



North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary

February 12, 2008

Lemont Smith
Recognition Program Manager
Occupational Safety and Health Division
NC Department of Labor
4 West Edenton Street
Raleigh, NC 27601

Dear Mr. Smith,

Enclosed is the NC Division of Waste Management's completed Annual Review for the North Carolina Public Sector Star Recognition Program. We are pleased to report that our Division had measurable safety success in 2007. In addition, several areas for improvement were identified. If you have questions or wish to discuss details of our safety program, feel free to contact me at (919) 508-8414 or via email at dexter.matthews@ncmail.net.

Sincerely,

Dexter R. Matthews, Director
NC Division of Waste Management

Enclosure

c: Jim Edwards, DWM Safety Committee Chairperson
Brian Polk
David Lilley

**NC DIVISION OF WASTE MANAGEMENT
PUBLIC SECTOR STAR SITE
2007 Annual Review**

1. Management Commitment and Leadership

Management continues to be supportive of the division's commitment to safety.

2. Accountability

Senior management continues to discuss safety at staff meetings and encourages line supervisors to do the same.

3. Disciplinary Program

DENR is now using a Department-wide performance evaluation. The Department incorporated the safety performance developed by DWM.

4. Injury and Illness Rates

Three-year average rate for both total recordable cases (TRC), and days away, restricted and transferred (DART) cases.

Total Recordable Cases (TRC)

Year	Recordable cases	÷ Total Work Hours	x 200,000	= Total recordable cases
2005	0	250,000	200,000	0
2006	2	271,000	200,000	1.4
2007	0	272,500	200,000	0

Three-Year Average- 0.46

Days Away, Restricted and Transferred (DART)

Year	Lost/Restricted Workdays	÷ Total Work Hours	x 200,000	= Days away, restricted and transferred
2005	0	250,000	200,000	0
2006	0	271,000	200,000	0
2007	0	272,500	200,000	0

LWDI – Lost Workday Injury

Three-Year Average- 0.00

Incident Trends:

While there were no recordable incidents for the year 2007, DWM did have eight incidents involving property damage or injury requiring only first aid. Half the incidents were minor vehicle accidents, two slip trip and falls, and one cut finger.

In an effort to prevent the vehicle accidents, the Division has developed a Driver Safety Class in conjunction the NC Highway Patrol. More information about this class is presented in Section Ten. The other incidents are considered isolated and awareness education has been provided to affected employees.

5. Employee Participation

The Division's Safety Committee is the most meaningful method to participate in the safety program. However, the culture truly drives participation. Because employees know that safety is their job, they help select equipment, remind others that an issue may need to be reviewed by the safety professional, help get hazards corrected, and help other employees with finding alternative methods to perform tasks.

6. Self-Inspections

Central office monthly inspections were changed to quarterly.

A log of hazards identified during the quarterly inspections is maintained to ensure hazards are corrected. Most hazards involved use of extension cords, not using proper lifting equipment, or minor concerns which are immediately corrected.

The Safety Committee continues to perform safety inspections at Regional Offices every six months. These inspections are finding fewer hazards compared to past inspections.

7. Employee Hazard Reporting System

The Division maintains the same reporting system. Few anonymous concerns are received. Most employees feel free to express their concerns to supervisors, management, and/or safety professionals.

8. Accident/Incident Investigation

Eight incidents occurred throughout the Division during 2007. Three of the incidents occurred at the Central Office. Four incidents were medical-related and were considered minor. The other four incidents involved damage to state vehicles. All incidents were investigated and corrective action was taken.

9. JSA/Process Reviews

The Division regulates underground storage tanks which are primarily located at gas stations. As a part of the inspection, employees must lift ground covers. A few employees were concerned that this exposed them to a confined space. After several site visits and a consultation with NC OSH, it was determined these spaces do not meet the definition of a confined space. Written inspection procedures, including instructions not to enter the sumps, were added to the Safety SOP Manual and presented during the annual HAZWOPER update class.

In another example of process review, our employees request that land owners dig test pits to demonstrate that nothing has been illegally buried and to evaluate geological structure and/or environmental contamination. Some employees were concerned that this activity involved the OSHA Excavation/Trenching Standard. Upon review, new guidelines were established that included provisions for underground utilities, fall protection, and hazardous atmosphere. It was also strongly communicated that DWM employees shall not enter an excavation.

10. Safety and Health Training

Training remains the core of our safety program. With the development of a safety website, DWM now has a central location for health and safety information. The website also offers calendars for all regularly scheduled safety training as well as online classes (Bloodborne Pathogens, Radiation Safety, Back Injury Prevention, and Safety for Supervisors).

In response to several incidents involving state owned vehicles, a Driver Safety class was developed in conjunction with the NC Highway Patrol. The class combines tradition classroom information as well as a driving course. So far, about half the division has been trained in Driver Safety and additional classes are being scheduled.

11. Preventive Maintenance

DWM only has vehicles which require preventive maintenance. Vehicle inspections are a part of regular safety inspections and have resulted in the correcting of bad tires, cracked lenses, burned out lights, and seat belt repair.

12. Emergency Programs/Drills

Written emergency plans were revised to ensure new staff was included. A Continuity of Operations Plan (COOP) plan was also developed by the Division to ensure the business operations continued in the case of an unexpected event, such as a fire, suspicious package, or Avian Flu.

A table top exercise involving a suspicious package was conducted to test the plan. Emergency plans were a key element of the COOP plan as it provided a method to evacuate the building. The exercise showed that several areas must be addressed such as medical attention, responding to media issues, lines of communication, and employee responsibilities in the initial emergency phase, and reentry. The reliance on traditional emergency services would not be as adequate as first thought. In addition, arrangements should be made with clean up companies prior to the event.

13. Health Program

Several health surveys were completed at sites regulated by the Division of Waste Management. These surveys evaluated mercury and noise exposure at hazardous waste treatment, storage, and disposal (TSD) facilities. Results from the noise survey showed the need for additional hearing protection at certain locations. Mercury vapor sampling showed elevated levels at certain facilities that store and crush fluorescent lamps. Affected employees were made aware of the results.

In addition, a general health and safety survey is being completed at all NC Commercial TSDs. The primary focus of these inspections is to ensure that exits are accessible and clearly marked. These inspections are completed by the safety professional and the regular inspector.

14. Personal Protective Equipment

Following several industrial accidents and need for additional protection at certain sites, employees (one being a Section Chief) requested a traffic safety vest that also provided places to store equipment. This request resulted in the design and purchase of new traffic safety vests. DWM worked with the Department of Corrections to develop vests that had pockets for equipment (i.e. camera, GPS units, notebooks, and pens). Not only does the vest provide adequate protection, employees do not mind wearing them.

During 2007, DWM completed switching HWS/BF/SWS employees to new Type II hard hats. These hard hats are now standard equipment for these employees. Employees like the new hard hats, as they provide better protection and are more comfortable to wear.

15. Safety and Health Staff Involved with Changes

The Division has two full time safety and health professionals. Both remain actively involved with all aspects of the health and safety program.

16. Contractor/Temporary Employee Safety

Several temporary staff was used to complete a massive document management project. The staff moved files, scanned files and arranged for files to be moved to a new storage location. No injuries were reported. Supervisors and Safety Staff designed safety procedures specific to this task.

17. Medical Program

Duke (Durham) and OccuMed (Asheville) continue to provide medical evaluations. A few new facilities were added to ease travel.

A large percentage of employees completed updated CPR/AED training. Several First Aid classes were also taught. First Aid/CRP/AED continues to be offered to all employees even if it is not a job requirement.

18. Resources

The Division has two full time safety professionals: Brian Polk and Dave Lilley. In 2007 Brian completed the MESH certification as well as a Master's Degree in Occupational Safety. Dave completed the Office Ergonomics Accreditation Program through The Ergonomics Center of North Carolina in 2007, and maintained his CSP and CIH certification.

Additional Information and Goals:

Significant Health and Safety Program Changes:

- **Personal Appliance Policy:** This policy requires that if an employee brings a personal appliance into the workplace, the path to ground must be tested every quarter. As a result, four electrical upgrades were required in DWM occupied buildings, and one faulty appliance had to be removed.
- **Safety Website:** The new safety website created a central location for safety and health information. However, after years of paper copies and asking for information, employees are slow to utilize all the website features. This continues to be a challenge but there is progress.

Factors Influencing the Health and Safety Program:

- **New staff:** As a result of legislative changes, the Division will add approximately 25 new positions. In fact this will create a new Central Compliance Unit in the Solid Waste Section. These positions include account managers, engineers, and other support staff.
- In addition to permanent employees the Division has started using many temporary and part-time staff. This presents a challenge to schedule safety training for unique, short term tasks.
- **Environmental Quality Apex, NC:** In October of 2006, the EQ facility caught fire in Apex, NC. This response by the Division was great and required significant resources. Throughout the clean up and recovery, DWM staff maintained a conscious attitude toward safety.
- **Legislative changes House Bill 36 and House Bill 1492:** These two laws created new responsibilities for DWM staff. Primarily, these two bills address solid and hazardous waste management which has required some employees to regulate different types of facilities and assume new roles. The Division continues to evaluate the need to change safety guidelines as a result of the passage of these bills.
- **Federal Grant Budget:** Some of the programs in the Division are funded by federal grants. Because of recent legislative raises, insurance costs, and rising operating costs, some employees assumed new roles and

responsibilities. This has and continues to present a need for training and continued focus on safety as employees perform additional tasks.

- **Department Safety Audit:** In addition to regular site audits, the Department's Safety Director conducted a comprehensive safety program audit. The audit focused mostly on Departmental requirements such as the establishment of a safety committee, proper documentation of accidents, and completion of worker compensation forms. Suggestions for improvement included rotating membership on the safety committee and documenting informal (tailgate) safety meetings. The Division is in the process of finding methods to make these improvements.

Goals for 2008:

- Have 75% of employees who may operate a state vehicle complete the Driver Safety Class or equivalent.
- Develop additional online training classes to facilitate safety training for temporary and part-time employees. Such topics include *Office Safety, Evacuation and Emergency Procedures, and Orientation*.
- Develop informal safety training tracking record.

Success Stories:

- Because the safety website provides easy access to safety manuals, there is no longer a need to print numerous copies for employees. The amount of paper, time, and wear on copiers has been greatly reduced. It is estimated that this saves approximately \$1000.00 annually.

Mentoring with other Employers:

- **Duplin County Solid Waste:** At the invitation of Duplin County Solid Waste Manager, DWM assisted with inventorying workplace hazards, best practices, and training for two solid waste facilities.
- **City of Asheville - Solid Waste Division:** At the invitation of the Solid Waste Manager, DWM assisted with inventorying workplace hazards and procedures for fires involving waste management equipment. Fire extinguisher training was also provided.
- **Hazardous Waste Treatment Storage and Disposal facilities:** As a result of safety inspections conducted by the Division, numerous hazards have been identified and corrected. Five facilities have been inspected.
- **NC STAR Conference:** The Division attended and assisted with the 2007 STAR conference.