

CASE # C9034-019-10

SECTION# 314 408 394

**Strategic Plans for Maryland**

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Entered By (Ints.) | Date

- Construction (Sic 1500-1799)
- Manufacturing (NAICS 310000-330000)
- Trade, Transportation, Utilities (NAICS 220000 & 420000-490000)
- Public Sector

**Local Emphasis Programs for Maryland (LEP's)**

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Entered By (Ints.) | Date

- Fall Hazards in Construction
- Struck by/Crushed by Hazards in Construction
- Electrical Hazards in Construction
- High Hazard Industries in Maryland FFY 2010
- Accident

**National Emphasis Programs (NEP's)**

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Entered By (Ints.) | Date

- AMPUTATE-Reducing Machine Hazards Leading to Amputations
- DI2009NR-FY2009 Data Initiative Non-Responders
- DUSTEXPL-Combustible Dust
- FIELDSAN-Field Sanitation
- LEAD-Potential Exposure to Lead in All Industries
- NURSING-Insp. in Nursing and Personal Care Facilities
- PETRO-Petro Chemical
- POULTRY-Compliance Insps in Poultry Processing Industry
- PSMPQV-Process Safety Management
- REFINERY-PSM Insps./Visits Haz Chem-Petrochem Refineries
- SILICA-Insp. Presence of Crystalline Silica/Silicates
- SSTARG10-Year 2011 Site Specific Insp. Targeting Plan
- TRENCH-Trenching and Excavation

**Last Updated 09/24/10**

Copy in case

Copy to Supervisors

CASE# C9954-019-10 INSPECTION# 34408394

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OSHA - 1 Field 42: Optional Information Codes

Entered By (Ints)/ Date

**National Codes – Applicable to MOSH**

*Note: These codes are most often or most likely to be used, however there are other codes which may apply*

- |                |   |
|----------------|---|
| N-01           | Multi Employer Inspection Number                              |
| N-02-ABRASIVE  | Silica related abrasive blasting activities                   |
| N-02-BLOOD     | Blood Borne Pathogen Related Inspection                       |
| N-06-#####     | Programmed Construction Targeting (Enter Dodge Number)        |
| N-10-IMMLANG-Y | Immigrant and or Hispanic worker was involved in accident     |
| N-10-IMMLANG-N | Immigrant and or Hispanic worker was NOT involved in accident |
| N-11-PORTLAND  | Construction Sites Where Portland Cement in Use               |
| N-14-FOCUS,C,# | Focused – Main Contractor & No. of Contractors                |
| N-14-FOCUS,S   | Focused – Subcontractor Issued a Citation                     |
| N-16-ASBESTOS  | Asbestos Involved Inspection                                  |
| N-16-COMTOWER  | Communication Tower Construction Inspection                   |
| N-16-FORM      | Formaldehyde Involved Inspection                              |
| N-16-LEAD      | Lead Involved Inspection                                      |
| N-16-PWRPRESS  | Mechanical Power Press Related Inspection                     |
| N-16-RESCON    | Construction of Low Rise Residents (4 or fewer floors)        |
| N-16-SINGFAM   | Construction of Single Family Houses                          |

**State Codes Currently In Use**

*Type ID Optional Information*

S	05	Enter email address of company <b>OR</b> if email address is not available enter <b>Email NONE</b>
S	06	Enter month & year case was <b>transmitted</b> . Example: <b>October 2009</b>
S	09	Original Case Number for follow-up Inspection
S	10	Final Order Date
S	13	<b>Crane NIC</b> for new crane related regulations
S	13	<b>Crane IC</b> for a crane related inspection with no violations of the new crane related regulations
<i>The S-15 Code is for smoking in an enclosed workplace or not posting an enclosed workplace</i>		
S	15	<b>NIC Letter</b> for 1 <sup>st</sup> offenders
S	15	<b>NIC</b> for repeat offenders
S	15	<b>IC Unprogrammed</b> for smoking/posting related complaints/referrals

Last Updated 09/24/10

OCT-2010

## Legal Name Verification

From: **Cristina Campbell**

Date: **08/05/10**

Case #: **C9954-019-10**

Inspection #: **314408394**

- Employer completed legal name verification form (attached)
- Charter Services (attached)  
Through the state of Maryland
- Business License (attached)
- Phone call to the company:  
Company Officer Name: **Bob Saunders**  
Title: **Risk Manager**  
Legal Name Given: **State of Maryland Motor Vehicle Administration**
- Other (explain):

Explain any discrepancies/reconciliations:

Name Card/ Letterhead:



Maryland Occupational Safety & Health

1131 Belair Rd, LL1

Bel Air, MD 21014

Fax: (410) 803-8652

In order for our records to be accurate, this form must be filled out completely, signed, and returned to our office no later than 24 hours from time of receipt. Use the fax number or the address listed above.

Legal Name of Company: State of Maryland  
Motor Vehicle Administration  
(Include correct grammar, abbreviations, and capitalization)

Mailing Address: 6601 Ritchie Hwy, N.E.  
Glen Burnie, MD 21062

Street Address (if different from above):

N/A

Telephone #: (410) 768-7069

Fax # (410) 424-3068

Email address (no web pages please): bsaunders1@mdot.state.md.us

Federal Tax ID # or SSN if none: unknown

Total # of Employees Company wide: 1,800+

The company is a:  - Corporation  - State Agency  
(Check only One)  - Partnership (Please list names and addresses on separate paper)  
 - Sole Owner: \_\_\_\_\_ (name)

If the following box is checked please submit the following:

- Log 300 (Log of Injuries and Illnesses) Form for the last three full years and the current year's partial list.

I, Robert A. Saunders, certify that the above information is true and correct to the best of my knowledge.

Robert A. Saunders  
Signature

Risk Manager  
Title

8-5-10  
Date



**DEPARTMENT OF LABOR, LICENSING AND REGULATION**

Division of Labor and Industry,  
Maryland Occupational Safety and Health



**Inspection Report**

Thu Oct 21, 2010 5:04PM

Rpt ID	Assignment Nr.	CSHO ID	Supervisor ID	Inspection Nr.	Opt. Insp. Nr.
0352420	903171247	C9954	V8744	314408394	01910

Establishment Name		Motor Vehicle Administration			
Site Address	6601 Ritchie Highway, N.E. Glen Burnie, MD 21062	Site Phone	(410) 768-7069	Site Fax	(410) 424-3068
		Other			
Mailing Address	6601 Ritchie Highway, N.E. Glen Burnie, MD 21062	Mail Phone	(410) 768-7069	Mail Fax	(410) 424-3068
		Other			
Controlling Corp	State of Maryland	Employer ID			
Ownership	C. State Government	City	0673	County	003
Legal Entity		Previous Activity (State Only)			

Related Activity					
Type	Number	Satisfied	Type	Number	Satisfied
R. Referral	202808523	Health			

Employed in Establishment	850	Advance Notice?	No	Category	H. Health
Covered By Inspection	2	Union?	No		
Controlled By Employer	60000	Walkaround?	No	Interviewed?	Yes

SIC Inspected		Primary SIC	9621	Secondary SIC	
NAICS Inspected		Primary NAICS	926120	Secondary NAICS	

Inspection Type	C. Referral	Reason No Inspection	
Scope of Inspection	B. Partial Inspection		
Classification			
National Emphasis			
Local Emphasis			
Strategic Initiatives			

Anticipatory Warrant Served?	No	Denial Date	Date ReEntered	Date ReDenied	ReEntered
Anticipatory Subpoena Served?	No				

Entry	08/05/2010	10:45 AM	First Closing Conference	10/01/2010	09:00 AM
Opening Conference	08/05/2010	11:15 AM	Second Closing Conference		
Walkaround	08/05/2010	12:00 PM	Exit	10/01/2010	10:30 AM
Days On Site	3		Case Closed	10/21/2010	
			No Citations Issued		

Type	ID	Optional Information

CSHO Signature		Date	10-21-10
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# Inspection Narrative

Thu Oct 21, 2010 5:04PM

Inspection Nr.	314408394
Opt. Case Number	01910

Establishment Name	Motor Vehicle Administration		
Legal Entity	State Government	Type of Business	Transportation Agency

Additional Citation Mailing Addresses	

Organized Employee Groups	
AFSCME Maryland Local 3655 190 West Oyster St Baltimore MD 21230	

Union Representatives	
Mark Liberto 1418 Flatwood Court Crofton, MD 21114	

Authorized Employee Representatives	

Employer Representatives Contacted						
Name	Title	Credentials Presented	Closing Conference	Opening Conference	Other Management Duties	Walk Around?
Bob Saunders	Risk Manager	Yes	Yes	Yes		Yes
Ron Dove	Environmental Compliance Manager	Yes	Yes	Yes		Yes

Employees Interviewed	
Mark Liberto 1418 Flatwood Ct. Crofton, MD 21114	

Other Persons Contacted	

Entry	08/05/2010	10:45 AM	First Closing Conference	10/01/2010	09:00 AM
Opening Conference	08/05/2010	11:15 AM	Second Closing Conference		
Walkaround	08/05/2010	12:00 PM	Exit	10/01/2010	10:30 AM
			Case Closed	10/21/2010	

Followup Inspection?	NO	Reason	In Compliance
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Coverage Information/Additional Comments

**SAFETY NARRATIVE**

Inspection Number	314408394
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**COVERAGE INFORMATION:**

The Maryland Motor Vehicle Administration (MVA) is a department within the State of Maryland Department of Transportation (MDOT) agency that administers vehicle and driver services such as vehicle title and registration, and drivers licensing and identification. The MVA employs approximately 1800 people at locations in every county throughout the state.

**NATURE AND SCOPE**

Check Applicable Boxes and Explain Findings:

- Complaint Items
- Referral Items
- Accident Investigation Summary & Findings
- LEP
- Planned Inspection
- Follow-up Inspection

**NATURE AND SCOPE -- UNUSUAL CIRCUMSTANCES**(Mark X and explain all that apply:)

- None



- Denial of entry (see denial memo)
- Delays in conducting the inspection
- Strikes
- Jurisdictional Issues
- Trade Secrets
- Other

Comments:

**OPENING CONFERENCE NOTES:**

All aspects of the opening conference were discussed with no objections noted.

**PENALTY ADJUSTMENT CALCULATION**

**1. HISTORY ADJUSTMENT:**

Place "x" in correct box

- A. Initial inspection/no previous employer history/previous inspections in compliance or only OTS violations cited..... 

-	0
---	---
- B. Previous inspection not in compliance with serious hazards, cited more than 36 months from this inspection (issuance to closing)..... 

X	5
---	---
- C. All other scenarios of noncompliant activity..... 

-	0
---	---

**2. SIZE ADJUSTMENT:**

- 1- 25 employees..... 

-	0
---	---
- 26-100 employees..... 

-	0
---	---
- 101-250 employees..... 

-	0
---	---
- 251 or more employees..... 

X	0
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**3. GOOD FAITH CALCULATIONS:**

**A. Safety and Health Program and Training Program.**

Does the employer have a formal safety and health program and training program that:

Y= Yes N= No

- 1. Is in writing?..... 

Y	0
---	---
- 2. Provides for management commitment and employee involvement?..... 

Y	0
---	---
- 3. Provides for worksite analysis and hazard identification?..... 

Y	0
---	---
- 4. Provides for hazard prevention and control?..... 

Y	0
---	---
- 5. Provides appropriate training/instructions for hazards of work being done?..... 

Y	0
---	---
- 6. Has deficiencies that are only incidental?..... 

Y	0
---	---
- B. **Employer's Injury and Illness Experience.** Has the employer experienced any injuries or illnesses?..... 

N	0
---	---
- C. **Supervision, Employer Concern and Knowledge.** Did the employer demonstrate an appropriate level of supervision, concern and knowledge about safety and health requirements?..... 

Y	0
---	---
- D. **Increased Awareness of Violation.** Is there any indication that the employer acted voluntarily with either intentional disregard of the standard or plain indifference to its safety obligations?..... 

N	0
---	---
- E. **Abatement.** Did the employer abate or mitigate most of the alleged violations..... 

Y	0
---	---

TOTAL	0
Good Faith	25%

**CLOSING CONFERENCE NOTES:**

Were any unusual circumstances encountered such as, but not limited to, abatement problems, expected contest and/or negative employer attitude? If yes, explain below.

Yes  No

**19. Closing Conference Checklist ("x" as appropriate)**

- No Violations Observed
- Gave Copy Employer Rights
- Reviewed Hazards & Standards
- Discuss Employer Rights/Obligations
- Encouraged Informal Conference
- Offered Abatement Assistance
- Discussed Consultation Programs

**Closing Conference Held with Employee Representative**

Jointly  Separately

**Introduction**

A MOSH limited scope inspection was initiated on 08/05/10 by Ms. Cristina Campbell, MOSH Industrial Hygienist as a result of a referral by Maryland Department of Environment regarding possible exposure to mercury from crushing of fluorescent lightbulbs while operating a drum crusher. The inspection was conducted at MVA Headquarters which is located at 6601 Ritchie Highway in Glen Burnie, Maryland.

**Opening Conference**

An opening conference was conducted on 08/05/10 at 11:15 a.m. by Ms. Campbell with *Mr. Mark Liberto, Union Rep,* Mr. Bob Saunders, Risk Manager, and Mr. Ron Dove, Environmental Compliance Manager. The purpose, scope, and nature of the inspection were discussed and the employer's rights and responsibilities were explained. The employer was given copies of the Maryland Occupational Safety and Health Act and Regulations.

**Walkaround Inspection**

A walkaround inspection was conducted on 08/05/10 at 12:00 p.m. by Ms. Campbell with Mr. Saunders and Mr. Dove. The Aircycle Bulb Eater® is a lamp crushing machine that processes spent fluorescent lamps into small, fragmented pieces. The machine, which contains an entry tube, spinner assembly, and filters is designed to fit onto an empty 55-gallon drum where intact bulbs are fed into the machine and the crushed pieces are collected inside the drum. One 55 gallon drum can hold anywhere from 300 to 1,350 bulbs depending on the diameter and length of the lamps. Literature from Aircycle alleges that the Bulb Eater® can crush "fluorescent lamps of any length into 100% recyclable material while capturing over 99.99% of the vapors released". The unit is equipped with first and second stage high efficiency particulate (HEPA) filters which filter out dust particulates, and a third stage activated carbon filter formulated with sulfur which filters out mercury vapor and neutralizes it to mercuric sulfide. The operator turns the unit on and feeds lamps into an entry tube where they are pulled into the unit by vacuum suction and crushed into small pieces. It takes approximately 1-2 seconds to crush one lamp. Once the bulbs are crushed and the operator presses the STOP button, the crusher motor stops and the vacuum continues to purge for an additional 30 seconds to remove any particulates and vapor. Clean air is exhausted out through a tube on the top of the unit. The Bulb Eater® operating procedures state that the first stage filter must be changed at least twice per drum, and the second stage filter be changed at least once every ten drums. The carbon filter will last the life of the machine. Filters are to be sealed and placed inside the full drum. The spinner assembly should be changed every 10 full drums of lamps or as needed. Different size entry tubes for feeding the bulbs in the crusher are available for purchase, and use of the correct size tube helps to maintain the integrity of the lamp throughout the crushing process and minimize external breakage. The machine housing is equipped with a safety shut off which prevents the operation of the machine if it is not installed on a drum. An Aircycle Bulb Eater®, Model 55VRS-U Premium, is used onsite in the maintenance building at MVA Headquarters to crush spent lamps collected from all MVA locations. According to Mr. Dove, the bulbs are stored in the maintenance building until several boxes (60-70 bulbs) of bulbs have accumulated at which time one of two employees will feed bulbs into the crusher. Employees operate the drum crusher up to two times per month for approximately 15 to 20 minutes at one time. Once the drum is full, employees let the drum sit at least overnight and then change the drum by loosening the ring that seals the machine to the drum, lifting the machine off of the full drum, replacing the filter(s), placing onto an empty drum, and replacing and tightening the sealing ring. A lid is then placed and sealed onto the full drum, and the drum is transported by an outside contractor to another facility for disposal. According to Mr. Dove, clean, empty drums are supplied by the same outside contractor. Mr. Saunders stated that the drum crusher had been in operation at the site for approximately two years and that the drum is changed out approximately every six to eight months. Mr. Dove stated that when employees break a bulb or receive broken bulbs, they are to use a broom and dustpan to sweep the remains and place into the drum crusher. Mr. Dove stated that employees are provided and required to wear safety glasses and PVC-coated gloves when handling bulbs or operating the crusher. Employees are also provided 3M 6300 Series half-facepiece, elastomeric respirators with mercury vapor cartridges for voluntary use.

### Sampling

Direct readings were taken on 08/05/10 and 08/24/10 using a Jerome 431X Mercury Vapor Analyzer. Readings were taken in and around employee breathing zones, and in areas immediately adjacent to the drum crusher while in operation on 08/05/10, and while maintenance was being performed on 08/24/10. The permissible exposure limit for mercury vapor is 0.1 mg/m<sup>3</sup> as an 8-hour time weighted average (TWA). Personal air sampling was not performed due to the short amount of time (less than 15 minutes on both occasions) employees were operating or maintaining the drum crusher. See sampling results below.

Mercury Direct Readings - 08/05/10  
Operation

Time	Reading (milligrams per cubic meter)	Task
12:10 p.m.	0.000 mg/m <sup>3</sup>	next to the drum crusher while operating
12:12 p.m.	0.000 mg/m <sup>3</sup>	at employee breathing zone while crushing bulb
12:13 p.m.	0.000 mg/m <sup>3</sup>	at employee breathing zone while crushing bulb
12:14 p.m.	0.000 mg/m <sup>3</sup>	at employee breathing zone while crushing bulb
12:18 p.m.	0.000 mg/m <sup>3</sup>	next to drum crusher while purging

**Mercury Direct Readings - 08/24/10  
 Maintenance**

Time	Reading (milligrams per cubic meter)	Task
9:20 a.m.	0.000 mg/m <sup>3</sup>	at employee breathing zone before removing drum crusher lid
9:23 a.m.	0.000 mg/m <sup>3</sup>	at employee breathing zone while removing lid drum crusher lid
9:24 a.m.	0.559 mg/m <sup>3</sup>	at employee breathing zone while replacing drum; drum open for < 5 minutes
9:27 a.m.	0.000 mg/m <sup>3</sup>	at employee breathing zone while seating lid onto full drum
9:31 a.m.	0.007 mg/m <sup>3</sup>	at employee breathing zone while changing 1 <sup>st</sup> stage filter

**Employee Interviews**


Employees interviewed stated that they always wear safety glasses, PVC-coated gloves, and half-facepiece elastomeric respirator with mercury cartridges while operating the drum crusher and while performing maintenance such as changing filters and drums. Employees indicated that they had received training from their supervisor and had watched a training video regarding the use, operation, care, and maintenance of the drum crusher. Employees were aware that fluorescent lamps can contain mercury, and were familiar with good work practices and PPE to prevent exposure to mercury.

**Records Review**

The employer maintained OSHA 300 logs and summaries. The employer stated that they had maintained and implemented a written hazard communication program and written respiratory protection for voluntary use. This IH noted a log hanging in the bulb crushing area where employees had recorded the dates each of filters in the drum had been changed.

**Closing Conference**

A closing conference was conducted on 10/01/2010 at 9:00 a.m. by this IH with Mr. Dove and Mr. Saunders. The referral items and inspection findings were reviewed, no citations were recommended. The employer was provided a copy of the MOSH Closing Conference Guide. No objections or unusual circumstances were noted.

<b>CSHO Signature</b>		<b>Date</b>	10-21-10
<b>Accompanied By</b>			



**Photo Mount Worksheet**

Inspection Number: 314408394	OSHCO ID: C9954	Report Number: 019-10	Date: 10/20/2010
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Employer: Maryland Motor Vehicle Administration	Page 1 of 4
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Photo ID #: 1	Date: 08/05/10
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Location (Photo & Photographer):  
Maintenance Building

**Description:**

The Aircycle Bulb Eater® fits onto an empty 55-gallon drum where intact bulbs are fed into the machine and the crushed pieces are collected inside the drum.



Photo ID #: 2	Date: 08/05/10
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Location (Photo & Photographer):  
Maintenance Building

**Description:**

Several different size entry tubes for feeding the bulbs in the crusher were available for use onsite. Use of the correct size tube helps to maintain the integrity of the lamp throughout the crushing process and minimize external breakage.

**Photo Mount Worksheet**

Inspection Number: 314408394	OSHCO ID: C9954	Report Number: 019-10	Date: 10/20/2010
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Employer: Maryland Motor Vehicle Administration	Page 2 of 4
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Photo ID #: 3	Date: 08/05/10
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Location (Photo & Photographer):  
Maintenance Building

Description:  
Employees voluntarily wore at 3M 6300 Series half-facepiece respirator with mercury vapor cartridges.



Photo ID #: 4	Date: 08/05/10
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Location (Photo & Photographer):  
Maintenance Building

Description:  
Employees wore safety glasses and PVC-coated gloves when handling fluorescent bulbs or performing maintenance on the bulb crusher.



STATE OF MARYLAND  
 DEPARTMENT OF LABOR, LICENSING, AND REGULATION  
 DIVISION OF LABOR AND INDUSTRY  
 OCCUPATIONAL SAFETY AND HEALTH

**Photo Mount Worksheet**

Inspection Number: 314408394	OSHCO ID: C9954	Report Number: 019-10	Date: 10/20/2010
Employer: Maryland Motor Vehicle Administration		Page 3 of 4	
		Photo ID #: 5	Date 08/05/10
		Location (Photo & Photographer): Maintenance Building	
		Description:  Employees feed bulbs into the crusher via an entry tube. Vacuum suction pulls the bulb into the crusher where the spinner assembly fragments it into small pieces.	
		Photo ID #: 6	Date: 08/05/10
		Location (Photo & Photographer): Maintenance Building	
		Description:  A long entry tube just wider than the bulb helps prevent the bulbs from breaking before they reach the inside of the crusher. The machine housing is equipped with a safety shut off which prevents the operation of the machine if it is not installed on a drum.	

**Photo Mount Worksheet**

Inspection Number: 314408394	OSHCO ID: C9954	Report Number: 019-10	Date: 10/20/2010
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Employer: Maryland Motor Vehicle Administration	Page 4 of 4
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Photo ID #: 7	Date: 08/24/10
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Location (Photo & Photographer):  
Maintenance Building

**Description:**

When the drum becomes full employees let the drum sit at least overnight and then change the drum by loosening the ring that seals the machine to the drum, lifting the machine off of the full drum, replacing the filter(s), placing onto an empty drum, and replacing and tightening the sealing ring. A lid is then placed and sealed onto the full drum, and the drum is transported by an outside contractor to another facility for disposal.



Photo ID #: 8	Date: 08/24/10
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Location (Photo & Photographer):  
Maintenance Building

**Description:**

Employees seal the filter, remove it from the filter housing, place into a sealable bag, and then place the bag inside the full drum for disposal.



# UNPROGRAMMED INSPECTION

## E-Mail Verification Receipt

TO: Regional Supervisor, Bel Air Office  
 cc: Regional Secretary  
 FROM: Keith B. Owens, Supervisor  
 DATE E-Mailed: August 9, 2010

Complaint      Referral            Accident      Fatality

Log Number: 4937  
 Assignment Number: 903171247

EMPLOYER: State of MD Motor Vehicle Administration

Note: Once you have received this form via facsimile please E-Mail it within 24 hours to [owens.keith@dol.gov](mailto:owens.keith@dol.gov) and include the case number and the date assigned to the compliance officer. Thank you.

SIC 9621

Case Number: C9954-019-10

Inspection Number: 314 408 394

Date Assigned: 8/5/10

KBO/gp <sup>opened:</sup> 8/5/10

8/9/10 [Signature]

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