



FDM 23-40-1 General

July 28, 2011

Construction noise can usually be considered to be a temporary, unavoidable, and adverse impact associated with highway projects.

1.1 Permissible Noise Levels

To date, there have been no limits placed on construction noise for highway projects. However, the Environmental Protection Agency (EPA) has instituted noise emission standards for newly manufactured medium and heavy duty trucks and portable air compressors.

Local municipalities may have specific noise ordinances. The department and its contractors are not subject to compliance with local noise ordinances unless specifically cited in the project plans, specifications and contracts. The department and its contractors are encouraged to work with local municipalities and citizens to address construction noise concerns when voiced.

1.2 Measurement

Measurement of construction noise is not required for highway projects. However, using a range of construction equipment noise levels, [Attachment 1.1](#) was developed. It presents the distance from a construction site and the range of noise levels expected. This figure is typically used in place of construction noise measurements. This figure may be included in environmental documents.

1.3 Prediction

The limits of a highway noise analysis do not typically warrant such a detailed study. Highway construction noise activities can be accurately modeled using the FHWA Roadway Construction Noise Model (FHWA RCNM) Version 1.1 if determined necessary though. Should the project manager determine that a detailed analysis may be warranted, the Region's Environmental Coordinator and department's State Noise Engineer should be contacted prior to commencement of such an analysis.

1.4 Abatement

For most projects, construction noise will not substantially affect the neighborhood. Language included in the latest edition of the Standard Specs should be adequate for controlling construction noise impacts.

In rare instances, however, there may be potential for creating extremely high levels (i.e., when working in a confined area with residents very close) or for a very lengthy time of exposure (i.e., several months). Therefore, some means of regulating construction noise may be desirable.

If the project manager determines that special construction noise abatement measures are need above those included in the latest edition of the Standard Specs, the Region's Environmental Coordinator and department's State Noise Engineer should be contacted prior to incorporation of any special abatement measures into the project commitments or plans and specifications.

1.5 Documentation

Reporting of construction noise in an environmental document (see [FDM 23-45-1](#), [FDM 23-45-5](#) and [FDM 23-45-10](#)) should include a discussion of typical construction equipment noise levels, typical phases in the construction process, and abatement measures. [Attachment 1.1](#) may be included as part of the environmental document.

LIST OF ATTACHMENTS

[Attachment 1.1](#) Construction Noise/Distance Relationships