

## OCIA Audit Finding & Recommendations for Updated Responses

**Safety**

**5/15/2013**

### **Finding:**

Although OSHO is now functioning within the Support Services Division, this would not appear to be the most effective location within the SCDOT organization. A draft copy of the SCDOT Strategic Management Plan outlines safety initiatives in the Workforce section, which is under the authority of the Human Resources Division. With so much coordination necessary with Human Resources in the areas of employee training, Workers Compensation claims, and disciplinary actions resulting from safety issues, the OSHO and the safety initiative could be more effective if organizationally located within the Human Resources Division.

### **Recommendation:**

We recommend consideration of the OSHO being organizationally located within the Human Resources Division of SCDOT. This should provide for more effective coordination and cooperation in the area of employee safety and wellness.

### **May 2013 Response:**

Recommendation 1 looked at the organizational location of the Occupational Safety and Health Office (OSHO) within SCDOT and suggested that the Human Resources (HR) Division was a better organizational fit. Our Strategic Management Plan (SMP) is intentionally organized into critical management areas to force interaction, coordination, and integration across potential and historical work channels. We acknowledge in the SMP that safety-related activities are not only operational and HR-related, but the responsibility of all areas of SCDOT. For now, we have chosen to house our safety-related activities in the operational support channel, tied closely to HR. As the SMP and our evaluation of results mature over time, we will revisit where the OSHO should reside.

### **April 2015 Response:**

The current organization placement of the OSHO under Support Services allows for close interaction with engineering senior management. The Director of OS&H has tasked his staff with defining all processes/functions of the OSHO and is initiating cross training of staff to ensure more than one person is knowledgeable and trained to cover all functions associated with the OSHO office (i.e. OSHA reporting, alcohol & drug testing, driver training, etc.) Director Eargle and Director of Support Services met with DSE Hall and members of her management team and agreed on a standardized safety organization statewide like that of Engineering District 4 with the Lead District Safety Officer reporting directly to the DEA with additional districtwide safety representatives directly reporting to the Lead District Safety Officer. This direct report organization will ensure the safety and health of our workforce is addressed uniformly across the state. A meeting is being planned for mid-April to outline the new organizational structure to the DEA's.

**Finding:**

Currently, safety is administered in a fragmented and decentralized manner through seven district safety representatives and individual county safety representatives, with support by the OSHO. All districts and counties are not staffed nor administer the safety programs in a consistent manner. Some locations do not have full-time safety representatives and duties are varied within each district and county. At the time of our audit, there were nine (9) counties that were not staffed with a county safety representative. In District 7, safety duties are administered by the Resident Maintenance Engineer (RME). In some counties, the safety representative has additional and varied duties not related to the safety program. We understand the manpower review is addressing this issue and has presented recommendations for a consistent organization with necessary staffing levels, including some reassessment of duties and responsibilities

**Recommendation:**

We recommend the SCDOT safety program be administered through a standardized organization with clear reporting and responsibilities for each safety position. This could be structured in a centralized or decentralized environment. Whatever the organization structure, the responsible party should be provided with the necessary authority and resources to accomplish the safety mission.

**May 2013 Response:**

Recommendation 2 suggested the SCDOT safety program be administered through a standardized organization with clear reporting and responsibilities for each safety position. We concur with this and have been in discussion for some time about the responsibility for and delivery of occupational safety field services. This recommendation is in alignment with the corrective path we have initiated. As part of SCDOT's overall manpower management review, the functions and structure of our safety programs and personnel have been evaluated. Recommendations for change have been submitted and are being reviewed.

**April 2015 Response:**

As stated above, we are continuing to standardize our field operations. We have identified the existing structure in District 4 as an effective and efficient way of managing our safety resources. We have a new Director of Occupational Safety & Health and he is working to standardize our organization and to implement policies for a consistent governing structure.

**Finding:**

SCDOT employees do not have an independent forum or channel to direct and discuss internal work safety issues. During 2012, the SCDOT Safety Council was established by the Secretary of Transportation to explore safety initiatives. This council is made up of representatives of SCDOT, Department of Public Safety, Department of Motor Vehicles, and the Federal Highway Administration. While a very worthwhile venture, it would appear that the work of the council has been overwhelmingly geared toward the reduction of deaths on our highways versus the safety of SCDOT employees.

**Recommendation:**

We recommend that a new, internal “SCDOT Occupational Safety Council” be established to address the concerns and recommendations of our employees as they relate specifically to employee safety on the job.

**May 2013 Response:**

Recommendation 3 advocated the creation of a new, internal “SCDOT Occupational Safety Council” to address the concerns and recommendations of SCDOT employees. The SCDOT Safety Council has been active for over one year now. It has a broad-based charter, to mirror the Department’s broad-based safety concerns. The Safety Council addresses national and state standards, interagency concerns, and in-house occupational safety concerns. The SMP includes an element to establish an agency occupational safety council and subordinate council within each district to analyze trends and develop countermeasures to ensure the safety of our employees.

**April 2015 Response:**

Director of OS&H Eargle plans to initiate a committee consisting of SCDOT mid and upper level managers from the maintenance and construction organizations to address occupational safety concerns and recommendations of our employees. Some districts currently have their own safety committees; by requiring each district to have a safety committee with mid and upper level managers as chairs, these will ensure a positive attitude for compiling concerns and recommendations from their respective counties. The district committee chairperson would serve on the Statewide Safety Council, presenting their concerns and recommendations to the council, ensuring a consistent response statewide.

The timeline for implementation would be as follows:

- Present the plan for district committees and the Statewide Safety Council to DEAs during the meeting with upper level engineering management to discuss the safety organizational structure as outlined in Finding #1. (Mid-April)
- Identify leaders within each district to chair their respective safety committee and serve on the statewide Council. (May 1, 2015)
- Begin monthly Statewide Safety Council Meetings to hear the concerns and recommendations. (June 2015)

**Finding:**

SCDOT Departmental Directive No. 12 Employee Safety Policy was issued to establish the employee safety policy and introduce the employee safety manual. Directive No. 12 was issued in June 1997 and has only gone through one minor revision and reissue in 16 years (October 2007). This directive has not been strengthened or reinforced since 2007 and provides no clear objectives nor administration of the safety program with commitment by management and communication to employees.

**Recommendation:**

We recommend that SCDOT Departmental Directive No. 12 Employee Safety Policy be revised and reissued with a renewed commitment by management to safety at SCDOT. The Strategic Management Plan addresses such a “revitalization” of the safety program and the reissuance of Directive No. 12 should be a major part of achieving that objective.

**May 2013 Response:**

Recommendation 4 dealt with SCDOT Departmental Directive No. 12 (DD 12), Employee Safety Policy, and suggested that the directive be revised and reissued with a renewed commitment by management to safety at SCDOT. The SMP addresses such a revitalization of the safety program and the reissuance of DD 12 will be a major part of achieving that objective. DD 12 directs employees to the *SCDOT Employee Safety Manual*, which essentially is the agency’s safety policy. The manual fully addresses all agency safety policies and programs in detail. The manual is reviewed and updated annually; therefore, it is incorrect to state that there has been only one minor revision since 1997. DD 12 will be reworked upon completion of the manpower review.

**April 2015 Response:**

Recommended revisions to Departmental Directive 12 have been submitted to management for review. The latest revision is October 15, 2007.

The Director of OS&H currently has staff updating the SCDOT Safety Manual, specifically Chapter 32. The plan is to have staff review all chapters of the manual and make recommended revisions, then review and update the manual every 3 years.

**Finding:**

SCDOT does not currently have in place an agency-wide program to recognize or reward employees for meeting or exceeding the objectives of our safety program. We were informed that such programs had been in place on an informal basis in the past but were eliminated due to budgetary considerations.

Our surveys and interviews of employees highlighted the lack of any form of reward or recognition programs, as almost 50% of the responses indicated the interest for reward or recognition for performing their jobs in a safe manner. It is generally accepted practice for many industries, including construction, maintenance and transportation, to have safety rewards and recognition programs and pride in their safety records and accomplishments.

**Recommendation:**

We recommend that SCDOT consider the adoption of a safety rewards and recognition program. This could be accomplished on a district, county or individual employee basis or a combination of all. Recognition programs help instill the sense of pride and ownership for the safety of all employees and support management commitment to the program. Such programs can take the form of luncheons, banquets, awards, plaques and certificates, and competitions with recognition in agency publications.

**May 2013 Response:**

Recommendation 5 proposed SCDOT consider the adoption of a safety rewards and recognition program. This could be accomplished on a district, county or individual employee basis or a combination of all. We concur with this recommendation and agency management previously directed staff to look broadly at our recognition program and to provide recommendations to revitalize it, including safety achievements. This is a work in progress and is included in the SMP.

**April 2015 Response:**

Recommendations were submitted for a safety rewards program our top rated units were recognized at the annual Engineering Conference last month.

**Finding:**

Safety is not an accounting budget item at SCDOT, so the expenditures for safety were not readily available. The personnel costs alone for our current safety staff (42) are in excess of \$1.8 million per annum, but there is no formal capture of safety equipment costs or training costs. We were consistently informed that safety programs and related funds for equipment and training have been reduced, but we were not provided any detailed accounting of reduced costs or training hours. This could also be utilized to provide a measure of the efficiency or effectiveness of our safety program.

**Recommendation:**

We recommend that SCDOT consider the development and utilization of a safety budget to capture the costs associated with our safety program, including dedicated personnel, safety equipment and gear, including safety boots, eyewear and vests, training costs, and employee wellness program costs. This could be accomplished within SCEIS or a separate budget routine. In addition, training budgets by type and hours should be utilized to develop the annual training plan and to capture the actual training completed. We understand that such tracking is currently in development within the OSHO office and should provide for more detailed analysis in the future.

**May 2013 Response:**

Recommendation 6 advised SCDOT to consider the development and utilization of a safety budget to capture the costs associated with the safety program, including dedicated personnel, safety equipment and gear (safety boots, eyewear and vests), training, and employee wellness. The cost associated with some safety items, such as training, could reasonably be captured as a separate budget expenditure. Other items are more subjective in nature, and would be more difficult to capture. For example, replacing the brakes on a vehicle could be recorded as a safety expenditure or as routine vehicle maintenance. We will explore our options with our finance personnel to identify safety costs that can be captured.

**April 2015 Response:**

As noted in our original response, it is difficult to capture and track the costs associated with a comprehensive safety program. Also, the structure of the SCEIS system is not designed to facilitate the development of budgets as recommended by OCIA.

**Finding:**

SCDOT has suffered two (2) fatalities within the past two (2) years, both of which occurred in high speed work zones. The accident investigation for the April 2011 fatality by the South Carolina Department of Labor, Licensing and Regulation, which is the Department of Labor, Occupational Safety and Health Administration (OSHA) body for the state of South Carolina, determined that no violations existed, however a recommendation was presented “when working on projects, a shadow vehicle with attenuator should be used to provide a buffer for employees.” As a result of this and other accidents, SCDOT embarked on a Work Zone Traffic Control Manual, which includes new procedures and equipment to help ensure employee safety. The review, which we were informed does provide for the use of TMA’s (truck mounted attenuators) is in draft form and under review by management. We understand management proposed a five (5) year phase-in for these procedures and the purchase of necessary equipment.

**Recommendation:**

We recommend an accelerated schedule for review, acceptance and implementation, including necessary equipment purchases, for high speed Work Zone Traffic Control. This already identified deficiency is an area of renewed commitment from management to employee safety and should not be delayed.

We also recommend that in the case of an employee fatality or serious injury, in addition to the investigation report, a report of management corrective action plans to address the unsafe condition be required. Distribution of these reports should be to a strategic management team, including the SCDOT Commission at their discretion.

**May 2013 Response:**

Recommendation 7 addressed the schedule for review, acceptance and implementation, including necessary equipment purchases, for high speed work zone traffic control. In addition, OCIA recommended that in the case of an employee fatality or serious injury, an investigative report and a report of management corrective action to address the unsafe condition be required. Distribution of these reports should be to a strategic management team, including the SCDOT Commission at their discretion.

We are saddened by the deaths of two of the agency’s workers on our highways. Our employees are exposed to numerous risks daily as they perform their duties, and we strive to minimize the risks and their impacts. Both workers were killed by impaired drivers who were repeat offenders, which unfortunately is an increasing trend in South Carolina. It is difficult for the agency to mitigate those circumstances. However, in order to address those issues we can control, SCDOT reviewed each case in detail and initiated and emphasized corrective actions for

all work zones, particularly those that are high risk. We have developed a procedure to analyze risks for each work activity, and we are training our crews to perform those risk assessments. We will review the availability of capital safety equipment, such as truck-mounted attenuators.

**April 2015 Response:**

The Maintenance Workzone Traffic Control Manual is being adapted for electronic viewing via the Intranet. Due to the complexity of the manual, the plan is to train district trainers on how to use the manual during the month of May. The districts will then train their county maintenance staff. This will be supplemented by upper level management from Engineering and the OSHO attending the district training to enforce the importance of using proper traffic control for specific maintenance work being performed, ensuring the safety of our employees. Training will be completed and full implementation of the manual by June 1, 2015.

**Finding:**

Safety within any organization including SCDOT is a “campaign” and a program with many uncontrollable variables and as such measurable objectives and results are difficult to quantify. Therefore, a conclusion on the efficiency and effectiveness of our safety program is difficult to reach.

One measure of the effectiveness of the program could be an analysis of the OSHA and injury statistics. SCDOT Injury Summary reports do not support any measurable improvement in our injury statistics over the past five (5) years. In fact, our injury reports compared to the employee counts and man hours worked actually indicate increases in both the number of injuries and the severity of those injuries. After going three (3) years (2008-2011) without a fatality, we experienced a fatality in both 2011 and 2012. We understand that injury statistics may not provide an accurate picture of the effectiveness of the safety program. We have experienced a decrease in the number of motor vehicle accidents, which management attributes to an increased campaign and awareness.

Source: OSHO

Per management, an aberration may have occurred in the 2010 Total Number of Injuries Reported due to a change in capture methodology.

<b>Year</b>	<b><u>2007</u></b>	<b><u>2008</u></b>	<b><u>2009</u></b>	<b><u>2010</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>
<b>Total # of SCDOT Employees</b>	5,058	5,195	5,142	5,027	4,686	4,527
<b>Total # of SCDOT Work-Related Fatalities</b>	1	0	0	0	1	1
<b>Total Hours Worked - Calendar Year</b>	10,187,173	10,543,246	10,469,120	10,283,110	9,597,192	9,381,048
<b>Total # of First Report of Injury Filed by Year (12A's)</b>	462	461	516	627	510	515
<b>Total # of OSHA Recordable Injury &amp; Illness Cases</b>	339	276	312	343	283	307
<b>Total # of OSHA Lost Workday Injury &amp; Illness Cases</b>	156	125	134	134	114	118
<b>OSHA Incidence Rate</b>	6.68	5.24	5.96	6.67	5.9	6.52
<b>OSHA Lost Workday Case Rate</b>	3.06	2.37	2.56	2.63	2.38	2.49
<b>OSHA Severity Rate</b>	140.63	88.19	77.49	98.22	106.39	117.22
<b>OSHA Lost Workdays per Lost Workday Case</b>	45.92	37.19	30.27	37.41	44.79	46.59
<b>OSHA Number of Lost Workdays</b>	7,163	4,649	4,056	5,050	5,106	5,444
<b>OSHA Number of Restricted Days</b>	4,902	5,206	5,666	7,851	5,535	4,333
<b><u>Maintenance Employee Summary</u></b>						
<b>Maintenance # of Recordable Injury/Illnesses</b>	334	270	279	330	271	285
<b>Maintenance # of Lost Workday Cases</b>	152	121	118	127	107	110
<b>Maintenance Incidence Rate</b>	6.56	5.12	7.23	8.20	7.27	7.81
<b>Maintenance Lost Workday Case Rate</b>	2.98	2.30	2.87	3.15	2.87	3.01
<b>Maintenance Severity Rate</b>	140.43	78.06	77.2	97.75	104.91	110.31
<b>Maintenance Lost Workdays per Lost Workday Case</b>	47.06	34.01	34.25	39.57	47.06	47.04
<b>Maintenance Number of Lost Workdays</b>	7,153	4,115	4,041	5,026	5,035	5,174
<i>Note: We update each case as the out of work or work restriction status changes, although the case occurred during a specific calendar year lost/restricted time may continue to accumulate up to the maximum of 180 days lost or restricted or a combination of both.</i>						

Note: We update each case as the out of work or work restriction status changes, although the case occurred during a specific calendar year lost/restricted time may continue to accumulate up to the maximum of 180 days lost or restricted or a combination of both.

Source: OSHO



While an overwhelming number of our employees surveyed (86%) indicated that safety was an important issue to management at SCDOT as evidenced by the safety meetings, safety bulletins, training, etc., almost 44% stated that SCDOT at times sacrifices safety to “get the job done.”

**Recommendation:**

Based upon SCDOT statistics as well as the response of the staff as measured by our surveys, we recommend that a new occupational safety campaign and program be initiated at SCDOT. Although we could not determine the total amount of funds expended on safety initiatives, current funding could be utilized to support a new effort with redistribution of those moneys to staffing, training, equipment, and rewards/recognition programs.

As stated in the draft of the SCDOT Strategic Management Plan, this initiative should serve to “revitalize programs and develop an investment strategy” and should encompass at a minimum recommendations in this audit report.

- Revision and re-issue of SCDOT Departmental Directive No. 12 Employee Safety Program, including the referencing of employee and supervisory disciplinary actions for safety violations, if warranted, and reinforcement of job protection for reporting of safety violations (whistle-blower policy).
- Implementation of the Work Zone Manual with necessary equipment purchases.
- Establishment of a SCDOT employee safety council and consideration of an employee hotline for reporting safety concerns, as to be determined by this committee.
- Establishment of safety training budget.
- Implementation of a safety rewards and recognition program.

**May 2013 Response:**

Recommendation 8 reviewed SCDOT statistics as well as staff responses to OCIA surveys, and recommended that a new occupational safety campaign and program be initiated. However, the OCIA findings stated that “one measure of the effectiveness of the program could be an analysis of the OSHA and injury statistics.” This analysis is flawed because of changes to guidelines concerning the reporting of employee injuries. It is inaccurate to compare the total number of injuries reported for years 2007 through 2012.

A more accurate analysis would result from comparing the number of OSHA-recordable cases for those years. Comparison of OSHA-recordable cases shows that SCDOT injuries have fluctuated from year to year, with an overall decrease during the stated timeframe. In addition, the finding states injury severity rates (ISR) have risen. As indicated by the second chart, that is inaccurate; the OSHA severity rate has decreased.

During the past few years, the agency implemented several strategies aimed toward reducing accident rates. These strategies included increased training requirements for CDL drivers, policies focused toward making drivers more aware of their surroundings (cone policy), and increased discussions between management and employees regarding vehicle safety. Since 2007, we have seen a 45 percent reduction in vehicle accidents.

It is the agency's goal to decrease both accident and injury rates. The SMP has an objective to provide employees with a safe work environment. Implementation includes enforcement of safety policies, identification of deficiencies, and development of countermeasures; ultimately achieving lower accident and injury rates. We will review the idea of an in-house safety campaign to complement the Toward Zero Deaths campaign we contemplate with our interagency partners.

**April 2015 Response:**

The following are strategic goals for the OSHO:

- Ensure maintenance foremen receive necessary training on Reasonable Suspicion Testing of employees every 3 years. This will ensure maintenance foremen are able to identify unsafe behavior and remove drivers and/or equipment operators from safety sensitive duties if they appear impaired.
- Screen Driver's License records of potential new hires and current employees being considered for inner-agency positions within 24 hours of receipt of request. By screening driver records we can eliminate or reduce the probability of vehicle accidents by selecting/promoting persons with a safe driving history.
- Ensure workforce receives necessary driver training for those employees with job functions requiring they drive a state-owned vehicle. Whether a 3 year training renewal or training due to an accident or driver's record review, this will ensure staff is well trained in the safe operation of SCDOT vehicles.
- Promote employee health and wellness through SCDOT Wellness Program and State Benefits, ensuring employees are aware there is no cost to the employee. Employees will be more aware of their health, thus decreasing health issues and strengthening the workforce; potentially minimizing lost days due to sickness and resulting in an overall healthier workforce.

The OSHO also promotes safety and health of our employees through statewide maintenance work zone audits, hearing conservation screenings for maintenance employees, performing pre-trip inspections on CDL vehicles as part of the QMT inspections of maintenance units as well as maintenance facility and shop safety inspections as part of the QMT inspections.