

# **RULES and REGULATIONS**

## **Of the Colorado Department of Transportation**



### **PERTAINING TO RULES FOR IMPLEMENTATION OF THE USE OF WASTE TIRES FOR NOISE MITIGATION PURPOSES**

2 CCR 601-17

Effective August 1, 2008

**COLORADO DEPARTMENT OF TRANSPORTATION**  
**Division of Transportation Development**  
**RULES FOR IMPLEMENTATION OF THE USE OF**  
**WASTE TIRES FOR NOISE MITIGATION PURPOSES**  
**ALONG COLORADO STATE HIGHWAYS**  
**Rule 2 CCR 601-17**

**1.0 STATEMENT OF BASIS & PURPOSE**

The purpose of this rule is to establish consistent guidelines regarding the review, evaluation and approval of requests for the installation of noise mitigation measures on and off state highway rights of way pursuant to Section 43-2-401, C.R.S. *et seq.* and existing CDOT policies and procedures.

**2.0 STATUTORY AUTHORITY**

Section 43-1-106, C.R.S. Transportation Commission – powers and duties  
23 CFR 1.23 Rights of way purposes  
23 CFR 710.403 Management purposes  
23 CFR Part 772 Noise Abatement Section 23-1-106.5  
Section 43-2-401, C.R.S. *et seq.*

**3.0 BACKGROUND**

3.1 The Department recognizes that “retrofitting” noise barriers on existing state highways (Type II Noise Program under 23 CFR Part 772) can be a desire of local residents and local officials. CDOT does not currently fund a Type II noise program but will apply for funding of noise barriers through the waste tire recycling development cash fund within the Department of Local Affairs provided the applicant meets the necessary criteria established under this rule and state law.

3.2 It is policy of the Department that funding Type II noise barriers utilizing existing Department revenue is unworkable considering the existing funding shortfall to cover the critical needs of Colorado’s State Highways. However, the Department recognizes that certain neighborhoods have undesirable highway noise levels, and if not for the Department’s lack of available funding, noise mitigation efforts would be appropriate and within existing Department guidelines for noise abatement. State law allows the Department to apply for noise mitigation funds through the Department of Public Health and Environment’s waste tire recycling development cash fund, created in section 25-17-202 (3), C.R.S. so long as the proposal meets the criteria outlined in 43-2-401 through 43-2-404, C.R.S. and this rule.

## **4.0 NOISE MITIGATION MEASURES PUBLICLY FUNDED PURSUANT TO SECTION 43-2-402, C.R.S.**

### **4.1 ELIGIBILITY CRITERIA**

4.1.1 The applicants must be located within the boundaries of a local government that, as of the date of the application, has adopted an ordinance or resolution that requires the mitigation of the effects of noise on future residential or other noise-sensitive developments adjacent to the state highways within the boundaries of the local government.

4.1.2 Applicants must submit their application for noise mitigation measures between November 1 and March 31.

4.1.3 The application must specify whether local government has agreed to provide any of the funds necessary to construct the noise mitigation measures. If the local government has not agreed to fund at least 50% of the necessary funds, the impacted homes must have been constructed before the highway was constructed or last underwent a major reconfiguration (i.e. widening, interchange reconstruction, etc.).

4.1.4 The application must specify the proposed noise mitigation measure (i.e. noise barrier). To be eligible, the proposed measure must be on CDOT's approved list of noise mitigation measures and contain or make use of, in part, recycled, recapped, or other previously used waste tires.

4.1.5 Applications must contain evidence satisfactory to CDOT that a responsible body has committed to providing funding for any necessary maintenance and repair of the noise mitigation measure.

### **4.2 APPLICATION CONSIDERATION**

For noise mitigation measures pursuant to section 43-2-402, C.R.S. CDOT must consider and review the applications by July 1 and place applicants that meet the requirements of this section on a list of approved noise mitigation measures.

### **4.3 OTHER CRITERIA FOR CONSIDERATION**

4.3.1 In the event there is more than one acceptable project in a given cycle, the list of eligible projects will be ranked according to the Department's Noise Mitigation Prioritization Formula and submitted to the Department of Public Health and Environment for consideration.

4.3.2 For noise mitigation measures pursuant to section 43-2-402, C.R.S. the Department shall construct noise mitigation measures on the list of approved measures for which a local government has agreed to provide no less than fifty percent of the necessary moneys in the order of priority as established by the

Department's Noise Mitigation Prioritization Formula, using moneys provided by local governments. The remaining moneys required to commence construction of the measure are to be distributed to the Department by the Director of the Department of Public Health and Environment pursuant to section 24-32-114 (1)(b) C.R.S. After construction of noise mitigation measures, the Department shall use any remaining moneys provided local governments and any moneys distributed pursuant to section 24-32-114 (1)(b) C.R.S. to construct other noise mitigation measures on the list of approved measures in the order of their priority. For approved noise mitigation measures where the Department has not received sufficient funding from local governments and the Department of Public Health and Environment, such measures shall remain on the list of approved measures until sufficient funding is provided from local governments or the Department of Public Health and Environment or until the close of the fiscal year.

4.3.3 If a noise mitigation measure on the list of approved measures is not constructed in a State fiscal year, the applicant may submit an application for the noise mitigation measure for the next State fiscal year.

## **5.0 NOISE MITIGATION MEASURES THAT ARE PRIVATELY FUNDED PURSUANT TO SECTION 43-2-403, C.R.S**

### **5.1 ELIGIBILITY CRITERIA**

5.1.1 The applicants must be located within the boundaries of a local government that, as of the date of the application, has adopted an ordinance or resolution that requires the mitigation of the effects of noise on future residential or other noise-sensitive developments adjacent to the state highways within the boundaries of the local government.

5.1.2 Applicants may submit their application for noise mitigation measures to be privately funded to the Department at any time.

5.1.3 The applications must be accompanied by a petition in support of the noise mitigation measures signed by members of no less than 75% of the households who live no more than four-tenths of one mile from the nearest edge of the right-of-way of the state highway.

5.1.4 The application shall specify the source of the moneys necessary to construct the noise mitigation measures.

5.1.5 The application must specify the proposed noise mitigation measure (i.e. noise barrier). To be eligible, the proposed measure must be on CDOT's approved list of noise mitigation measures. To be eligible for DOLA grant funding, the mitigation measure must make use of, in part, recycled, recapped, or other previously used waste tires.

5.1.6 Applications must contain evidence satisfactory to CDOT that a responsible body has committed to providing funding for any necessary maintenance and repair of the noise mitigation measure. Applications that propose using CDOT right-of-way, but do not purchase all the necessary CDOT right-of-way, must contain evidence satisfactory to CDOT that a responsible body has committed to providing funding for any necessary maintenance and repair of the noise mitigation measure. If the local entity does purchase the right-of-way, then the maintenance and repairs to the mitigation would be the responsibility of the local entity.

## 5.2 APPLICATION CONSIDERATION

5.2.1 For noise mitigation measures that are privately funded pursuant to section 43-2-403, C.R.S. CDOT must consider the application within 3 months of receipt.

5.2.2 To be eligible for forwarding to the Department of Local Affairs for consideration, the application must meet the following criteria:

5.2.2.1 It complies with the Department's Noise Analysis and Abatement Guidelines dated December 1, 2002;

5.2.2.2 It is compatible with any existing noise mitigation measures in the eligible area; and

5.2.2.3 It complies with zoning and building requirements established by the local government.

5.2.3 The Department shall approve applications for noise mitigation measures on CDOT right of way that meet all the requirements under section 43-2-403, C.R.S. and applicants upon such approval may construct the noise mitigation measures.

## 5.3 OTHER CRITERIA FOR CONSIDERATION FOR NOISE MITIGATION MEASURES THAT ARE PRIVATELY FUNDED PURSUANT TO SECTION 43-2-403, C.R.S.

5.3.1 In the event there is more than one acceptable project in a given cycle that requires State funding, the list of eligible projects will be ranked according to the Department's Noise Mitigation Prioritization Formula and submitted to the Department of Local Affairs for consideration.

5.3.2 For noise mitigation measures that are privately funded pursuant to section 43-2-403, C.R.S., but require additional funding from the Waste Tire Recycling Development Cash fund, the noise mitigation measures must:

5.3.2.1 Comply with all applicable rules and procedural directives of the Department and the Transportation Commission;

5.3.2.2 Meet the noise reduction standards established by the Department;

5.3.2.3 Be compatible with any existing noise mitigation measures in the eligible area; and

5.3.2.4 Comply with zoning and building requirements in the eligible area.

5.3.3 Noise mitigation measures that are privately funded and approved pursuant to section 43-2-403, C.R.S. may be constructed in the State Highway Right of Way with the approval of the Department or on private land. The Department may sell at fair-market value or grant an easement to any land in the State Highway Right of Way for the purpose of constructing noise mitigation measures, subject to the provisions of Section 43-1-210 (5), C.R.S.

5.3.4 Applicants constructing privately funded noise mitigation measures pursuant to section 43-2-403, C.R.S. shall be responsible for the maintenance of the noise mitigation measures.

## **6.0 NOISE MITIGATION PRIORITIZATION FORMULA**

Each of the following factors will be considered in giving each noise barrier application a priority rating. Each factor will be rated using the following criteria on a scale from 0-10 points. The maximum score that a request can accumulate is 35 points.

### **6.1 Noise Levels at First-Row Adjacent Residences—10 points**

The existing worst-hour equivalent noise levels at the first row of residences adjacent to the highway will be determined via noise modeling (in accordance with procedures in the CDOT noise analysis guidelines). Points will be scored below based on the average noise level of all first row residences in the application area:

75 dBA and above: 10 points

70-74 dBA: 9 points

66-69 dBA: 8 points

63-65 dBA: 4 points

Less than 63 dBA: 0 points

### **6.2 Noise Mitigation Benefits—10 points**

The procedure to determine the benefits of the requested mitigation measure will be the method for determining the cost-benefit index of a barrier as described in the CDOT Noise Analysis Guidelines, section 5.5.1:

Less than \$2000/dBA per receiver reduction: 10 points

\$2000-\$3000/dBA per receiver reduction: 9 points

\$3000-\$4000/dBA per receiver reduction: 8 points

\$4000-\$5000/dBA per receiver reduction: 6 points

\$5000-\$8000/dBA per receiver reduction: 3 points

More than \$8000/dBA per receiver reduction: 0 points

6.2.1 The funding that is to be provided by private entities and/or local governments will be credited to the cost-benefit index accordingly. For example, if a local government is to contribute 50% of the funding for a barrier that is found to have a cost-benefit index of \$5000 per decibel per receiver of reduction, the amount that will be used for awarding priority points under this formula will be \$2500 per decibel per receiver reduction.

### 6.3 Area Exposure, Part A—5 points

The amount of time that the residences have been in existence will determine the following priority points:

Over 30 years old or was in existence before the original construction of the adjacent highway: 5 points  
21-30 years old: 4 points  
11-20 years old: 2 points  
3-10 years old: 1 point  
Less than 3 years old: 0 points

### 6.4 Area Exposure, Part B—5 points

The date that the last time capacity improvements were made to the adjacent highway will determine the following priority points. This is to take into account that projects built recently were required to undergo a noise analysis:

Before 1970: 5 points  
1970-1980: 4 points  
1981-1992: 3 points  
1993-1997: 2 points  
1998-2002: 1 points  
2003-Present: 0 points

### 6.5 Previous Type II List Bonus Points—up to 5 points

Up to five points will be awarded for project areas that were included on the 1992 CDOT Type II barrier list. The list consisted of four “tables”, labeled A through D. All of the locations that were on Table A of the list have been completed. Areas listed in tables B through D can be eligible for the following bonus points:

Locations listed in Table “B”: 5 points  
Locations listed in Table “C”: 3 points  
Locations listed in Table “D”: 2 points  
Not listed: 0 points

## **7.0 MATERIALS INCORPORATED BY REFERENCE**

CDOT noise analysis guidelines  
1992 CDOT Type II barrier list