



A REPORT  
TO THE  
MONTANA  
LEGISLATURE

PERFORMANCE AUDIT

# *Controls Over Dyed Diesel Use in Montana*

*Department of Transportation*

SEPTEMBER 2011

LEGISLATIVE AUDIT  
DIVISION

11P-01

**LEGISLATIVE AUDIT  
COMMITTEE**

**REPRESENTATIVES**

RANDY BRODEHL  
[brodehl@centurytel.net](mailto:brodehl@centurytel.net)

TOM BURNETT  
[Tburnetthd63@hotmail.com](mailto:Tburnetthd63@hotmail.com)

VIRGINIA COURT  
[Vjchd52@yahoo.com](mailto:Vjchd52@yahoo.com)

MARY McNALLY  
[mcnallyhd49@gmail.com](mailto:mcnallyhd49@gmail.com)

TRUDI SCHMIDT  
[trudischmidt@q.com](mailto:trudischmidt@q.com)

WAYNE STAHL, VICE CHAIR  
[wstahl@nemontel.net](mailto:wstahl@nemontel.net)

**SENATORS**

DEBBY BARRETT  
[grt3177@smtel.com](mailto:grt3177@smtel.com)

GARY BRANAE  
[garybranae@gmail.com](mailto:garybranae@gmail.com)

TAYLOR BROWN  
[taylor@northernbroadcasting.com](mailto:taylor@northernbroadcasting.com)

CLIFF LARSEN  
[cliff@larsenusa.com](mailto:cliff@larsenusa.com)

FREDRICK (ERIC)MOORE  
[mail@SenatorEricMoore.com](mailto:mail@SenatorEricMoore.com)

MITCH TROPILA, CHAIR  
[tropila@mt.net](mailto:tropila@mt.net)

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Performance audits conducted by the Legislative Audit Division are designed to assess state government operations. From the audit work, a determination is made as to whether agencies and programs are accomplishing their purposes, and whether they can do so with greater efficiency and economy.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Members of the performance audit staff hold degrees in disciplines appropriate to the audit process.

Performance audits are performed at the request of the Legislative Audit Committee which is a bicameral and bipartisan standing committee of the Montana Legislature. The committee consists of six members of the Senate and six members of the House of Representatives.

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**AUDIT STAFF**

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JOE MURRAY

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# LEGISLATIVE AUDIT DIVISION

Tori Hunthausen, Legislative Auditor  
Deborah Butler, Legal Counsel



Deputy Legislative Auditors  
Cindy Jorgenson  
Angie Grove

September 2011

The Legislative Audit Committee  
of the Montana State Legislature:

This is our performance audit of the Montana Department of Transportation's controls over dyed diesel use in Montana.

This report provides the Legislature information and makes recommendations for improving controls over the special fuel users permitting process, strengthening vehicle inspection activities, and improving management controls over the department's dyed diesel fuel activities.

The department's response to the recommendations is included at the end of the audit report. We wish to express our appreciation to the department director and staff for their cooperation and assistance during the audit.

Respectfully submitted,

*/s/ Tori Hunthausen*

Tori Hunthausen, CPA  
Legislative Auditor

## TABLE OF CONTENTS

Figures and Tables.....	iii
Appointed and Administrative Officials .....	iv
Report Summary .....	S-1
<b>CHAPTER I – INTRODUCTION.....</b>	<b>1</b>
Introduction .....	1
Audit Objectives.....	1
Audit Scope and Methodologies .....	1
Management Memorandum .....	2
Report Organization .....	2
<b>CHAPTER II – BACKGROUND .....</b>	<b>3</b>
Introduction .....	3
MDT Organizational Structure.....	3
Motor Carrier Services Division.....	4
Administration Division .....	5
Fuel Tax Management and Analysis Section.....	5
Legal Services.....	6
Internal Audit Unit .....	6
MDT Organizational Structure Provides For Basic Controls .....	6
<b>CHAPTER III – SPECIAL FUEL USERS PERMITS.....</b>	<b>7</b>
Introduction .....	7
Process Exists to Ensure MDT Contracts Are Awarded to Contractors With SU Permits .....	7
Current MDT Process Does Not Address Subcontractors.....	8
Local Road Projects Did Not Always Use Permitted Contractors.....	8
Local and Federal Staff Were Not Always Aware of Special Fuel Users Permit Requirements .....	9
Additional Training Would Be Beneficial.....	9
Inspections on Public Road Projects .....	10
<b>CHAPTER IV – STRENGTHENING DYED DIESEL FUEL INSPECTION ACTIVITIES.....</b>	<b>13</b>
Introduction .....	13
Dyed Diesel Enforcement Process.....	13
Dyed Diesel Enforcement Controls .....	14
Dyed Diesel Fuel Inspections.....	14
Lower Risk Vehicles Have More Inspections .....	15
Vehicles With Lower Inspection Rates Present Higher Risk of Dyed Diesel Use .....	16
Other States Have Established Risk Based Dyed Diesel Fuel Inspection Process .....	16
Risk Based Process Could Improve MDT’s Dyed Diesel Enforcement Process.....	17
<b>CHAPTER V – IMPROVING MANAGEMENT CONTROLS.....</b>	<b>19</b>
Introduction .....	19
Improving Coordination Between the FTMA Section and Internal Audit.....	19
Current Audit Activities.....	20
Summary .....	20
Improving Dyed Diesel Management Information.....	20
Using Available Information to Better Prioritize Enforcement Activities .....	21

Public Road Project Inspections ..... 21  
Dyed Diesel Tip Line ..... 21  
Appeals Process Information ..... 22

**DEPARTMENT RESPONSE**

Department of Transportation ..... A-1

## FIGURES AND TABLES

### Figures

Figure 1	Montana Department of Transportation Organizational Structure.....	4
Figure 2	Fuel Tanks Inspected for Dyed Diesel .....	15

### Tables

Table 1	Number of Violations By Vehicle Type .....	16
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## APPOINTED AND ADMINISTRATIVE OFFICIALS

### Department of Transportation

Jim Lynch, Director, through August 11, 2011

Tim Reardon, Director, Effective August 11, 2011

Larry Flynn, Administrator, Administration Division

Jody Brandt, Operations Manager, Accounting Controls Bureau

Linda Hicks, Financial Manager, Fiscal Operations Bureau

Tracy Halubka, Program Manager, Fuel Tax Management and Analysis  
Section

Duane Williams, Administrator, Motor Carrier Services Division

Dan Moore, Bureau Chief, Enforcement Bureau

Vickie Murphy, Internal Audit Unit Manager

### Montana Transportation Commission

S. Kevin Howlett, Chair

#### Term Expires

2015

Rick Griffith

2013

Diann Seymour-Winterburn

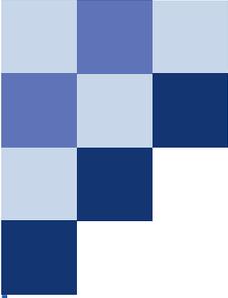
2013

Carol Lambert

2015

Barb Skelton

2013


 MONTANA LEGISLATIVE AUDIT DIVISION

 PERFORMANCE AUDIT  
 Controls Over Dyed Diesel Use in Montana  
 Montana Department of Transportation

SEPTEMBER 2011

11P-01

REPORT SUMMARY

Operating vehicles on public roads with dyed diesel fuel contributes to a loss of fuel tax revenue to the state. The Montana Department of Transportation could strengthen its process to identify vehicles and equipment operating on public roads using dyed diesel.

## Context

Montana defines “special fuel” as any diesel fuel used in motor vehicles or equipment operating upon the public roads and highways of the state. Consumers in Montana can purchase two different types of diesel fuel, depending where the vehicle is operating. Clear diesel fuel includes a state and federal fuel tax for each gallon purchased of \$0.2440 and \$0.2775, respectively. Any vehicles operating on public roads or working on public road construction projects (roads, bridges, etc) must use clear diesel fuel.

The second type of diesel fuel consumers can purchase is sold tax free. Tax free diesel fuel is intended to be used only for off road purposes, such as for agricultural operations. It cannot be used in vehicles or equipment operating on Montana’s public roadways. Because certain diesel fuel is sold tax free, there can be motivation for individuals to use it inappropriately. Untaxed diesel fuel is dyed red to provide a simple way to identify when it is being used.

Montana enacted state law (Title 15, Section 70, Part 3) prohibiting the use of dyed diesel fuel for purposes other than off road use. These laws prohibit vehicles operating on public roads from using dyed diesel and also require all contractors and subcontractors performing any work on public roads (construction, maintenance, etc.) to obtain a special fuel users (SU) permit. This permit requires SU permit

holders to use clear diesel fuel at all times and prohibits them from storing or using dyed diesel.

The Montana Department of Transportation (MDT) is responsible for enforcing statutes related to dyed diesel. Our performance audit examined the department’s controls over dyed diesel use in Montana. Our audit included a review of 148 department road project contracts for 2010, 49 public road projects administered by local governments in 2009 and 2010, an analysis of MDT dyed diesel violations issued in 2009 and 2010, interviews with MDT and local government officials, and observation of dyed diesel enforcement field activities.

## Results

Studies indicate that entities responsible for laws related to dyed diesel fuel have an organizational structure that provides for both enforcement and auditing activities. MDT’s organizational structure provides the mechanism for both these activities to occur. However, audit work found specific controls related to dyed diesel enforcement can be improved. Recommendations made to strengthen the process include:

- ◆ Establishing a review process to ensure subcontractors working on MDT road projects have SU permits.
- ◆ Providing training to local and

*(continued on back)*

federal government contracting personnel regarding SU permitting requirements.

- ◆ Defining the process and expectations for public road project inspections to ensure contractors comply with dyed diesel laws.
- ◆ Establishing a risk based vehicle inspection program for dyed diesel enforcement.
- ◆ Improving the process to recommend high risk areas related to dyed diesel that should be further examined by the Internal Audit Unit.
- ◆ Strengthening dyed diesel enforcement through better use of available information to prioritize enforcement activities.

Recommendation Concurrence	
Concur	6
Partially Concur	0
Do Not Concur	0
<b>Source: Agency audit response included in final report.</b>	

For a complete copy of the report (11P-01) or for further information, contact the Legislative Audit Division at 406-444-3122; e-mail to [lad@mt.gov](mailto:lad@mt.gov); or check the web site at <http://leg.mt.gov/audit>  
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# Chapter I – Introduction

## **Introduction**

Montana defines “special fuel” as any diesel fuel used in motor vehicles or equipment operating upon the public roads and highways of the state. Consumers in Montana can purchase two different types of diesel fuel, depending on where a vehicle is operating. Clear diesel fuel includes a federal and state fuel tax for each gallon purchased of \$0.2440 and \$0.2775, respectively. Any vehicles operating on public roads or working on public road construction projects must use clear diesel fuel. The second type of diesel fuel consumers can purchase is sold tax free. Tax free diesel fuel is intended to be used only for off road purposes, such as agricultural operations. It cannot be used in vehicles or equipment operating on Montana’s public roadways. Because certain diesel fuel is sold tax free, there can be motivation for individuals to use it inappropriately. In 1994, federal law required all untaxed diesel fuel to be dyed red to provide for a visible way to identify untaxed diesel fuel. Montana adopted the federal dyed fuel requirement and enacted state law (Title 15, Section 70, Part 3) prohibiting the use of dyed diesel fuel for purposes other than off road use. The Montana Department of Transportation (MDT) is responsible for enforcing statutes for special fuel use, including those related to dyed diesel fuel. This performance audit examined the department’s controls over dyed diesel fuel use in Montana.

## **Audit Objectives**

We developed three audit objectives related to MDT’s dyed diesel enforcement program. These were to:

- ◆ Determine if public road contracts comply with special fuel permitting requirements mandated by state law.
- ◆ Evaluate the effectiveness of enforcement of dyed diesel fuel on public roads.
- ◆ Assess management controls over MDT’s dyed diesel enforcement activities.

## **Audit Scope and Methodologies**

To address the audit objectives we completed the following methodologies:

- ◆ Examined laws and administrative rules applicable to the special fuel requirements in Montana.
- ◆ Reviewed MDT policies and documentation related to permit and reporting requirements for special fuel used by individuals and businesses.
- ◆ Evaluated department management information related to dyed diesel enforcement activities.
- ◆ Interviewed MDT management and staff regarding the department’s activities and responsibilities related to dyed diesel fuel. This included management and staff from the Administration Division, Motor Carrier

Services (MCS) Division, Fuel Tax Management & Analysis Section, Internal Audit Unit, Legal Services, and district offices. We also interviewed MCS enforcement officers.

- ◆ Interviewed Montana Highway Contracting representatives regarding dyed diesel usage and enforcement.
- ◆ Conducted observations of MCS patrol officers taking fuel samples to test vehicles for dyed diesel fuel.
- ◆ Examined dyed diesel fuel pumps to verify they were marked as dispensing dyed diesel fuel as required by statute.
- ◆ Reviewed contract files for 49 public road projects completed in 2010 for city and county public work offices to determine if contractors with special fuel users permits were hired.
- ◆ Reviewed 148 MDT road projects for 2010 to determine if contractors with special fuel users permits were hired for the projects. For these projects, we also reviewed six projects to assess whether subcontractors had special fuel user's permits.
- ◆ Analyzed dyed diesel violations for 2009 and 2010 to determine what types of vehicles were inspected, where violations occurred, types of vehicles involved, and amount of dyed fuel found.
- ◆ Reviewed the appeals process for dyed diesel violations to assess the outcomes of the appeals and consistency of the process.
- ◆ Reviewed studies related to fuel tax evasion including those related to inappropriate use of dyed diesel fuel.
- ◆ Obtained information from other states regarding dyed diesel fuel requirements including laws, rules, and policies.

## **Management Memorandum**

A management memorandum is a verbal or written notification to the agency of issues that should be considered by management, but do not require a formal agency response. We discussed with department officials the need to establish guidelines to help guide the department's informal hearings process. Individuals are provided the opportunity to request an informal hearing with the department if they disagree with a citation issued for a dyed diesel violation.

## **Report Organization**

The report contains five chapters. Chapter II provides a background discussion of the department organizational structure and enforcement activities related to dyed diesel fuel. Chapter III discusses recommendations related to controls over the special fuel user permit. Chapter IV presents information related to strengthening dyed diesel fuel inspection activities. Chapter V provides information on how the department can improve management controls over its dyed diesel enforcement activities.

## Chapter II – Background

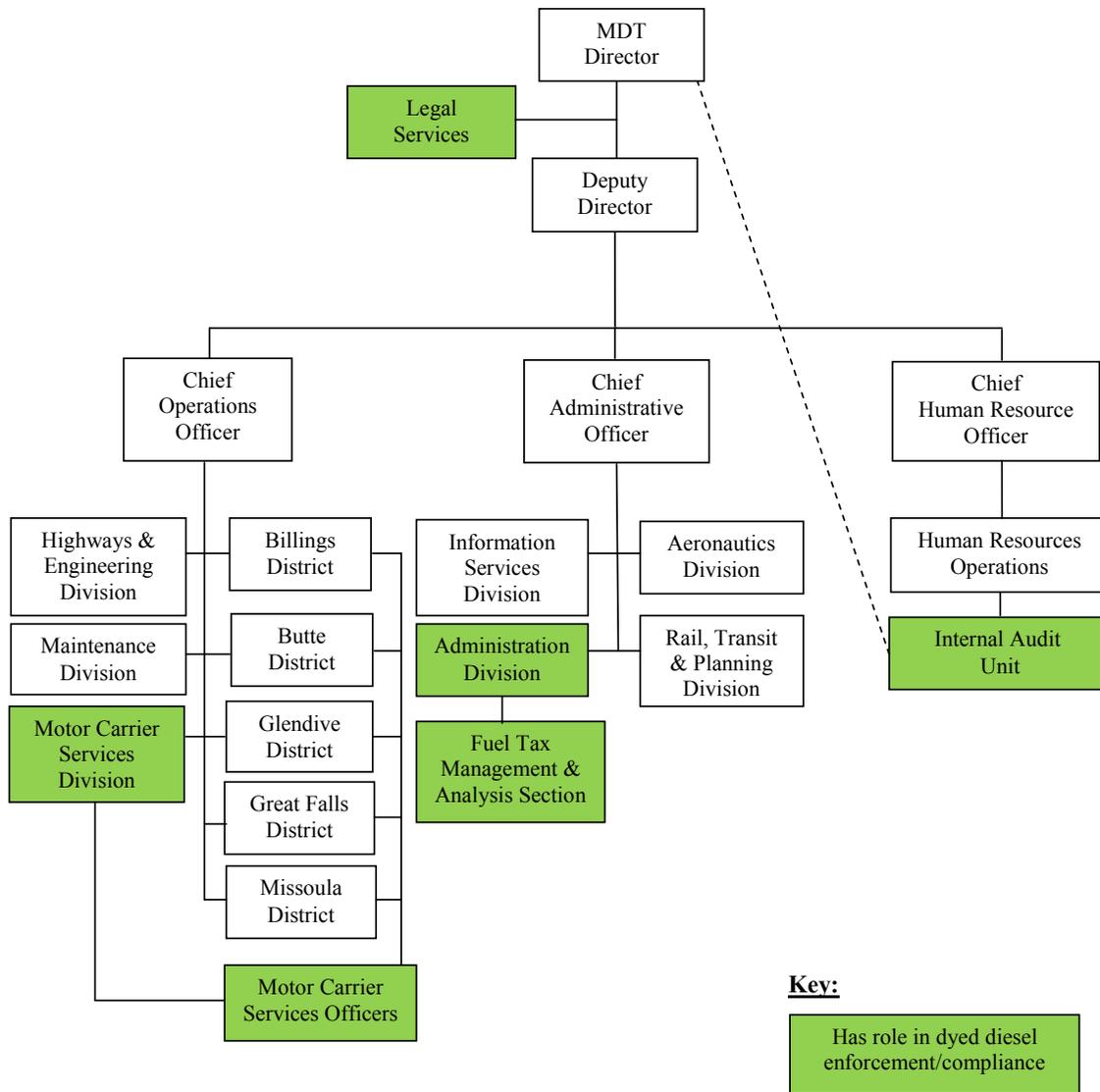
### **Introduction**

The Montana Department of Transportation (MDT) is the custodian of the federal and state funded highway systems. In addition to designing, building, and maintaining the state's highways, the department is also responsible for enforcing vehicle weight and safety laws, permitting requirements, and collecting and distributing highway user fees and fuel taxes. State law places responsibility for enforcing laws related to diesel fuel with MDT. This includes the authority to stop and inspect supply tanks, if probable cause exists, of any diesel-powered motor vehicle operating on the public roads of this state in order to determine compliance with laws related to diesel fuel use. This chapter describes those components within the department that have responsibilities related to dyed diesel.

### **MDT Organizational Structure**

Several areas within the department play a role in ensuring compliance with laws related to dyed diesel fuel. Figure 1 depicts the organizational structure of the department. Those areas of the department that play a key role related to dyed diesel fuel are highlighted in green.

Figure 1  
**Montana Department of Transportation Organizational Structure**



Source: Compiled by the Legislative Audit Division from MDT Information.

### Motor Carrier Services Division

The Motor Carrier Services (MCS) Division conducts enforcement activities for a variety of regulations on Montana’s public roads including vehicle weight and safety, insurance requirements, commercial vehicle licenses, and special fuels use. The division is also responsible for issuing licenses and permits needed to legally operate vehicles on Montana’s roadways. MCS operations are administered by division headquarters

in Helena, with day-to-day enforcement activities conducted by the division's 90 uniformed peace officers located in the five MDT districts around the state. MCS officers report to a District Captain. The District Captains report to the District Administrator and MCS Enforcement Bureau Chief.

MCS officers are authorized to issue citations for violations related to any of these regulations, including citations to individuals found to be inappropriately operating vehicles with dyed diesel fuel. Sixty-eight of the MCS officers are assigned to weigh station facilities around the state which are primarily responsible for verifying commercial trucks traveling the state's highways meet weight and safety regulations. MCS officers assigned to weigh station facilities can also take fuel samples of vehicles entering the facility to ensure they are not using dyed diesel fuel. The remaining 22 MCS officers are patrol officers authorized to stop vehicles travelling on public roads. Patrol officers are equipped with portable scales used to weigh vehicles often on more remote roadways of the state. These officers also have equipment which allows them to draw fuel samples from vehicles they stop.

## **Administration Division**

The Administration Division provides support services for the entire department in accounting, financial management, purchasing and mail services. Specific to dyed diesel fuel activities, the Division Administrator oversees the department's informal review process for those who want to challenge citations received for inappropriately using dyed diesel fuel. This process is described later in this report. The division also administers the operations of the Fuel Tax Management and Analysis (FTMA) Section which also plays a role in dyed diesel fuel activities.

## **Fuel Tax Management and Analysis Section**

The FTMA Section is responsible for the overall management and analysis of gasoline and vehicle fuels taxes as identified in Title 15, Chapter 70. This section performs a variety of functions directed at managing department policy, programs, grants, agreements, and ongoing education and training programs related to gasoline and vehicle fuels taxes. Other responsibilities related to these laws include ensuring fuel tax dollars are remitted to the department and promoting cooperative relationships with federal, state and tribal governments. The FTMA Section also administers MDT's dyed diesel tip line and the dyed diesel database. This database tracks information related to dyed diesel violations such as names of individuals cited, county where citation occurred, and date the citation was issued.

## **Legal Services**

Legal Services provides the department's legal counsel in several areas such as eminent domain, real estate contracts, and motor fuel taxes. Legal services become involved with issues related to dyed diesel fuel when someone files a formal appeal of a dyed diesel violation. Formal appeals are heard by a hearings officer from the Montana Department of Justice. Legal Services staff represents the department during these hearings. The formal appeals process is described later in this report.

## **Internal Audit Unit**

MDT's Internal Audit Unit promotes compliance with state laws, administrative rules, and department policies. Specific to diesel fuel, the Internal Audit Unit conducts audits of licensed diesel fuel users, distributors, and diesel fuel users that request tax refunds. These audits verify information provided on quarterly reporting forms are accurate, supported, and correct taxes are paid. Internal Audit staff may also assist other MDT staff during special projects designed to identify illegal use of dyed diesel fuel.

## **MDT Organizational Structure Provides For Basic Controls**

Studies indicate entities responsible for laws related to dyed diesel fuel should have an organizational structure that provides for both enforcement and auditing of dyed fuel use. MDT's organizational structure provides the mechanism for both these activities to occur. While the department has basic organizational controls for dyed diesel in place, audit work found specific controls related to dyed diesel enforcement can be improved. These areas include improving controls over the special fuel users permit, strengthening inspection activities, and improving management controls over the department's dyed diesel fuel activities. The following chapters discuss our recommendations for each of these areas in more detail.

## Chapter III – Special Fuel Users Permits

### **Introduction**

Section 15-70-302, MCA, requires all contractors and subcontractors who perform any work (construction, maintenance, etc.) on public roads to obtain a special fuel users (SU) permit on an annual basis. Once a contractor is issued an SU permit, they are required to use clear diesel fuel at all times, including for any work performed on private property. The SU permit, which is obtained from the Montana Department of Transportation (MDT), requires permit holders to use clear diesel fuel and prohibits them from storing or using dyed diesel in equipment, vehicles, and stationary engines. To obtain an SU permit, a bond of not less than \$5,000 must be posted which, according to MDT information, is to assure that any “tax, penalty, and interest has been paid to the department.” SU permits must be renewed by December 31 of each year. If an SU permit holder worked on a project on private property, they can request a refund of taxes paid for clear diesel fuel used on that project. Contractors or subcontractors who use dyed diesel fuel on any public road project are in violation of state law and could be fined and suspended for up to six months from participating in future public road contracts.

Our first audit objective was to determine if public road contracts comply with special fuel permitting requirements. As part of our audit work, we reviewed public road projects administered by MDT and other government entities to determine if contractors working on these projects had the required permit. This chapter presents our recommendations related to SU permitting requirements.

### **Process Exists to Ensure MDT Contracts Are Awarded to Contractors With SU Permits**

MDT completed 148 public road projects in 2010. We reviewed all these road projects to determine if prime contractors awarded the contracts had the required SU permit. Our audit work found the department awarded road contracts to prime contractors with SU permits for all 148 projects. We determined that prior to awarding public road contracts MDT staff compare the names of prime contractors to department SU permit information to verify each contractor has the required permit. Based on our audit work, we determined MDT has a process to ensure prime contractors awarded department road contracts have SU permits. However, we identified inconsistencies in whether subcontractors on MDT projects or contractors working on local or federal public road projects had SU permits.

## **Current MDT Process Does Not Address Subcontractors**

We selected a judgemental sample of six MDT projects to review subcontractors to determine if they had SU permits. For the projects reviewed, we identified nine subcontractors working on MDT road projects did not have an SU permit. Therefore, these subcontractors were not in compliance with statutory requirements. Department staff indicated subcontractors working on MDT road projects are hired by prime contractors after road construction contracts are awarded and there is currently not a process to verify subcontractors have SU permits. Instead, the department relies on prime contractors to confirm the subcontractors have SU permits. MDT has a responsibility to ensure all contractors working on department road projects have the appropriate permits. As noted earlier, MDT verifies prime contractors awarded contracts have the required SU permit. The department should expand this process to include subcontractors to ensure they have the required SU permit as required by state law.

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### **RECOMMENDATION #1**

*We recommend the Montana Department of Transportation expand contractor reviews to include subcontractors working on department road contracts to ensure they have the statutorily required special fuel users permit.*

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## **Local Road Projects Did Not Always Use Permitted Contractors**

We reviewed contracts at three local public works offices for 49 public road projects. Projects reviewed were completed in 2010 and included contracts for construction and maintenance of public roads. Our file reviews identified contractors working on public road projects that did not have a required SU permit. Audit work found that 16 of the 49 contracts reviewed (33 percent) were awarded to contractors without the required permit. State law requires all contractors and subcontractors working on any city, county, state or federal road project to have an SU permit. This permit requires contractors to use clear diesel fuel at all times. According to Montana contracting representatives, contractors without SU permits could have an unfair advantage when bidding on local road projects because these contractors could possibly use dyed diesel fuel prices which could result in lower bids. Some of these concerns were addressed through passage of House Bill (HB) 319 during the 2011 Legislative Session. This bill will require an individual bidding on a public road project to list their SU permit number on the bid documents. However, a process should exist to assure SU permit numbers provided on these documents is verified.

## **Local and Federal Staff Were Not Always Aware of Special Fuel Users Permit Requirements**

Interviews with local public works contracting staff responsible for administering public road project contracts found they were not always aware of the SU permit or that contractors working on public road project needed to have the permit. In addition, interviews with United States Forest Service (USFS) contracting officials indicated they were not requiring or verifying whether contractors working on USFS road projects had SU permits. None of the local or federal officials we interviewed knew information related to SU permitted contractors was available on MDT's website allowing them to verify if contractors have a valid permit. Therefore, they were not always verifying this information before entering into contracts.

## **Additional Training Would Be Beneficial**

The SU permitting requirements were implemented through legislation passed by the 2005 Legislature. Since that time, MDT has taken steps to notify local and federal government agencies to make them aware of the statutory requirements of hiring SU permitted contractors and subcontractors to work on public road contracts. According to department officials, the department sent letters to county commissioners advising them about the permitting requirements and also contacted the Montana Association of Counties. However, department staff indicated there have been limited training opportunities specifically intended for local and federal agency personnel responsible for contracting related to SU permitting requirements. Consequently, local and federal agency personnel were not always familiar with the requirement to hire SU permitted contractors for their public road projects.

MDT provides various training opportunities to the customers it serves. For example, according to MDT staff they provide periodic training courses to contractors and trucking companies regarding documentation requirements required for participation in the International Fuel Tax Agreement. This is a fuel licensing program that allows companies to license diesel powered vehicles to travel in more than one jurisdiction and pay fuel taxes to all states they travelled in through their home state. MDT staff indicated they also provide training to contractors issued SU permits to ensure they understand record keeping requirements associated with the permit. MDT staff said several training programs have been provided during the last few years. Our audit work found local and federal agencies could benefit from similar types of training opportunities regarding SU permitting requirements. MDT staff said they intend to visit counties to discuss the recent changes in the SU requirements resulting from passage of HB 319. This would also provide an opportunity to provide training about the purpose of the SU permit and the controls necessary to determine if contractors have a valid permit. Since all public road contractors must use SU permitted

contractors, the department should also make training available to other government entities, including staff for city and federal government agencies responsible for public road project contracting activities.

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***RECOMMENDATION #2***

*We recommend the Montana Department of Transportation provide training to local and federal government contracting personnel regarding special fuel users permit requirements.*

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## **Inspections on Public Road Projects**

Inspections help verify required standards, such as SU permitting requirements, are met. Additionally, inspections can be used as an educational tool to teach individuals about the required standards. Audit work found improvements could be made in the department's inspection process. For example, interviews with MCS officers identified officers that inspect MDT road projects at least once during a construction season while other officers indicated inspections of road projects is not a priority for them so projects may or may not get visited. We also found limited evidence that local public road projects or projects administered by federal agencies are routinely inspected for compliance with dyed diesel laws.

As noted earlier, our review of contractor information for MDT and local road projects identified several contractors or subcontractors working on projects that did not have an SU permit. There also appears to be a limited number of dyed diesel fuel inspections occurring on public road projects. For example, department data indicates limited inspections were completed on construction equipment in 2009 and 2010. Limited inspections also mean a lower chance of fuel in vehicles and equipment working on projects being tested which increases the risk of dyed diesel being used on public road projects. Interviews with road construction contractor representatives noted concerns with the department's current process to inspect public road projects, particularly with those related to local road projects. They believe the department needs a better defined process to ensure contractors working on road projects are in compliance with statutory requirements, such as having an SU permit (§15-70-302, MCA) and not using dyed diesel fuel while working on these public projects (§15-70-321, MCA).

Audit interviews indicated the priority placed on the dyed diesel inspection process, including those inspections on public road projects, is generally based on officer discretion. According to MCS officials, the department has a performance measure that requires MCS officers to spend a minimum of 45 percent of their time conducting

vehicle inspections. According to MCS staff, this includes all inspections the department is authorized to conduct (weight, safety, dyed diesel fuel, etc). Department officials indicated the first priority for MCS officers are weight and safety inspections because they help ensure the safety of the traveling public. The department also has a responsibility to ensure dyed diesel is not being inappropriately used on public road projects. However, there is currently not a well defined process in place that establishes clear expectations for MCS officers related to dyed diesel inspections on public road projects or allows management to effectively evaluate or manage activities related to dyed diesel inspections on public road projects. Without some type of formalized expectation for dyed diesel inspections, it is difficult for MCS management to ensure public road projects comply with state law related to dyed diesel fuel use.

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***RECOMMENDATION #3***

*We recommend the Montana Department of Transportation define its process and expectations for public road project inspections to help ensure contractors comply with state law related to dyed diesel use.*

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## Chapter IV – Strengthening Dyed Diesel Fuel Inspection Activities

### Introduction

In 2006, the Montana Department of Transportation (MDT) contracted for a study to report on various techniques that can be used to avoid paying fuel taxes in Montana. This review included an estimate of the lost revenue due to on-road use of dyed diesel. This study estimated that more than 930,000 gallons of dyed diesel fuel were consumed for on-road use in 2004. The report also estimated the state of Montana could be losing over \$630,000 annually due to the misuse of dyed diesel fuel. When dyed diesel fuel is used for on-road purposes, it reduces the amount of tax revenue going into Montana's Special Revenue Highway Account which helps fund public road construction projects. Our second objective evaluated the effectiveness of MDT enforcement activities to identify unauthorized use of dyed diesel on public roads. Audit work determined that although thousands of vehicles are inspected for dyed diesel fuel each year, a process does not exist that provides for potentially higher risk vehicles to be inspected.

### Dyed Diesel Enforcement Process

Dyed diesel fuel is readily available to the public at numerous fuel retailers around the state. In addition, it is not uncommon for dyed diesel fuel to be delivered to farms, ranches, and businesses around the state so it can be used in the daily operations of those enterprises. Therefore, it is important a system exist to enforce laws related to dyed diesel fuel to ensure it is not being used on Montana's public roads. In Montana, the presence of dye at a concentration of 2.0 milligrams per liter (mg/l) or greater is considered to be in violation of state law. The department's Motor Carrier Services (MCS) officers are authorized to inspect fuel tanks of certain vehicles operating on Montana's public roads. This is done by inserting a large straw into the fuel tank and extracting a sample of fuel. If it appears through a visual examination that dyed diesel fuel may be present (it appears red in color as opposed to being clear), fuel samples are sent to the MDT chemistry lab for testing. If the results come back showing the fuel contains a concentration of red dye of 2.0 mg/l or more, the operator of the vehicle or equipment is issued a citation. Individuals found to be inappropriately using dyed diesel fuel are subject to civil penalties of \$1,000 for a first offense and \$5,000 for a second offense. According to MDT information, a third offense is considered a criminal offense. A person who refuses to allow an MCS officer to inspect the contents of a vehicle's fuel tank is subject to a \$500 citation.

## Dyed Diesel Enforcement Controls

Audit work found the department has established certain controls related to dyed diesel enforcement activities. Identified controls include:

- ◆ Periodically running public service announcements and making dyed diesel information available on the department's website to help educate the public about dyed diesel laws.
- ◆ Decals attached to fuel pumps that dispense dyed diesel at retailers indicating the pump dispenses untaxed fuel which is for off-road use only.
- ◆ Establishment of a dyed diesel tip line which allows the public to report potential instances of unauthorized use of dyed diesel fuel to the department. According to MDT Staff, approximately 24-48 calls are received on the tip line each year.

As noted above, the department has established certain controls related to dyed diesel enforcement activities. However, we found the department can build on these controls by improving its process to inspect vehicles to determine if they are operating on public roads using dyed diesel fuel.

## Dyed Diesel Fuel Inspections

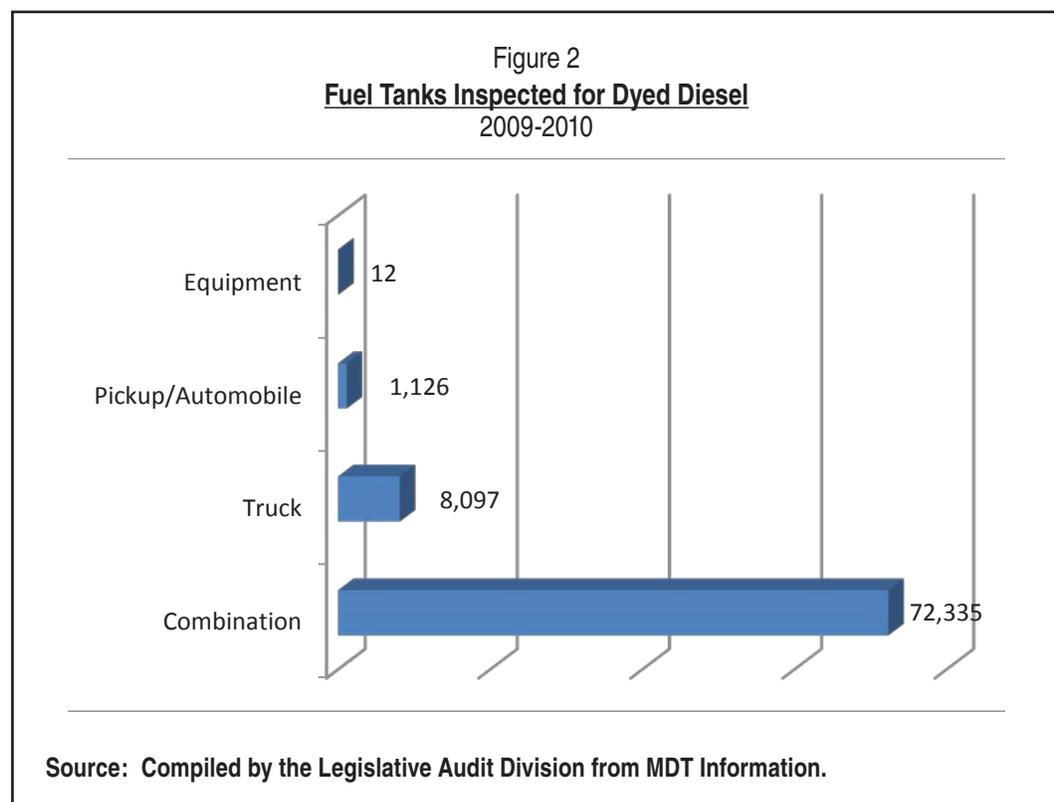
Section 61-10-154, MCA, authorizes MCS officers, if probable cause exists, to stop and inspect supply tanks connected to the engine of any diesel powered motor vehicle operating on the public highways to determine compliance with Title 15, Chapter 70, Part 3 (Special Fuels Use Tax Act). In addition, §15-70-324, MCA, authorizes the department to establish vehicle inspection sites to stop, detain, and inspect vehicles. MCS officers have the authority to issue citations if any violations are identified. The department conducts thousands of fuel inspections on various types of vehicles each year. Administrative rule categorizes vehicles into one of the following four classifications.

1. **Automobile** – a self-propelled passenger vehicle that usually has four wheels and an internal combustion engine and is not a pick-up truck or truck.
2. **Pickup truck** – a vehicle licensed under a flat gross vehicle weight fee and has a manufacturer's rated capacity of 1/4 ton, 1/2 ton, 3/4 ton, or one ton.
3. **Truck** – a vehicle licensed under graduating gross vehicle weight fees and has a manufacturer's rated capacity exceeding one ton, but not exceeding 46,000 pounds.
4. **Combination** – a motor vehicle used, designed, or maintained for transportation of persons or property and has two or more axles whose gross weight exceeds 46,000 pounds or a combination of vehicles whose combined licensed weight exceeds 46,000 pounds.

MCS officers are also authorized to inspect equipment. Equipment is a special vehicle or stationary piece of machinery designed to operate off public roads and highways. Equipment is generally designed not to transport passengers.

## Lower Risk Vehicles Have More Inspections

We reviewed MDT dyed diesel inspection data for fiscal years 2009 and 2010 to determine the total number of dyed diesel inspections. This included analyzing the number of inspections on the different classes of vehicles and construction equipment. During this two year time period, MDT inspected a total of 81,570 fuel tanks for dyed diesel. The following graphic illustrates the department's dyed diesel inspection activity for each vehicle classification and equipment.



As the graphic shows, the department conducted the majority of its dyed diesel inspections on combination vehicles. Combination vehicles comprised 72,335 of total inspection activity which was more than 88 percent of total dyed diesel inspections. Combination vehicles are generally required to stop at weigh scale facilities around the state to be weighed and inspected. According to MDT officials, combination vehicles have their fuel tanks checked as part of safety inspections. Vehicles weighing less than 10,000 pounds (automobiles, pickups, trucks) and equipment used on public road projects comprise a significantly smaller percentage of the department's overall dyed

diesel inspection activity. Department officials indicated probable cause is needed to inspect these vehicles so fewer have been inspected for dyed diesel.

## Vehicles With Lower Inspection Rates Present Higher Risk of Dyed Diesel Use

Our audit work found vehicles weighing less than 10,000 pounds and construction equipment may present higher risks of inappropriate dyed diesel usage. We compared the number of vehicles inspected to violations issued and noted a significantly higher frequency of violations with pickups. The following table illustrates the number of violations to total number of inspections done in fiscal years 2009 and 2010. The table also includes data for off road equipment that was inspected.

Table 1  
**Number of Violations By Vehicle Type**  
2009-2010

Type of Inspection	Fuel Tanks Inspected	Number of Violations
Combination	72,335	54
Truck	8,097	42
Pickup	1,126	55
Equipment	12	7

**Source: Compiled by the Legislative Audit Division from MDT Information.**

## Other States Have Established Risk Based Dyed Diesel Fuel Inspection Process

Studies completed in other states suggests vehicles weighing less than 10,000 pounds present a higher risk of inappropriate use of dyed diesel fuel than larger vehicles. We contacted other states to obtain information regarding processes related to dyed diesel enforcement activities. The Arizona Department of Transportation conducted a study, in conjunction with enforcement activities, which collected fuel samples from approximately 4,000 vehicles at on-road fuel enforcement sites across the state on two different occasions. Vehicles inspected included pickup trucks, passenger cars, semi-trucks, and recreational vehicles (RV). This study found the most frequent vehicle operating with dyed diesel fuel was pickups trucks and recreational vehicles. The study determined up to 4 percent of pickups and 12 percent of RV's were operating on dyed diesel fuel. Based on the data collected, the study projected the state of Arizona may have been losing approximately \$1.9 million in tax revenue if these vehicles used dyed diesel fuel on a regular basis. When the second phase of the study was completed

eight weeks later, there was a 76 percent reduction in violation rates. It was concluded the previous enforcement efforts helped decrease inappropriate use of dyed diesel on public roads. The Arizona Department of Transportation has since established risk based dyed diesel fuel inspection process to better focus its dyed diesel enforcement activities on higher risk areas.

Similarly, officials in the state of Washington indicated they also use a risk based approach to conduct dyed diesel enforcement activities. This includes focusing enforcement efforts on those areas of the state with high amounts of dyed diesel fuel sales and potential use for dyed diesel. This resulted in several dyed fuel violations being identified including a business that did not pay approximately \$50,000 in fuel taxes over a four year period due to the inappropriate use of dyed diesel fuel.

### **Risk Based Process Could Improve MDT's Dyed Diesel Enforcement Process**

Studies have shown relatively easy access to dyed diesel fuel, increasing numbers of diesel pickups, and rising fuel costs result in more vehicles potentially using dyed diesel fuel and recommend enforcement tools exist to help ensure dyed diesel fuel is not used on public roads. Other states have identified smaller classes of vehicles present a high risk of using dyed diesel and moved towards a risk based inspection process for dyed diesel enforcement. MDT is responsible for ensuring compliance related to the Special Fuels Use Act (Title 15, Chapter 70, Part 3) which prohibits using dyed diesel on public roads. Department staff indicated recently rising fuel prices increase the risk of inappropriate use of dyed diesel and tools are needed to help ensure compliance. Several individuals cited for using dyed diesel told MCS officers they put dyed diesel into the vehicle either at a retailer that sells dyed diesel fuel or had access to a dyed diesel bulk tank.

Audit work noted using a risk based approach to inspect vehicles for dyed diesel fuel provides for effective enforcement by focusing resources on inspecting vehicles that present a higher risk of using this fuel inappropriately. We found that although MDT inspects a high number of vehicles each year, the department is generally not inspecting vehicles using a risk based approach. Studies indicate vehicle inspection sites are an enforcement tool that could help focus efforts on any vehicle that operates on diesel fuel including lighter vehicles that are not usually inspected by department staff. The department should establish a risk based vehicle inspection program that would allow the department to inspect vehicles that present higher risks of inappropriate use of dyed diesel.

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**RECOMMENDATION #4**

*We recommend the Montana Department of Transportation establish a risk based vehicle inspection program for its dyed diesel enforcement activities.*

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# Chapter V – Improving Management Controls

## **Introduction**

Our third audit objective included an assessment of the department's management controls over dyed diesel enforcement activities. As noted in Chapter II, several programs with the Montana Department of Transportation (MDT) are involved with the department's dyed diesel fuel enforcement activities. These include the Motor Carrier Services Division (MCS), Fuel Tax Management and Analysis (FTMA) Section, and the Internal Audit Unit. Since multiple programs within the department are involved with dyed diesel fuel activities, it is important management controls exist to ensure they are able to effectively coordinate and share information. Our audit identified areas where MDT could improve management controls over dyed diesel enforcement activities. These include coordination of activities between the FTMA Section and Internal Audit and improving management information related to dyed diesel activities. This chapter discusses our audit recommendations related to these areas.

## **Improving Coordination Between the FTMA Section and Internal Audit**

Our audit work identified examples that indicated special fuel users (SU) permit holders have used dyed diesel fuel on public road projects. Using MDT information, we compared dyed diesel fuel citations issued in 2009 and 2010 to the names of SU permit holders. We identified 15 dyed diesel violations that were issued to employees operating a vehicle owned by SU permit holders. While violations were issued to the individuals operating the vehicles, no additional review of the SU permit holder was conducted by the department. According to Internal Audit Unit staff, an employee of an SU permit holder being cited for using dyed diesel increases the risk the SU permit holder could be using dyed diesel fuel on a more extensive basis. Interviews with FTMA staff found they do not perform an analysis of the dyed diesel database or compare this information to SU permit information to determine those situations where SU permit holders may be using dyed diesel fuel. The FTMA Section does periodically refer various kinds of information to the Internal Audit Unit for further review. However, FTMA staff have never provided information related to SU permit holders. The Collections Bureau will refer SU permit holders if there are issues with reporting forms. A process should exist to identify those areas of highest risks associated with dyed diesel fuel that should be further examined by the Internal Audit Unit.

## Current Audit Activities

Internal Audit staff indicated they currently conduct a limited number of audits of SU permit holders each year, usually four to five, which are randomly selected for review. Internal Audit staff indicated these selections are not based on any type of risk assessment, and often do not result in identification of any issues. Audits have identified SU permit holders that used dyed diesel fuel and did not pay fuel taxes as required. For example, one internal audit conducted in fiscal year 2009 found an SU permit holder who had used over 10,000 gallons of dyed diesel fuel resulting in additional taxes and penalties of approximately \$28,500. Internal Audit staff believes a more formalized approach to identify high risk SU permit holders could potentially result in similar findings.

## Summary

Our audit work found there has been limited direction provided to staff regarding the type of analysis the FTMA Section should conduct related to SU permit holders to identify potential inappropriate use of dyed diesel. Interviews with FTMA staff found they were unaware they should be performing this type of analysis and that potential risk areas should be referred to Internal Audit. Based on our audit work, we found no formally defined process has been established to identify high risk areas related to dyed diesel that should be referred to Internal Audit for further examination.

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### ***RECOMMENDATION #5***

*We recommend the Montana Department of Transportation design and implement a process to identify high risk areas related to dyed diesel that should be further examined by the Internal Audit Unit.*

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## **Improving Dyed Diesel Management Information**

Best practices recommend agencies maintain management information which can be used to make decisions and track program activities. During the audit, we found the department has limited management information for certain aspects of its dyed diesel fuel enforcement activities which has hindered the department's ability to effectively manage these activities. We identified four areas where department staff could make improvements related to management information for dyed diesel fuel enforcement activities. These include:

- ◆ Using available information to better prioritize enforcement activities
- ◆ Compiling data related to inspections for public road projects

- ◆ Tracking the disposition of dyed diesel tip line calls
- ◆ Sharing information related to the department's appeals process

Compiling sufficient information can help program managers better evaluate program activities, assist in managing them more effectively, and identify staff training needs. Improving management information could help the department make better decisions on how to use department resources and determine how dyed diesel activities could be strengthened or better prioritized. It can also help various MDT programs better coordinate activities when necessary.

The following sections discuss those areas where we believe the department could better use management information to help strengthen dyed diesel enforcement activities.

### **Using Available Information to Better Prioritize Enforcement Activities**

The department's dyed diesel database compiles information related to dyed diesel fuel inspections such as type of vehicle inspected, number of violations issued, where violations occurred, roadways where inspections occurred (Interstate, rural highway, weigh scale, etc.), and the number of inspections completed by each MCS officer. There are quarterly reports summarizing this information and provided to the MCS Division's Enforcement Bureau for review. Interviews with Enforcement Bureau officials found the bureau could more efficiently use this information to identify trends related to MCS officer inspection activities. This information could also help identify potential risk areas such as those areas of the state experiencing an increase in dyed diesel violations.

### **Public Road Project Inspections**

Dyed diesel fuel inspections are tracked in the department's dyed diesel database. While the dyed diesel database provides data on individual inspections that were conducted, it does not track information on what public road projects were visited or what inspection activities took place during those visits. As a result, MCS Division staff does not know how often public road projects get inspected, which projects are visited, what contractors, vehicles, and equipment are inspected, or the results of inspections that took place on those projects.

### **Dyed Diesel Tip Line**

MDT has a toll free dyed diesel tip line which can be used to report suspected unauthorized use of dyed diesel. The tip line allows individuals to make reports either by calling a toll free phone number or via e-mail to the department. The tip line is

administered by the FTMA Section. According to department staff, the department receives approximately two to four calls each month. When calls or e-mails are received FTMA staff forward the information to the MCS Division's Enforcement Bureau. The Enforcement Bureau then gives the information to an MCS patrol officer for follow up. Tip line information could also be used to strengthen enforcement activities. In addition to documenting what investigation activity was done to follow-up on calls and e-mails received, information from the tip line could help identify potential risk areas related to suspected use. However, audit work found limited information related to the tip line is compiled. For example, there are no formal statistics regarding number of reports received, where reports are from in regard to geographic location, what work was done to follow up on calls, or the final disposition of calls.

### **Appeals Process Information**

Individuals receiving dyed diesel fuel violations may request to go through the department's informal or formal appeals process. The informal review process provides individuals the opportunity to further explain why dyed diesel was found in an effort to have fines reduced or eliminated. For informal reviews, the Administrator for MDT's Administration Division acts as the department's review officer. The review officer must issue a written decision within thirty calendar days of the informal review. If the department agrees to a reduced fine it enters into a settlement agreement with the violator. A settlement agreement involves a reduced fine in exchange for the ability to conduct follow up inspections of the violator anytime without having a reason or probable cause. Settlement agreements are valid for one year from the date of the agreement. In fiscal years 2009 and 2010, 40 percent of dyed diesel violations went through an informal review and most resulted in a reduced fine because the review officer believed there was sufficient reason provided on why dyed diesel fuel was found in the vehicle. Audit work found MCS officers are not always getting information related to settlement agreements resulting from citations that went through the informal hearing process. In addition, neither FTMA nor MCS staff knew what follow up activities (number of inspections, who was inspected, etc.) were occurring as a result of the settlement agreements.

In addition to informal appeals, the department has a formal appeals process which provides for a formal hearing of the dyed diesel violation. Audit work found a process has not been established for MCS Division management to be notified of formal appeals outcomes. In fiscal years 2009-2010, there were 12 formal appeals filed which resulted in a full dismissal of the citation and penalty. Many of the appeals were dismissed because the department was unable to prove that the person cited for the dyed diesel violation "purposefully and knowingly" put the dyed diesel fuel into the vehicle. MCS enforcement officials indicated receiving information on why dyed diesel citations were

dismissed during the appeal process could help them determine if dismissals were due to weaknesses in the division's enforcement activities and help identify potential areas where training for MCS enforcement officers is needed.

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***RECOMMENDATION #6***

*We recommend the Montana Department of Transportation strengthen dyed diesel enforcement by:*

- A. *Using available information to prioritize enforcement activities.*
  - B. *Compiling data related to inspections for public road projects.*
  - C. *Tracking the disposition of dyed fuel tip line calls.*
  - D. *Sharing information related to the department's appeals process.*
-

DEPARTMENT OF  
TRANSPORTATION

DEPARTMENT RESPONSE

**Montana Department of Transportation**

2701 Prospect Avenue  
PO Box 201001  
Helena MT 59620-1001

Timothy W. Reardon, Director  
Brian Schweitzer, Governor

September 16, 2011

Tori Hunthausen, Legislative Auditor  
Legislative Audit Division  
State Capitol Room 160  
Helena, MT 59620-1705

**RECEIVED**

SEP 19 2011

**LEGISLATIVE AUDIT DIV.**

Subject: Controls Over Dyed Diesel Use in Montana

Dear Tori,

Thank you for giving the Montana Department of Transportation (MDT) an opportunity to respond to the performance audit performed by your office for controls over dyed diesel use in Montana.

We have attached our response including a management action plan. I appreciate your staff's effort, cooperation, and professionalism during this audit. MDT is committed to complying with state and federal laws, and implementing and maintaining effective accounting controls.

Please feel free to contact me should you have any questions or comments regarding this audit.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Reardon", written over a horizontal line.

Tim Reardon  
Director

**Attachments**

Copies: Vickie Murphy, Internal Auditor  
Larry Flynn, Administration Division Administrator  
Duane Williams, Motor Carrier Services Administrator



**September 16, 2011**  
**Corrective Action Plan**  
**Controls Over Dyed Diesel Use in Montana**

Audit Recommendation #	Does this affect a federal program?	Management View	Corrective Action Plan	Responsible Area	Target Date
<b>Recommendation #1</b> We recommend the Montana Department of Transportation expand contractor reviews to include subcontractors working on department road contracts to ensure they have the statutorily required special fuel user permit.	No	Concur	Develop a process to check whether subcontractors have an SU license.	Engineering Division	12/31/2011
<b>Recommendation #2</b> We recommend the Montana Department of Transportation provide training to local and federal government contracting personnel regarding special fuel user permit requirements.	No	Concur	MDT representatives will stop by all 56 County offices, 64 public works offices and 7 federal offices across Montana	Administration Division	10/31/2011
<b>Recommendation #3</b> We recommend the Montana Department of Transportation define its process and expectations for public road project inspections to help ensure contractors comply with state law related to dyed diesel use.	No	Concur	Develop guidelines for MCS Officers to review and perform public road projects	Motor Carrier Services Division	7/1/2012
<b>Recommendation #4</b> We recommend the Montana Department of Transportation establish a risk based vehicle inspection program for its dyed diesel enforcement activities.	No	Concur	Using available data and information for other state jurisdictions to develop guidelines to target high risk areas. These guidelines will also include a mechanism for tracking and documenting any concentrated enforcement efforts.	Motor Carrier Services Division	7/1/2012

**Corrective Action Plan  
 Controls Over Dyed Diesel Use in Montana**

Audit Recommendation #	Does this affect a federal program?	Management View	Corrective Action Plan	Responsible Area	Target Date
<b>Recommendation #5</b> We recommend the Montana Department of Transportation design and implement a process to identify high risk areas related to dyed diesel that should be further examined by the Internal Audit Unit.	No	Concur	Gather data from multiple division and develop a risk assessment that will be used to help identify which audits to perform in the next plan year.	Internal Audit	3/1/2011
<b>Recommendation #6</b> We recommend the Montana Department of Transportation strengthen dyed diesel enforcement by: A. Using available information to prioritize enforcement activities. B. Compiling data related to inspections for public road projects. C. Tracking the disposition of dyed fuel tip line calls. D. Sharing information related to the department's appeals process.	No	Concur	A. Develop guidelines for fuel inspections. B. Review alternatives for inspections, then develop guidelines. C. Develop a system for tracking dyed fuel tip line calls. D. Develop a system for tracking appeals and their resolution.	Motor Carrier Services Division/ Administration Division	7/1/2012