



Office of the Chief Internal Auditor

### Audit Report

South Carolina Department of Transportation Oversize/Overweight Permits

August 15, 2012



Office of the Chief Internal Auditor

## Audit Report

South Carolina Department of Transportation Oversize/Overweight Permits

August 15, 2012

### Table of Contents

### Office of the Chief Internal Auditor Audit of SCDOT's Oversize/Overweight Permits

August 15, 2012

### TABLE OF CONTENTS

	Page
Transmittal Letter	4
Executive Summary	6
Audit Findings and Recommendations	8
Department Response	14

# Transmittal Letter



#### OFFICE OF THE CHIEF INTERNAL AUDITOR

August 15, 2012

Commission of the South Carolina Department of Transportation

The Honorable Lawrence K. Grooms, Chairman South Carolina Senate Transportation Committee

The Honorable Hugh K. Leatherman, Sr., Chairman South Carolina Senate Finance Committee

The Honorable Phillip D. Owens, Chairman South Carolina House Education and Public Works Committee

The Honorable W. Brian White, Chairman South Carolina House Ways and Means Committee

Dear Gentlemen:

The Office of the Chief Internal Auditor has completed our operational audit of SCDOT's Oversize/Overweight Permits Office as of February 2, 2012. Our objective was to ensure that permits are administered and issued correctly according to state and federal laws and regulations. In accordance with Section 57-1-360, we are transmitting to you this report on our audit.

We conducted this audit in accordance with generally accepted governmental 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.

Please do not hesitate to contact us if you have any questions or comments.

Respectfully submitted,

Office of the Chief Internal Auditor

## Executive Summary

#### **Executive Summary**

The South Carolina Department of Transportation's (SCDOT's) Oversize/Overweight (OSOW) Permits Office, in compliance with Section 57-3-130 of the *South Carolina Code of Laws*, is authorized to issue special permits for vehicles that exceed the legal sizes and weights specified in the *South Carolina Code of Laws*. OSOW permit types include: multiple trip permits (annual permits), single trip permits, permission permits (no fee permits), superload permits, and house moving licenses.

During State Fiscal Year 2011 (FY2011), OSOW processed 67,628 permits collecting \$2,591,111.23. The fee collected for a permit depends on the type of commodity being transported and the type of permit being issued. Fees collected are to be placed in the State Highway Fund and used for financing the cost of OSOW and for other highway purposes (Section 57-3-130). OSOW consists of a Permits Director and five agents. OSOW works with SCDOT's Bridge Maintenance Division, Resident Maintenance Engineers, and Road Data Services Division; as well as, local police and State Transport Police.

The Office of the Chief Internal Auditor (OCIA) reviewed the process for issuing and administering OSOW permits to determine SCDOT's compliance with applicable state and federal laws and regulations. We conducted this audit in accordance with Generally Accepted Government Auditing Standards. These 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 during this audit provides a reasonable basis for our findings and conclusions based on the audit objectives. We evaluated the processes and internal controls of OSOW. Our objectives were as follows:

- To ensure OSOW permits are issued properly in accordance with the South Carolina Code of Laws, the Federal Highway Administration's (FHWA's) Federal Size and Weight Regulations, OSOW's Guidelines for Movement Over South Carolina Highways of Oversize and Overweight Vehicles and Loads, OSOW policies and procedures, and other applicable laws and regulations.
- > To ensure there are proper internal controls in place to accomplish the objectives of OSOW.

It should be noted that many of the recommendations in this report require coordination with other departments and or personnel. The OCIA has met with Barbara Wessinger in Legal and Mark Kwayisi in Bridge Maintenance to review the report with them and solicit input on the report. While we have not obtained formal responses, from these other areas, we incorporated their views in the report to reflect their comments and what they felt was achievable in regards to the findings.

Audit Findings and Recommendations

#### **Audit Findings and Recommendations**

The Office of the Chief Internal Auditor (OCIA) reviewed the processes within the Oversize/Overweight Permit Office (OSOW), interviewed employees, and performed tests of controls. We have developed ten recommendations related to process flows and controls within OSOW.

#### Finding 1:

Many companies are hired to transport commodities that require a permit, to SCDOT job sites because of being oversized and/or overweight. SCDOT employees at job sites are not required to perform a check to determine if these companies obtained a permit from OSOW before traveling to the SCDOT job site.

Additionally, management believes mobile homes are transported without the mover obtaining the proper permit. State Transport Police are not always available to provide assistance in checking for permits. Currently, there is not a method in place to reconcile the number of mobile home sales to the number of permits purchased.

#### **Recommendation 1:**

SCDOT should require employees at job sites to view permits of oversized and/or overweight haulers transporting commodities to SCDOT job sites as a quality control check that would help quantify any potential problems there may be without obtaining the required permits. SCDOT should consider incorporating penalties into its contracts for construction projects when a hauler is determined not to comply with the permitting requirements.

To ensure each mobile home is properly permitted, it is recommended that OSOW work with the staff of the 46 counties to develop guidelines to have the counties request a copy of the moving permit as a part of their overall permitting steps. Once the OSOW department has developed these guidelines with the counties they should work with the Legal Department to recommend changes in legislation to make these intentions law. Currently, prior to electricity being connected to a mobile home, state law requires a sticker be affixed to a mobile home window signifying that the county is satisfied with all the permitting requirements.

#### Finding 2:

OCIA observed several instances where OSOW's did not follow the OSOW Policies & Procedures Manual. Examples are as follows:

• For bridge review, there was some discrepancy related to the axle weights of superloads since the policy manual stated that axle weights should not exceed 20,000 pounds per axle. The Director of OSOW stated that the policy had been changed to 23,000 pounds per axle for self-propelled cranes and 22,000 pounds per axle for other load types.

- There appears to be a conflict in the OSOW guidelines as to when red flags and/or lights are required. One section of the guidelines (Section E #2 part c) mentions that flags or lights are required once the rear overhang is more than six feet while in another section (Section I #2), flags are required once the rear overhang is beyond four feet. OCIA noted instances where the rear overhang restrictions printed on the permit were not consistent with the guidelines.
- There should be some clarification provided in regards to the shipment of structural material and if the material exceeds 80 feet in length if it needs to be transported on a stretch trailer or if other setups such as a stinger or dolly would be acceptable.
- OSOW's policies and procedures, state "Permission permits shall not be amended; a new permission permit shall be issued." OCIA noted several amendments to permission permits during its review of the permits process.

#### Recommendation 2:

The Policy and Procedure Manual needs to be reviewed to ensure that it contains the correct information that complies with the law and/or some other piece of authoritative guidance. The legal department and/or its designee should review the manual to ensure its accuracy.

#### Finding 3:

According to the South Carolina Code of Laws and Regulations, road machinery is an exempt load and only has to pay a \$10 administrative fee. As a result, any dual use machinery that can that also can be used for something other than working on a road has been labeled by OSOW as road machinery and exempted from permit fees and is also only charged a \$10 administrative fee.

#### **Recommendation 3:**

OSOW should request the removal the road machinery exemption in addition to the other exemptions listed in the law such as fire apparatus, forestry, etc. This would enhance efficiency, safety, and enforcement by SCDOT and State Transport Police. If the road machinery exemption is not removed, OSOW should define "road machinery" in their guidelines to help decide when a permit is required. This could involve asking customers if their intended use for any commodity could be labeled as road machinery in order to determine whether the load should be categorized as road machinery or some other category. If the intended use is a road project, the hauler should be able to provide a file or job number that corresponds to a road project.

#### Finding 4:

OSOW utilizes permitting software, SC Automated Routing and Permit Systems (SCARPS), developed by Bentley. SCDOT is no longer under contract with Bentley. In the exit agreement, SCDOT IT Services obtained the source code that allows OSOW to make limited changes to the permit administration system and maintenance tool. SCDOT Information Technology (IT) Services does not possess the expertise required to fully maintain this system.

#### **Recommendation 4:**

OSOW should decide whether to purchase new software for administering and issuing permits or hire a Subject Matter Expert (SME) to maintain SCARPS.

#### Finding 5:

OCIA noted a crane permit that was sent to a Bridge Engineer and was denied because two of the axle weights were described as too heavy. Following this denial, the decision was made within OSOW to issue the permit. It was reported that the Bridge Engineer sometimes denies customer's permits because of heavy axle weights instead of providing an acceptable route of travel.

There have also been several amendments to superload permits with adjustments to dimensions, added restrictions, changes to approved routes, and changes to axle weight configurations that were not sent by OSOW to a Bridge Engineer for approval.

#### Recommendation 5:

OSOW should follow its policies and procedures for superloads and send all superload permits to a Bridge Engineer for approval. OSOW should never override a Bridge Engineer's decision to deny a customer a permit.

If OSOW is uncertain the reported weights are accurate, the permit should not be processed for bridge approval until OSOW has determined that the information submitted is correct. OSOW should also consider requiring customers to send in certified weight and dimension tickets to ensure customers are reporting accurate information.

Any reference on the permit itself, stating that axle weights will be acceptable if the combined axle weights do not exceed the gross weight of the load, needs to be removed. OCIA feels that allowing each axle weight to stand on its own will help enforce the weight limitations dictated by SCDOT Engineering and increase safety and reduce damage to the roads.

#### Finding 6:

A bridge analysis fee is not being charged with permission permits. Permission permits for road machinery are charged an administrative fee of \$10.00 at a maximum and all other permission permits are exempt from all fees and are free of charge

#### Recommendation 6:

Superload permission permits are required to be sent to a Bridge Engineer for analysis and approval like other permits. Legal should review the law to decide if a bridge analysis and/or impact fee could be added to the cost of obtaining a permission permit.

#### Finding 7:

During OCIA's review of the OSOW's permits process, OCIA noted several of the superload permits approved by OSOW were missing the Bridge Engineer's approval. OSOW has been operating under two exceptions, approved verbally by Bridge Maintenance, to the superload policy. When OCIA asked Bridge Maintenance about these exemptions, Bridge Maintenance did not remember approving these exemptions. The first exception is OSOW can issue superload permits weighing up to but not more than 150,000 pounds traveling solely on interstates. The second exception involved OSOW approving multiple permits for the same type commodity, same weights and dimensions, traveling the same route within one year of the first route approved by Bridge Maintenance.

#### **Recommendation 7:**

OSOW and the Bridge Maintenance Division should meet at least annually to review superload policies and procedures. All revisions from this meeting should be made official by incorporating them into OSOW's policies and procedures manual.

#### Finding 8:

Several of the permits reviewed during the audit involve OSOW overriding decisions that were made by the Bridge Maintenance staff, which would include overriding permit denials, etc. As a result, there may be a lack of review by the Bridge Maintenance staff and what happens once a permit is denied. This is a potential safety issue that is not being addressed.

#### **Recommendation 8:**

Bridge Maintenance should maintain a list of permits that they denied quarterly. Someone from the Bridge Maintenance staff should review the OSOW permit files to ensure the permits that were denied were not overridden by the OSOW office.

Bridge Maintenance needs to assist OSOW in utilizing the Roadway Information Management System (RIMS) to determine bridge ratings when evaluating potential routes for Oversize/Overweight loads. RIMS does not provide accurate information for OSOW to evaluate routes when issuing potential permits. If RIMS cannot provide the information OSOW needs, an alternative information source needs to be established by Bridge Maintenance.

#### Finding 9:

The South Carolina Code of Laws and Regulations allows for an exemption for the following type commodities; fire apparatus, road machinery or implements, and products of husbandry including farm tractors, timber equipment, liquid fertilizer storage facilities, and vehicles or combinations of vehicles used to transport, store, or spread lime, nitrogen, or other soil improvement products for agricultural purposes. The exemption allows haulers transporting these commodities to travel routes not reviewed by OSOW as long as they do not exceed 16 feet in width. All other exempt commodities are allowed to travel without a permit as long as they do

not exceed 12 feet in width. However, all nonexempt commodities are required to obtain a permit once they exceed eight feet six inches in width. This exemption poses a dangerous risk on South Carolina's highways and roads, because these exempt commodities are allowed to travel without a permit at larger widths. OSOW's guidelines and permits contain safety restrictions that do not apply to these exempt commodities and may be unknown to these haulers. This compromises the ability to protect the motoring public. There have been fatal incidents involving the transport of exempt commodities that did not require a permit.

#### Recommendation 9:

All exempt commodities should be required to obtain a permit once they exceed eight feet six inches in width. This width is based on the Code of Federal Regulations 23-658.15. The restrictions placed on commodities are designed to ensure oversize and/or overweight loads are transported safely on South Carolina's highways and roads. The Legal Department should assist OSOW in recommending the legislative changes to accomplish this.

#### Finding 10:

A receipt showing deposit of all financial transactions for each business day is sent to OSOW by SCDOT's Accounting Division. Escrow deposits for the larger OSOW credit customers are deposited in the Special Deposits Fund. The permit payments are deposited in the State Highway Fund. OSOW files the receipts in the daily close out folder for each business day but does not compare the amount on the receipt to its records.

#### Recommendation 10:

OSOW should compare the amount deposited on the receipt of deposit to its Receipts Ledger to ensure the correct amount was deposited into the correct funds.

#### Conclusion

The audit highlighted two areas that will serve to improve OSOW. OSOW is aware and is working to promote better coordination and support from the Bridge Maintenance staff. The emphasis by OSOW is to provide excellent customer service, which requires assistance from Bridge Maintenance as well as better software. Additionally, OSOW has done a good job of dealing with the various laws and regulations. However, it appears that the job could be simplified as well as improved safety by legislative changes.

We appreciate the cooperation and assistance provided by the staff and management of OSOW.

### Department Response



#### **MEMORANDUM**

To:

Joel Griggs, Office of the Chief Internal Auditor

From:

Andrew T. Leaphart, P.E., Director of Support Services KV

Date:

August 13, 2012

Subject:

SCDOT Response to the Oversize/Overweight Audit

We have reviewed your findings and recommendations in the subject report dated August 8, 2012. We appreciate the efforts of the Office of the Chief Internal Investigator (OCIA) and the willingness of OCIA to work with the Oversize/Overweight Permits Office (OS/OW). We approached this audit as an opportunity to learn and improve, and are confident that our collaboration will ultimately yield an optimized process for all of our stakeholders and customers. Listed below are our responses to each of the ten findings and recommendations outlined in your report.

Finding 1 looked at permits issued for commodities transported to SCDOT job sites and mobile home relocations. Your recommendation is that SCDOT issue penalties to contractors not meeting the permit requirements and that we work with the staffs of 46 counties to develop guidelines for requesting copies of mobile home OS/OW permits. We are supportive of any action that will enforce compliance with OS/OW laws. We believe a viable first step in this process will be to initiate discussions with our engineering staff to outline a path forward. There will be a training element for field staff to be able to identify loads requiring permits. For mobile home permits, a practical first step would be to work with the Manufactured Housing Institute of South Carolina to develop an education plan for their members and then coordinate with the South Carolina Association of Counties to ensure statewide uniformity.

<u>Finding 2</u> identified several instances where current policies and practices did not conform to the latest edition of the OS/OW Operational Manual. We agree that the OS/OW Operational Manual needs to be updated and will schedule a review with the appropriate shareholders. These shareholders will include a representative from SCDOT's legal staff.

<u>Finding 3</u> addresses the current exemption for road machinery. We agree with the recommendation to remove or more clearly define this exemption. We will coordinate discussions with SCDOT's legal staff on the process of requesting legislative change.

<u>Finding 4</u> relates to the software currently used for routing and permitting. OS/OW, IT Services, Road Data Services and Engineering are in collaborative discussions about our software products and will continue these discussions until we obtain the most cost effective and proficient system for all participants involved.



Griggs Page 2 August 13, 2012

<u>Finding 5</u> outlined several instances where OS/OW did not communicate changes, adjustments or additions to a bridge engineer. Similar to the second finding and recommendation, OS/OW will ensure the OS/OW Operational Manual is up to date. The OS/OW staff will follow all approved policies and procedures while keeping an open dialogue with the bridge engineers. As outlined in the recommendation, we will remove the axle weight statement from the permit that originated in a 2002 meeting with industry, State Transport Police and Engineering. State Transport Police and industry will be notified of the change.

<u>Finding 6</u> discusses charging fees for permission permits. We will coordinate discussions with SCDOT's legal staff to ensure all fees for permission loads are being charged in accordance with state statute.

<u>Finding 7</u> notes that OS/OW operates with two verbal exemptions for superload permits. As stated in other recommendations, we concur that these exemptions, as well as all policies and procedures, should be incorporated into the OS/OW Operational Manual.

<u>Finding 8</u> tasks the bridge engineers with reviewing previously denied permits to ensure the OS/OW staff has not overridden the denial. The current permit system does allow the bridge engineers to review issued permits for up to five years. OS/OW will collaborate with Engineering to establish a review process.

<u>Finding 9</u> reviewed exempt commodities and recommends changes to the existing laws. We will coordinate discussions with SCDOT's legal staff on the process of requesting legislative change.

<u>Finding 10</u> reviewed the deposits made by OS/OW and recommends that we compare the amounts to ensure proper credit to the appropriate funds. We agree with this recommendation and will incorporate this practice into the OS/OW Operational Manual.

Again, we appreciate the work of your office on this review. While we feel this report identified several areas where we can improve, we are very encouraged that the conclusions were very positive and highlighted OS/OW's ability to perform under a complex system of laws and regulations. We will move forward with the actions previously stated to ensure OS/OW continues to support the safe and efficient transportation of goods on South Carolina's roads. If I can be of further assistance, please don't hesitate to call me at 803-737-1994.

ec: Robert J. St. Onge, Jr. Secretary of Transportation Clifton Parker, SCDOT Commissioner At-Large John V. Walsh, Deputy Secretary for Engineering J. Clem Watson, Chief Engineer for Operations Jim Feda, Director of Maintenance Michele Paoleschi, Director of Customer Service Mechelle Mabry, OS/OW Permit Director Linda McDonald, Chief Counsel