New England EPA Audit Policy for Municipal Vehicle Maintenance Facilities

The US Environmental Protection Agency (EPA) is working to make municipalities aware of their Audit Policy. The Audit Policy encourages facilities, both public and private, to:

- Conduct an environmental compliance audit; and,
- Disclose and correct any violations that are found during the audit.

Anyone in the public or private sector can use EPA's Audit Policy at any facility at any time. If violations are discovered during the audit and disclosed and corrected in a timely manner, the penalty for the violations is either eliminated or substantially reduced, if all conditions of the Audit Policy are satisfied.

Added Incentive for Municipal Vehicle Maintenance Facilities

EPA New England, in cooperation with the New England Chapter of the American Public Works Association (APWA), has developed an additional incentive program specifically for municipal vehicle maintenance facilities that is designed to increase environmental compliance, eliminate or minimize fines, and provide time to comply.

Municipal vehicle maintenance facilities participating in the program will be the lowest inspection priority for EPA New England from the sign-up date through September 30, 2002. This means that they are unlikely to be inspected during this period unless EPA receives a citizen complaint or believes an imminent environmental threat exists.

How to Sign Up

- Submit a letter of intent to EPA that states that you intend to conduct an audit of your facility and disclose potential violations to EPA under the audit policy.
- Identify a contact person at your facility.
- Tell them which facility (ies) and include each facility’s street address.
- Have the letter signed.
- Send the letter to EPA:
  Nancy Barmakian
  Regional Municipal Coordinator
  US EPA
  1 Congress Street
  Boston, MA 02114
  (phone: 617-918-1016)
- Send a copy to the Connecticut Department of Environmental Protection:
  Paul T. Balavender
  Manager, Office of Enforcement Policy and Coordination
  Connecticut DEP
  79 Elm Street
  Hartford, CT 06106-5127
  (phone: 860-424-3049)

Deadlines

For municipal vehicle maintenance facilities to receive the added incentive of inspection relief that EPA New England is offering, some deadlines have been established:

- Sign-up period is through October 1, 2001.
- Send a letter of intent as soon as possible to sign up and become the lowest EPA inspection priority. The sooner EPA receives your letter, the sooner your vehicle maintenance facilities are covered.
- Before October 1, 2002, ensure you have municipal approval and funds to conduct the audit.
- If you decide not to participate for any reason after sending a letter of intent, send a letter to Nancy Barmakian, EPA New England, by October 1, 2001. If you decide not to participate, you will revert to normal inspection status and will be treated no better or worse than all other non-participants.
- Complete your audit by December 31, 2001 or sooner.

Who Should Conduct the Audit?

The EPA Audit Policy specifies that the audit be an independent review of the facility's compliance status. EPA New England encourages the use of a quali-
fied third party, such as a professional auditor to conduct the audit.

What to Do with the Audit Report
You need not send EPA the completed audit report. The report is prepared to help you discover and correct any violations of environmental requirements.

Following Up with EPA
If violations are found during the audit, you must inform EPA of the violations in writing within 21 days of discovering the violation. They have a good form for making disclosures on their audit web site at http://es.epa.gov/oeca/ore/checklist.pdf. You must correct the violation within 60 days of discovering the violation. If you cannot correct the violation within 60 days, write to EPA to request an extension. If you inform EPA that no violations were discovered during the audit, your facility will remain a low inspection priority through September 30, 2002. If EPA does not hear from you within 60 days of completing your audit, your facility will return to normal inspection priority.

To Obtain the Audit Policy
Copies of the policy are available on the US EPA’s Audit Policy web site at www.epa.gov/oeca/ore/apolguid.html or on the New England EPA’s Compliance web site at www.epa.gov/region01/steward/neeat/compliance.html. You may also request copies by calling the EPA New England Customer Call Center at 1-888-372-7341 (toll free within New England) or the CTI Technology Transfer Center at 860-486-5400.

From information provided by New England EPA.

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Regulations Checklist for Public Works Facilities

This checklist is designed to help public works facilities achieve and maintain compliance with environmental and other requirements. The requirements listed here are based on federal environmental and health and safety regulations, as well as nationally recognized fire codes. This checklist is provided solely as a preliminary source of information on environmental and other regulations in order to help identify issues that may need further attention. It does not constitute legal advice and should not substitute for review of actual state and federal regulations.

**General Walk-Through of Facility Yard**
- Waste materials abandoned on the property or picked up are identified, stored according to hazard, and disposed of properly.
- Drums of materials and wastes outside of the building are stored on an impervious surface and have secondary containment (e.g., berms).
- Roofs are advisable. Drums are empty and clean.
- Road salt is stored in a shed so that storm water cannot wash it into a water body or contaminate ground water.
- Leaking vehicles are not stored outdoors.
- If you fuel vehicles on-site, you may have to equip your pumps with vapor recovery devices.

**Building**
- Employees have been trained in the use of fire extinguishers. Aisles and emergency exits are clear, and exit signs are posted over doors.
- Smoking is prohibited near volatile fluids.
- Electrical receptacles have no open grounds or reverse polarity.
- Circuits are labeled and the circuit box is closed. Access to the circuit box is clear within 5-10 feet.
- Electrical outlets have cover plates. No wires are frayed, damaged, or taped off.
- Wiring is enclosed in Electrical Metallic Tubing or rigid metal pipe.
- There is adequate central ventilation and adequate local ventilation for carbon monoxide from tailpipe exhaust systems.

**Materials and Waste Storage and Management**
- Drums, tanks and other containers are labeled with the name of the material they hold (for example, waste oil) and the type of hazard they present (e.g., flammable).
- Waste containers are labeled with the date when contents were first added.
- Lids are tight-fitting and sealed, and bungs are closed.
- Waste storage area is labeled.
- There are no leaks or excessive spillage in chemical or waste storage areas, including around solvent sinks, pumps, pipes, hoses, and valves.
- Flammable (flashpoint <140°F) materials are stored in an area (such as an air-tight metal cabinet) approved by the local fire department.
- Flammable and hazardous liquids are stored in containers that are either approved by the US Department of Transportation or by the State Fire Marshal, or listed and labeled by the National Registration and Testing Laboratory (UL-listed).
- Waste containers are stored on an impervious surface and have secondary containment.

**Floors**
- Floor drains are connected to the sewer (with approval from sewer authority or equipped with an approved tight tank which is pumped regularly by a licensed hauler).
- There are no cracks in the floor that would allow spills to penetrate.

**Health and Safety**
- Employees are trained in chemical
- Eyewash and showers providing 15 minutes of continuous flush are available.
- Materials Safety Data Sheets (MSDSs) are available for all chemicals, and spill control, posted near phones and potential sources of spills.
- Spill control materials are available on-site.
- Materials Safety Data Sheets (MSDSs) are available for all chemicals.
- Eyewash and showers providing 15 minutes of continuous flush are available in areas where acids and bases are used.
- Employees are trained in chemical, hazard, safety, and emergency preparedness.

**Vehicle Maintenance Operations**

**Vehicle Fluids**
- Drained waste fluids such as waste oil, antifreeze, and solvents are stored in separate drums or tanks.
- Waste oil is removed by a licensed transporter or burned on-site in an approved heater.
- Oil filters are punctured and hot drained over a waste oil drum for the required amount of time, and then recycled or disposed of properly.
- Oily shop rags are placed in sealed, labeled metal containers and laundered by a licensed facility.
- Oily absorbents are handled as oily waste, not thrown in the trash.

**Solvent Parts Cleaning**
- Lid of solvent parts cleaner is closed.
- A licensed transporter picks up and recycles solvents or disposes of solvents as hazardous waste.
- Parts cleaner is labeled with material name and hazard type.
- If flammable solvent (flashpoint <140°F, <200°F in RI) is used, the parts cleaner has a fusible link that locks shut in the case of fire.
- Parts cleaner filters are handled as a hazardous waste.

**Battery and Tire Storage**
- Batteries are stored in a single layer on pallets of shelving with a non-corrosive base, and are properly recycled.
- Tires stored outside are covered and properly disposed of.

From information available on the EPA New England web site at www.epa.gov/region01/steward/neeat/checklist.html.

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**Bad Roads Are Significant Cost to Motorists**

Driving on roads in need of repair costs American motorists $41.5 billion a year in additional vehicle operating costs — or $222 per motorist, according to a recent report.

The Road Information Program (TRIP), a nonprofit transportation research group based in Washington, calculated the extra costs motorists pay to drive on roads in need of repair. The report, “Extra Vehicle Operating Costs: What Motorists Pay to Drive on Roads in Need of Repair,” was based on TRIP’s analysis of Federal Highway Administration data. Nationwide, 28 percent of major roads in the country are in poor or mediocre condition and need repair.

“Driving on roads in need of repair results in extra costs in areas such as additional tire wear, damage to shock absorbers and wheel alignment and extra fuel consumption,” said William M. Wilkens, TRIP’s Executive Director. “These extra vehicle operating costs are ‘hidden taxes’ that American motorists pay to drive on bad roads.”

“Because bad road conditions are significant factor in the amount each and every driver pays, increased investment in highway transportation infrastructure at state and federal levels to help make needed repairs would help reduce these extra costs.”

Wilkens also pointed out that a recently released poll conducted for the Federal Highway Administration and the National Partnership for Highway Quality found significant public support for the use of more durable materials in the resurfacing of roads. The use of durable paving materials was the top choice cited by motorists when asked about preferred transportation improvements to combat traffic delays.

“It’s critical to make timely repairs of good quality, since studies have shown that it costs a lot less to repair roads in fair condition than roads in poor condition,” Wilkens said. “Also, the use of more durable paving materials can help extend the life of road surfaces.”

One way to reduce repair needs and prevent pothole formation is to emphasize improved technology that can help make roads more durable and longer lasting. “States with aggressive preventive maintenance programs can intercept roadway deterioration before potholes develop,” said Bill Ballou, President of the Foundation for Pavement Preservation.

“Preventive maintenance must be done on highways in good condition. It’s like changing the oil on a vehicle to make sure that major damage does not occur.”

Ballou pointed out that when pavement in good condition declines to fair or poor condition, then more expensive treatments such as rehabilitation and reconstruction are necessary.

As the nation’s highway infrastructure ages and more rehabilitation work is needed, work zones have become a daily fixture on our roads. Often, however, the user delays caused by work zones and the resulting costs to motorists, as well as the costs of mitigation strategies to lessen these delays, are not considered during the design and planning of projects. A new initiative of the Federal Highway Administration, known as the Strategic Work Zone Analysis Tools (SWAT) program, is out to change this.

Four tools are being developed as part of the initiative: an Expert System software program, a traffic impact analysis spreadsheet, a cost/alternative analysis spreadsheet, and a detailed simulation model. Other tools that are out there don’t encompass the impacts to areas surrounding work zones. With the Expert System, a user would enter data on the characteristics of the work zone, such as what type of highway improvement or repair work is being done and the duration. The program would then provide a list of possible mitigation strategies for reducing work zone delays and costs, such as re-timing an alternative route’s traffic signals.

Version 1.0 of the traffic impact analysis spreadsheet, known as QuickZone, is the first tool developed through the SWAT program and is scheduled to be released by next spring. In the meantime, a prototype version is available for review and evaluation. A user need only have Microsoft Excel 97 or higher running on a Windows-based PC to use the QuickZone application. The evaluators include a steering committee composed of states and Metropolitan Planning Organizations (MPOs), among others.

A definite date has not yet been set for the release of the Expert System software and the simulation model. The SWAT program is expected to run through 2004.

From information provided by the Turner-Fairbank Highway Research Center on their Strategic Work Zone Tools web site at www.tfhrc.gov/its/swat.htm.

QuickZone

QuickZone will provide a general and quick work zone traffic impact analysis capability. This tool will estimate the traffic impacts for various work zone mitigation strategies and estimate user delay and delay costs associated with those impacts. For example, if a highway agency was widening a lane of traffic, QuickZone could estimate the impacts of doing work at night instead of during the day or diverting the traffic to one road versus another road during different phases of the construction. The user delay can be estimated for both an average day of work and for the whole life cycle of construction.

The simulation model, meanwhile, would be used in conjunction with QuickZone to more precisely estimate the impacts of specific work zone strategies and the effectiveness of mitigation techniques.

FHWA’s Operations and Intelligent Transportation Systems Research Team has initiated the beta-testing of QuickZone, which was developed in cooperation with Mitretek Systems. Your help is sought in assessing this software in terms of ease-of-use, user interface, presentation of outputs, visual display of data, and overall functionality.

Motivation

In all but a few high-visibility freeway construction and refurbishment projects, the “soft cost” of traveler delay is typically not considered when key decisions about project staging and duration are made. The 1998 FHWA report Meeting the Customer’s Needs for Mobility and Safety During Construction and Maintenance Operations identifies this issue and recommends the development of an analytical tool (QuickZone) for quick and flexible estimation of work zone delay in all four phases of the project development process (policy, planning, design and operations).

Approach

The QuickZone concept is to provide an easy-to-use, easy-to-learn tool that utilizes software tools that are familiar to the target user base. FHWA’s current approach is to develop QuickZone as a Microsoft Excel Workbook application. The prospective QuickZone analyst need only have Excel 97 or higher running on a Windows-based PC with minimal memory and processing speed requirements. The overall goal in terms of ease-of-use is less than one hour to input and check a QuickZone network, and less than three minutes to analyze the data and produce delay profiles over the project duration.

Purpose

The primary functions of QuickZone are:

- Supporting tradeoff analyses between construction costs and delay costs.
- Examination of impacts of construction staging, by:
  - location along mainline
  - time-of-day (peak vs. off-peak)
  - season (summer vs. winter)
- Assessment of travel demand measures and other delay mitigation strategies.
- Allowing the establishment of work completion incentives.

Target Users

The target users of QuickZone are state and local traffic construction, operations, and planning staff, and construction contractors. The tool is suitable for application in both urban and inter-urban settings.

Want to Try QuickZone?

You can download and evaluate the prototype QuickZone Version 0.99 at www.tfhrc.gov/its/quickzon.htm. It is a self-extracting executable file. Click on the link and save the file to your computer. Then locate the file on your computer and double-click—the file will be extracted and the files will be ready for viewing. The file “readme.pdf,” included in the executable, explains the components of the software package.

From information provided by the Turner-Fairbank Highway Research Center on their QuickZone web site at www.tfhrc.gov/its/quickzon.htm.
Local Governments Face New Accounting Rules

The rules of governmental accounting are changing. As state and local governments are required to adopt accounting practices similar to those used in the private sector, transportation administrators face the task of bringing their financial reports into compliance with the new standards established by the Government Accounting Standards Board—before time runs out.

State and local governments have traditionally reported their infrastructure assets (roads, bridges, dams, vehicles, etc.) according to the cash accounting method: the cost of the infrastructure investment appears on the agency’s financial reports the year in which its cost was incurred. Under this system, the value of existing physical assets is not reported in subsequent years.

But according to new reporting requirements known as “GASB 34,” governments must begin to report such assets using accrual accounting methods similar to those used in the private sector—taking into account the monetary value of assets throughout their life spans and factoring in depreciation, in the same way a business would account for the value of the buildings and machines it owns.

Benefits of GASB 34

Although the new reporting system will make government financial information more comprehensible to private citizens, GASB 34 will also help businesses and financial institutions obtain a clearer picture of government finances. GASB 34 will therefore be an important factor in dealing with creditors and investors, and governments not in compliance will be at a distinct disadvantage.

Another important advantage of capitalizing infrastructure assets in compliance with GASB 34 is likely to be seen when it comes time to request public funding. The new accounting system will make it easier for the general public to understand that the transportation system represents an investment in the community’s future, so allowing infrastructure to degrade amounts to saddling future generations with a deficiency they’ll have to pay. In countries where similar accounting practices are required, the “stewardship” argument has been very effective in garnering public support for funding even during periods of economic recession.

What’s Required?

GASB 34 requires two types of financial reporting: prospective and retroactive. Prospective reporting simply requires agencies to report the value of newly acquired or constructed assets. Four years later, when retroactive reporting requirements go into effect, agencies will be required to determine values for their pre-existing assets (constructed or significantly improved since 1980) and report them as well.

These reporting requirements will take effect in phases, beginning with the largest governmental entities, so the fiscal year in which reporting begins will depend on your agency’s total annual revenues for the fiscal year ending after June 15, 1999. Prospective reporting requirements will take effect fiscal year beginning after June 15, 2001 for large-sized governments ($100 million or more in revenues); fiscal year beginning after June 15, 2002 for medium-sized governments (at least $10 million, but less than $100 million in revenues); and, fiscal year beginning after June 15, 2003 for small-sized governments (less than $10 million in revenues). Retroactive reporting requirements will take effect four years after prospective reporting requirements.

There are two methods available for assessing the value of transportation infrastructure: the depreciation approach and a modified approach. The relatively simple depreciation approach applies the perpetual inventory method of accounting to depreciate asset value based on historical costs. The more complicated modified approach, detailed in GASB 34, applies asset management techniques. Agencies are free to choose either method; determining which method is right for your agency will involve a number of factors including your internal organization and past accounting practices.

Depending on your agency’s unique situation, implementing GASB 34 may be relatively simple or represent a substantial unfunded mandate. However, GASB 34 is not a “one size fits all” regulation, and agencies may take advantage of the built-in flexibility in reporting to develop a strategy for meeting the new reporting requirements.

You can access extensive information on GASB 34 at the GASB web site: accounting.rutgers.edu/raw/gasb.

Excerpted from an article by Peter Nelson in Minnesota Technology Exchange, Vol. 8, No. 4, October-December 2000.

News from Connecticut DOT

Green Signal Heads

The Department of Transportation has changed its requirements for the color for signal heads from yellow heads and black faces to a dark green (Color No. 14056, Federal Standard No. 595). This change is effective immediately on all new signal installations. Existing yellow heads will remain until it is necessary to replace them for reasons other than change of color. The color green has been the standard color along the Merritt Parkway for aesthetic reasons. The dark face has been used to improve the contrast between the signal face and the indication color. The Department prefers to stock one color signal head.

All-Red Clearances

The Traffic Engineering Division has changed its philosophy with respect to determining all-red clearance intervals on state highways. The new method is contained in the Division’s recently revised Traffic Signal Design Manual, which is anticipated to be published in late spring 2001 and will be available from the Document Reproduction Office at Pascone Place in Newington. It was felt that the current methodology, which was primarily based on the ITE formula, resulted in all-red clearance intervals which were too long.
The Millennium MUTCD

Transportation managers nationwide use the Manual on Uniform Traffic Control Devices (MUTCD) to install and maintain traffic control devices on all streets and highways open to public travel. The Manual contains national design, application, placement standards, and guidance for all traffic control devices such as signs, signals, and pavement markings.

Although the MUTCD was updated in 1988, it has been more than 20 years since the last full-scale revision on the Manual in 1978.

The Millennium Edition MUTCD is being reformatted to improve the overall organization and discussion of the content. This reformattting makes the Manual easier to read and easier for the user to access information. Many sections of the Manual have been revised, including:

- New signs and pavement markings
- Changes in both standards and guidance
- New sections, such as Part 5 (Rural Roads) and Part 10 (Light Rail)
- Major changes in Part 6 (Work Zones)
- Americans with Disabilities Act (ADA) and pedestrian guidance

One of FHWA’s goals is to provide equitable access to the Manual to a wide and diverse audience of users. Electronic access is one way to reach this goal. Since December, the Millennium Edition MUTCD has been available on the Internet at: http://mutcd.fhwa.dot.gov. On the MUTCD web site you will also find:

- Information on the amendment process
- Tutorials and educational materials
- The latest news on revisions, interpretations, and experimentations
- Information on the major changes including a side-by-side PowerPoint presentation that compares the changes in the Millennium Edition MUTCD to the 1988 Edition
- Answers to frequently asked questions
- Discussion groups on a variety of MUTCD subjects
- Links to other MUTCD resources and FHWA staff
- Links for purchasing the MUTCD

Bound copies and CD ROM versions of the Manual will be available for purchase through a number of national associations, including the following:

- American Association of State Highway Officials (AASHTO) — www.transportation.org
- Institute of Transportation Engineers (ITE) — www.ite.org


Hultgren Named One of the Best

Lon Hultgren, Director of Public Works for the Town of Mansfield, has been recognized by the American Public Works Association (APWA) as one of their 2001 top ten public works leaders.

APWA has honored ten public works professionals each year since 1960 for the significant contributions they have made to the profession, to their communities, and to the people they serve.

We congratulate you, Lon, on APWA’s prestigious recognition of your dedication and success!

Norman Garrick Recognized for Public Works Service

Norman Garrick has received the Meritorious Service Award from the New England Chapter of the American Public Works Association for the continuing contribution to the improvement of public works services he had made through the Technology Transfer Center as Director of the Connecticut Transportation Institute.

The award, which recognizes the role private enterprise and academic institutions play in providing public works services, was presented at the New England Chapter APWA National Public Works Week Luncheon, in Boston, on May 23, 2001.

The New England Chapter’s 900 members are from Connecticut, Rhode Island, Massachusetts, New Hampshire and Vermont and represent public agencies, private sector companies, and individuals dedicated to providing high quality public works goods and services.

Congratulations, Norman!
From Our Resource Library

To request any of the following materials, please use the enclosed form or contact the Connecticut Transportation Institute’s Technology Transfer Center by phone at 860-486-5400, by fax at 860-486-2399, or by e-mail at smerrall@engr.uconn.edu. Publications are free while supplies last. Videotapes may be borrowed free of charge for two weeks.

PUBLICATIONS


This toolkit is a set of ten fact sheets that demonstrate proven cost-effective strategies for fleet operations to reduce costs, reduce liability, and improve environmental performance. The fact sheets provide information on implementing these pollution prevention best practices:

- Aqueous parts washing
- Aqueous brake washing
- Oil life extension
- Reusable oil filters
- Refillable spray bottles
- Antifreeze recycling
- Spill prevention and floor cleanup
- Oil water separators


The purpose of this guide is to provide assistance to local governments responsible for safety of unpaved rural roads. It provides an easy to use reference to help answer key safety questions in the field.


This guide is designed to help practitioners understand and correctly choose and apply the dust palliative that is appropriate for their particular site, traffic conditions, and climate. In addition, it describes the expected performance, limitations, and potential environmental impacts of various palliatives.


This workbook, which was distributed to participants at the March 20, 2001 National Videoconference on the Millennium Edition of the Manual on Uniform Traffic Control Devices, contains all slides used in that presentation.

VIDEOTAPES


Millennium MUTCD Satellite Video Conference, ATSSA/FHWA, 120 minutes.


Mark Your Calendars

Technology Transfer Expo 2001

September 26, 2001
9:00 a.m. – 3:00 p.m.
University of Connecticut
Storrs, Connecticut

Co-sponsored by the Connecticut Technology Transfer Center and the Connecticut Highway Street Supervisor Association (CHSSA)

Join us, rain or shine, for an educational day of hands-on demonstrations and exhibits.

Public agencies, trade associations, vendors and contractors will present live and static displays of their products and services.

Attendees can operate the latest equipment, test new products, and learn about the most recent policies, procedures and practices.

Registered contestants can also vie for top honors in the backhoe competition where they’ll be judged on skill, accuracy and speed.

For free tickets or additional information, please call the Technology Transfer Center at 860-486-1384.

Transcript Request Policy Change

Attention All Participants in Connecticut Road Master and Connecticut Municipal Legal Traffic Authority Programs

As of April 1, 2001, individuals may request up to two (2) transcripts per calendar year without incurring processing fees. A processing fee of $5.00 will be charged for any additional requests.

We do still require a written request with a signature. Revised request forms are available by calling 860-486-5400.
Conference Calendar

Managing the Small Highway Department
A Connecticut Road Master Program Elective Workshop
• August 7, 2001 in Storrs • August 8, 2001 in Waterbury • August 9, 2001 in Hartford
Contact: Connecticut Transportation Institute, phone 860-486-1384

Surveying Methods for Local Highway Departments
• September 18, 2001 in Storrs • September 19, 2001 in Storrs • September 20, 2001 in Storrs
Contact: Connecticut Transportation Institute, phone 860-486-1384

Where and When to Use Traffic Signs, Signals and Markings
A Connecticut Municipal Legal Traffic Authority Program Workshop
• October 16, 2001 in Hartford • October 17, 2001 in Waterbury • October 18, 2001 in Storrs

PROFESSIONAL DEVELOPMENT SEMINARS
Project Management, July 25-26, 2001 in Storrs
Traffic Calming and Neighborhood Design, October 10-12, 2001 in Hartford
Contact: Connecticut Transportation Institute, phone 860-486-1384

Take advantage of our new on-line registration form now available at
www.cti.uconn.edu/ti/Technology/Workshopsched.htm