that are not adversely affected by aircraft noise would not be considered a capital or operating expenses of the airport.

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<sup>3</sup> Consistent with past policy and interpretation of paragraph 580, airport sponsors have a reasonable period of time to implement substantial multi-year noise insulation projects that were a condition of approval in a record of decision for an AIP funded airport development project. Where structures in the project area no longer meet the qualifying criteria, airport sponsors may seek concurrence from APP-1 ~~ARP-1~~ that circumstances warrant special consideration. The sponsor must show that flexibility is needed to reasonably fulfill commitments in an environmental record of decision.

<sup>4</sup> The Federal Register Notice and grant assurances are published on the FAA website at the following address: [http://www.faa.gov/airports/airport\\_compliance/](http://www.faa.gov/airports/airport_compliance/)  
Title 49 of the United States Code is published on the U.S. House of Representatives website at the following address: [http://uscode.house.gov/download/title\\_49.shtml](http://uscode.house.gov/download/title_49.shtml)

Attachments:

1. AIP Handbook Replacement Paragraph 812
2. Handling of Noise Insulation Programs Currently Underway

Canceled

## **RECORD OF CHANGES**

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November 7, 2012:

- Deleted “AIP” from the title of the PGL, because although this is a modification to FAA Order 5100.38C (“Airport Improvement Program”) it also has corresponding implications for PFC funds and airport revenue.
- Page 2, Footnote 2 – Corrected “4 dB” to “45 dB”
- Page 3, Footnote 3 – Corrected “ARP-1” to “APP-1”
- Attachment 1, Page 12 – Corrected “...the costs of this work must be funded with other, non-federal, sources of funds” to read “...AIP, PFC, or airport revenue shall not be used for this work.”

Cancelled