MNDNR Permitting & Reporting System (MPARS)

- Customers apply for permits and track status
- Report water use and other data
- Pay fees
- Request changes to permits
MNDNR Permitting & Reporting System (MPARS)

Why it’s needed

• Budget changes
• Public expectations
• Reduce time on administrative tasks
MNDNR Permitting & Reporting System (MPARS)

Primary Objectives

• Comply with Governor's Executive Order and Legislative Action
• Simplify processes; provide a positive experience
• Improve efficiency
• Be a better model for conservation
MNDNR Permitting & Reporting System (MPARS)

- Customer Portal
- GIS Interface
- Use Reporting
- Internal Notification & Distribution System
- Online Payment System
- Online Permits System
- External Notification System
Pursuant to Minnesota Statutes, Chapter 105G, and on the basis of statements and information contained in the permit application, letters, maps, and plans submitted by the applicant and other supporting data, all of which are made part hereof by reference, PERMISSION IS HEREBY GRANTED to the applicant to perform actions as authorized below. This permit supersedes the original permit and all previous amendments.

**Project Name:** MNDOT Statewide General Permit

**County:** All counties in Minnesota

**Watershed:** All watersheds in Minnesota

**Resource:** All watersheds shown on the Public Waters Inventory

**Purpose of Permit:** Bridge, culvert, or stormwater outfall repair or replacement

**Authorized Action:** Replace or repair bridges, culverts, or stormwater outfalls on Public Waters, where all conditions and provisions specified herein are met. Projects authorized under this permit that have not been completed by the expiration date of this permit will require the project engineer to request an extension.

**Permittee:** MN Department of Transportation
Office of Environmental Stewardship
395 John Ireland Blvd, MS 620
St. Paul, MN 55155
(651) 366-3800

**Authorized Agent:** N/A

**Property Description (and owned or leased or where work will be conducted):** The Permittee or its authorized agent must own, control, or have permission to access and use all lands affected by the project.

**Authorized Issuer:**

- **Title:** Water Regulations Unit Supervisor
- **Issued Date:** 05/06/2013
- **Effective Date:** 05/06/2013
- **Expiration Date:** 11/30/2013

This permit is granted subject to the following CONDITIONS:

**APPLICABLE FEDERAL, STATE, OR LOCAL REGULATIONS:** The permittee is not released from any rules, regulations, requirements, or standards of any applicable federal, state, or local agencies; including, but not limited to, the U.S. Army Corps of Engineers, Board of Water and Soil Resources, MN Pollution Control Agency, watershed districts, water management organizations, county, city and township zoning.

**NOT ASSIGNABLE:** This permit is not assignable by the permittee except with the written consent of the Commissioner of Natural Resources.

**NO CHANGES:** The permittee shall make no changes, without written permission or amendment previously obtained from the Commissioner of Natural Resources, in the dimensions, capacity or location of any items of work authorized hereunder.

**SITE ACCESS:** The permittee shall grant access to the site at all reasonable times during and after construction to authorized representatives of the Commissioner of Natural Resources for inspection of the work authorized hereunder.

**TERMINATION:** This permit may be terminated by the Commissioner of Natural Resources at any time deemed necessary for the conservation of water resources of the state, or in the interest of public health and welfare, or for violation of any condition of this permit.
MnDOT Noise website update

The following slides can be found at:
http://www.dot.state.mn.us/environment/noise/index.html
Noise FAQ’s

Why does MnDOT build noise barriers?
noise barriers generically prove to be quite effective in providing noise reduction at receptors near transportation facilities.

in 1972, the U.S. Congress passed legislation requiring the states to provide mitigation for highway noise (considered an environmental impact) at impacted locations, where it is found to be significant and Nuisance as a part of all Type 1 Noise Act projects.

MnDOT Metro District also has a Highways Noise Abatement Program. This program is entirely state funded (without Federal-aid funds), therefore no FHWA review or approval is required. noise barriers for these locations are added to a planning work and included in MnDOT’s future District Highway Noise Abatement study, directed by the Minnesota Legislature in 1976 and updated in 2002, 2007, and again in 2011. (For further information see MnDOT Noise Policy, 2011)

What is a “Type 1 project”?
A Type 1 project is a proposed new or re-route the highway project for the construction of a highway meeting one or more of the following conditions:
  1. The construction of a highway on a new location;
  2. The physical alteration of an existing roadway where there is either:
    1. Substantial New Source Alteration: A project that involves the distance between the traffic noise source and the receptor or between the traffic noise source and the existing receptor.
    2. Substantial Vertical Alteration: A project that involves changing, therefore, exposing the traffic noise source and the traffic noise source. This is done by altering the vertical alignment of the roadway or by altering the topography (not including the addition or removal of vegetation) between the traffic noise source and the receptor; or
    3. A change that causes a significant environmental impact.
  4. A change in the roadway lane(s). This includes the addition of a new traffic lane that functions as a HOV lane, contraflow lane, High-Occupancy Toll (HOT) lane, bus lane, or truck lane, or;
  5. The addition of an auxiliary lane, except for when a auxiliary lane is a part lane.
  6. The addition or expansion of a separation or ramp, or a change to a ramp, or a change to a lane, or;
  7. The addition of a new or existing elements or a new or existing elements or a new or existing elements.

If a project is determined to be a Type 1 project as defined above, then the entire project area as defined in the environmental document is a Type 1 project.

What is an impacted location?
A “noise sensitive receptors” (defined as homes, parks, schools, businesses, etc.) is considered impacted by noise if either the future or (generally a 25-year traffic projection) noise levels exceed the state noise levels above FHWA Noise Abatement Criteria, or if there is a substantial increase (greater than or equal to 5.0 dB) in the projected noise levels at the property boundary from the baseline noise level.

Table 1 lists Minnesota’s noise standards. Table 2 lists the FHWA’s Noise Abatement Criteria.

<table>
<thead>
<tr>
<th>Noise Standards</th>
<th>Day</th>
<th>Night</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7:00 AM - 10:00 PM</td>
<td>10:00 PM - 7:00 AM</td>
</tr>
</tbody>
</table>

Solicitation Envelope Example

Minneapolis Department of Transportation
Metropolitan District
Waters Edge
1500 West County Road B-2
Roseville, MN 55113-3174

Noise barrier ballot
Do not throw away

Resident
2333 Main St
Nowhere, MN 55555
## Vehicle Classes for Noise Modeling

<table>
<thead>
<tr>
<th>Type</th>
<th>Passenger Vehicles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Motorcycle</td>
</tr>
<tr>
<td>2</td>
<td>Car</td>
</tr>
<tr>
<td>3</td>
<td>Truck Van</td>
</tr>
</tbody>
</table>

### Single Units

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Bus</td>
</tr>
<tr>
<td>5</td>
<td>2-Axle Single Unit</td>
</tr>
<tr>
<td>6</td>
<td>3-Axle Single Unit</td>
</tr>
<tr>
<td>7</td>
<td>4+ Axle Single Unit</td>
</tr>
</tbody>
</table>

### Combo Units

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>3 &amp; 4 Axle Semi</td>
</tr>
<tr>
<td>9</td>
<td>5 Axle Semi</td>
</tr>
<tr>
<td>10</td>
<td>6+ Axle Semi</td>
</tr>
<tr>
<td>11, 12, 13</td>
<td>Twin Tandem Semi</td>
</tr>
</tbody>
</table>
How to Determine the “Loudest Hour?”

Determining “Loudest Hour” For Noise Analysis

The following page is an excerpt from a Federal Highway Administration document entitled “Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA”, March 2010.

The results of travel demand forecasts are used as inputs to noise analyses routinely conducted as part of the NEPA process. The procedures used to identify and estimate noise impacts are found in 23 CFR Part 772, the FHWA regulations for the evaluation and mitigation of traffic noise in the planning and design of Federal funded highway projects. This regulation establishes:

1. Methodologies for conducting a traffic noise analysis, and
2. Guidelines and requirements for the consideration of noise abatement measures.

In preparing traffic projections for NEPA documents, it is important to understand certain requirements of the FHWA regulations with respect to traffic volume estimation and modeling:

- Noise levels are established for the existing condition and a no-build and build scenario in the design year. The “design year” is the future year used to estimate the probable traffic volume for which a highway is designed and is usually consistent with the design year established for other impact analyses in the EIS process.
- Impacts are measured during the one-hour period where the worst-case noise levels are expected to occur. This may or may not be the peak hour of traffic. That is, higher traffic volumes can lead to higher noise emissions from motor vehicles, the worst-case noise levels may occur in hours with lower volumes and higher speeds. In addition, vehicle mix may also change hourly. On many highways, the percentage of heavy trucks is reduced during peak hour. Since heavy trucks have greater sound emissions than passenger cars, vehicle mix is an important component in determining the peak hour of noise impact. It may be necessary to conduct screening runs on several hours to determine which combination of traffic volume, speed, and vehicle mix yields the greatest impact. It may be the case that the peak hour of noise impact changes as the result of the proposed project. For example, the introduction of a multimodal facility like a freight terminal could introduce a large volume of heavy trucks during off-peak hours. In this case, a different analysis hour could be evaluated for the no-build and build alternative scenarios.

If the hour to be modeled is not included as a direct output of the travel demand forecasting model, then adjustments can be considered based on factors developed for similar types of roads. For example, if a transportation model is used to develop annual average daily traffic (AADT), then adjustment factors based on automatic traffic recorders (ATRs) could be used to estimate time-of-day hourly volumes and vehicle mix. The methodology for adjustment of model volumes used in the noise analysis should be consistent with that used in other sections of the EIS, and should be documented.
Noise Analysis Flow Charts
EA/EAW Example Flowchart
Future guidance updates that will be posted on the website:

• How to analyze projects with existing noise barriers
• How to determine the physical limits of the noise analysis
Nighttime Construction Noise Boilerplate Specification

(NIGHT CONSTRUCTION)

Night Construction shall be defined as construction between the hours of 9:00 p.m. to 7:00 a.m., and where the work will occur within 500 feet of any sensitive areas such as hospitals, homes for the aged, private residences, apartment buildings, businesses, and schools.

For Night Construction, the Contractor shall be prohibited from performing the following activities: pile driving, concrete placement, sawing for pavement repair, cutting operations, and jack hammering. Any deviation from the hours that these activities are prohibited from occurring must be approved by the Engineer.

The Contractor shall have a supervisor on site during Night Construction that has completed the “MnDOT Noise Mitigation for Night Construction” training in the five years prior to the start date of this Contract and shall be on site as having completed the training with the Department. This training is free of charge and is available at the MnDOT website. A signed statement from the Nighttime Supervisor’s name and a copy of their certification shall be submitted to the Engineer prior to Night Construction.

For Night Construction, the following shall be required of the Contractor:

- A noise abatement plan shall be part of the proposed Night Construction. Notification of the type, location, and duration of the work shall be made in writing to the contractor at least 10 calendar days prior to beginning the work.
- Provide a copy of the Notification to the Engineer and the City.
- A noise abatement plan shall be prepared by the Contractor, which identifies the measures and equipment to be used and the procedures to be followed.
- Equipment shall be OSHA approved and have noise-abatement equipment installed on it, as applicable, and that are in compliance with applicable OSHA standards.
- The contractor’s equipment shall be approved by the City and the Engineer for use in the area.
- Vehicles shall be equipped with noise-abatement equipment, as applicable, and that are in compliance with applicable OSHA standards.
- Vehicles shall be equipped with noise-abatement equipment as required by the City and the Engineer.
- Tires and tracks shall not be noise-abatement equipment.
- Truck drivers who are unable to control the noise-abatement equipment shall be removed from the project.
- All engines and engine-driven equipment used for handling or construction shall be equipped with an adequate muffler to control noise and properly maintained to prevent excessive noise.

If the Engineer determines that the Contractor is not in compliance with the Night Construction requirements, the Engineer will suspend Night Construction until the non-compliant issues are addressed or the Contractor accepts an action plan from the Engineer that satisfactorily addresses any non-compliant issues noted.
Nighttime Construction Noise Web Based Training

www.dot.state.mn.us/onlinelearning/construction/noisemitigation
Consequences of Nonattainment

- Significant for businesses, government and citizens
- Air permitting, increased monitoring and modeling, State Implementation Plan
- Significant increase in project level documentation
- Adverse health impacts of not meeting standard
Economic Consequences of Nonattainment - Updates

- Study updated in 2012 by University of Minnesota grad student Courtney Blankenheim
- $140 million to $240 million annually for ozone and fine particulate nonattainment
- Biggest costs would fall on all drivers and fleet owners
Construction Emissions

Photo courtesy of the City of St. Paul
Top Ten Hot Spot Screening Method

- CO Maintenance Area since 1999
- Updated Maintenance Plan 2005
- Hot Spot Screening Method updated in 2007
- “Limited” Maintenance Plan 2010
- Hot Spot Screening Method to be updated FY 2014
EPA MOVES Model

• Required December 20, 2012
• MOVES2010b
• http://www.epa.gov/otaq/models/moves/index.htm
Mobile Source Air Toxics

NEW FHWA MSAT Guidance:

http://www.fhwa.dot.gov/environment/air_quality/air_toxics/policy_and_guidance/aqintguidmem.cfm

December 6, 2012