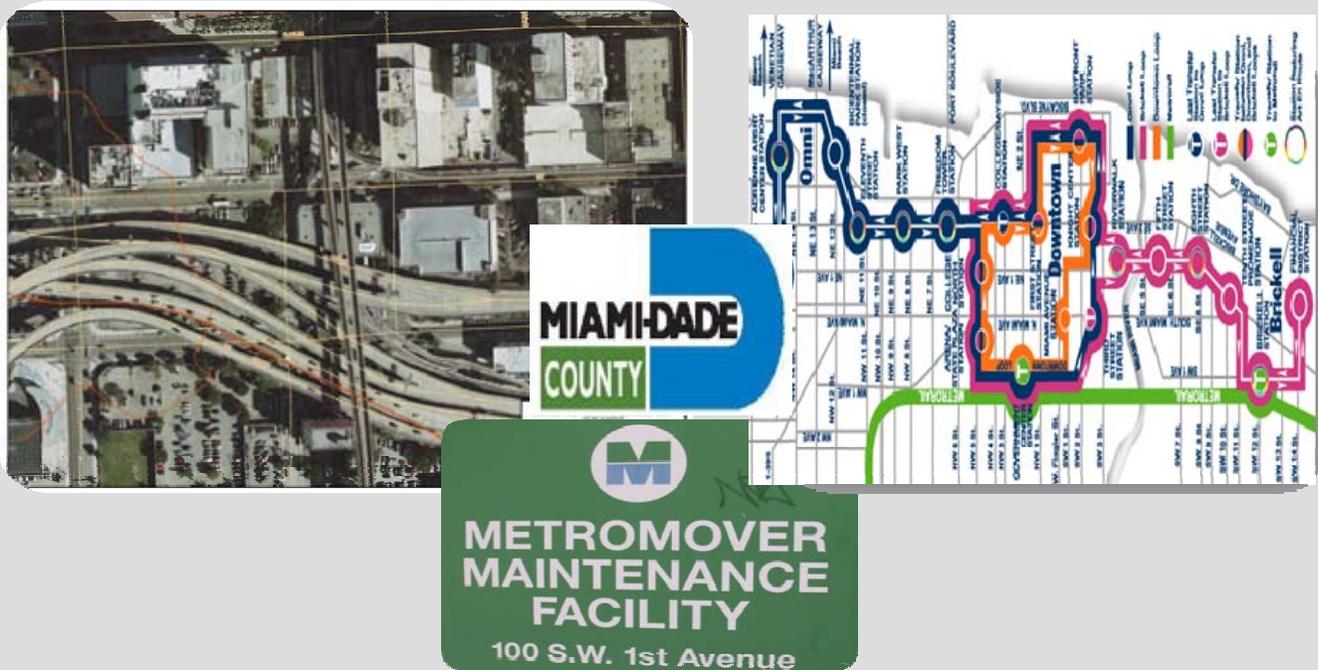


# Environmental Management System Manual

## Miami-Dade Transit Metromover Maintenance Facility



**FEBRUARY 2010**



CHEROKEE ENTERPRISES, INC.

# **Miami-Dade Transit Metromover Maintenance Facility**

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## **Environmental Management System Manual**

**February 2010**

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- Attachment Q** Management Review Procedure, Attendance Sign-in Sheet, and Annual Evaluation Form

## **1. ENVIRONMENTAL MANAGEMENT SYSTEM SCOPE AND PURPOSE**

The Miami-Dade Transit (MDT) Environmental Management System (EMS) documentation is written and implemented to meet the requirements of ISO 14001:2004. The purpose of this manual and the associated procedures is to describe the manner in which MDT successfully operates and maintains a reputation for environmental excellence. This EMS Manual is organized in four sections:

- Section 1 - Purpose of the EMS Manual and its objective including the Policy governing MDT's EMS.
- Section 2 – Description of the facility's funding, oversight and workforce, and operations.
- Section 3 – Policies and procedures developed and implemented for the facility related to the EMS.

## **2. FACILITY DESCRIPTION**

The Miami-Dade Transit (MDT) is the 14<sup>th</sup> largest public transit system in the United States and the largest one in the State of Florida. MDT delivers transit services to the public through the following four transportation modes: Metrobus; Metrorail; Metromover; and, Paratransit.

### **2.1 Funding**

MDT's operational funding comes from the local municipalities and/or counties, and the federal government. In November 2002, voters approved a one-half percent increase in the sales tax to fund major transportation improvements defined in the People's Transportation Plan (PTP). MDT receives approximately 16% of the operating cost from passengers as fares paid for service.

### **2.2 Oversight and Workforce**

MDT's organizational structure is comprised of the Director, a Deputy Director, and eight additional positions responsible for leading distinct functional areas. There are a total of 3,031 budgeted positions in the Department for fiscal year 2008-2009.

### **2.3 Operations**

Metrobus provides bus service throughout Miami-Dade County and some parts of Monroe and Broward Counties, on I-95 routes. The total fleet size of Metrobus is 893 buses. Metrail is a 22.6-mile elevated double-track heavy rail system with 136 vehicles, 22 stations, and 185 daily trips. Metromover is a fully automated people mover transportation system consisting of 4.4 miles of elevated dual-lane track guideway with 21 stations and one maintenance facility. It provides services to a variety of government, businesses, entertainment, and cultural centers in the Central Downtown, Omni and Brickel Areas. Paratransit is comprised of the Special Transportation Services (STS) program, providing approximately 135,000 trips on a monthly basis. Annual ridership on all modes of MDT transportation is projected to be 114 million.

In addition, the MDT has three Metrobus repair facilities. These include the Northeast, Central, Coral Way bus maintenance facilities. For these facilities to function efficiently, different operations and processes occur at the site including vehicular fueling (diesel and unleaded gasoline storage), and maintenance operations (waste oil, oily rag, used filter, and new oil storage). These bus maintenance facilities have several buildings and structures, including the Bus Wash, Steam Cleaning Building, Fuel and Cleaning Islands, Maintenance Building, the Transportation Building, and Guard House/Fare Collection.

The William Lehman Center (WLC) serves as MDT's Metrorail repair yard. For the facility to function efficiently, different operations and processes occur at the site including vehicular fueling (diesel and unleaded gasoline storage), and maintenance operations (waste oil, oily rag, used filter, and new oil storage). The WLC has several buildings and structures, including the Vehicular Fueling Island, Maintenance Building, Warehouse Building, a warehouse and light railcar maintenance building (neither are in-service buildings), a train wash booth, a fire pump station, and an electrical substation.

Finally, the Metromover Facility (MMF) serves as MDT's Metromover repair facility. For the facility to function efficiently, different operations and processes occur at the site including maintenance operations (waste oil, oily rag, used aerosol, and new oil storage). The MMF has one bi-level building and two parking lots.

MDT has been committed to achieving its environmental goals by utilizing sound environmental management practices and the organization views the implementation of the ISO 14001 as a way to reinforce its commitment for environmental stewardship and implementing pollution prevention programs and continually improving environmental performance to minimize environmental issues. In addition, the implementation of the ISO 14001 will reinforce MDT's current environmental practices as it starts on a major expansion of metrorail corridor from Earlington Heights Metrorail to the Miami Intermodal Center.

The MDT Metro Mover Facility (MMF) is situated under several rail and highway overpasses in downtown Miami, Florida. Facility terrain is relatively level and the entire facility encompasses approximately 1.04 acres (property records list the building with a 0.376-acre footprint). The facility is located at 25°46'23.35" degrees north latitude and 80°11'46.57" degrees west longitude.

The surrounding land use, within a one-mile radius, is a mix of commercial and residential properties. The MMF is situated on oolitic limestone in the Miami Oolite formation and the U.S. Fish and Wildlife Service classify its land use as “uplands”, i.e., neither wetlands nor deepwater habitat. According to topographic data, the facility is on flat terrain, about 10 feet above sea level, with area drainage assumedly having an overall bias to the south, to the Miami River. However, four storm water drainage inlets are located in the facility’s parking lots, and they provide drainage for the majority of the facility (excluding the exterior of the building). The MMF has one bi-level building and two parking lots. Petroleum products are stored aboveground inside the loading dock, the lower-level corridor, and the upper level maintenance area. The two parking lots occupy the majority of the facility’s remaining area, with some concrete walkways, compacted gravels, grass, and low-lying vegetation in between. The perimeter of the facility is surrounded by fencing and locked gates, with two open vehicle entrances.



### 3. ENVIRONMENTAL MANAGEMENT SYSTEM OUTLINE AND ADMINISTRATION

#### 3.1 Principles

The EMS Model is based on the following Principles, which come from the ISO standard and are referenced by section.

Principle 1: Commitment and Policy (Refer to section 4.2):

**An organization should define its policy and ensure commitment to its EMS.**

Principle 2: Planning (Refer to section 4.3):

**An organization should plan to fulfill its environmental policy.**

Principle 3: Implementation and Operation (Refer to section 4.4):

**An organization should develop the capabilities and support mechanisms to achieve its policy, objectives and targets.**

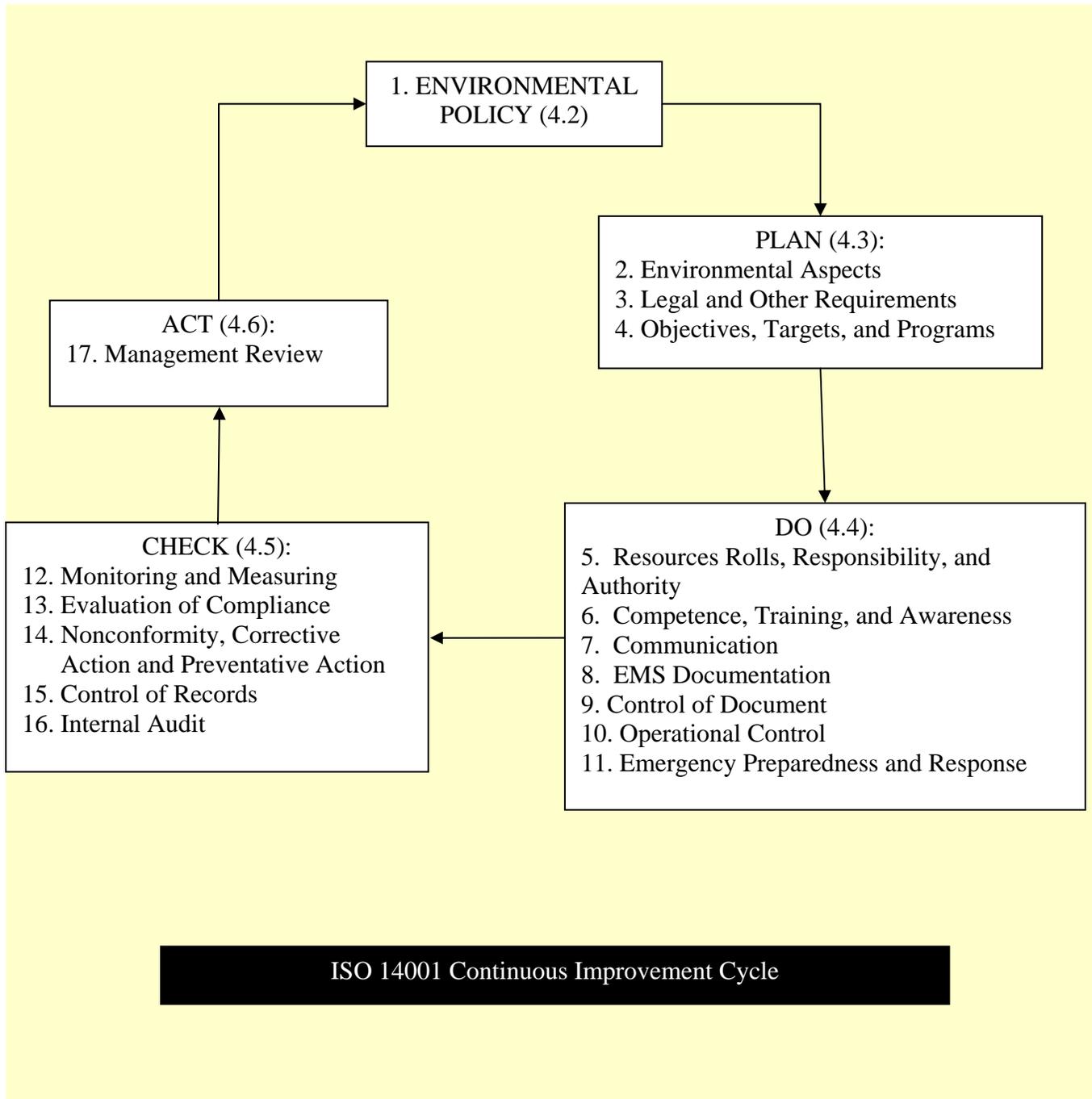
Principle 4: Measurement and Evaluation (Refer to section 4.5):

**An organization should measure, monitor and evaluate its environmental performance.**

Principle 5: Review and Improvement (Refer to section 4.6):

**An organization should review and continually improve its environmental management system with the objective of improving its overall performance.**

The following diagram illustrates the process involved in the EMS Continuous Improvement Cycle.



### **3.2 EMS Documents**

An EMS is based on a clear and concise statement of MDT's intentions as documented in the Corporate Environmental Policy.

The required systems are procedures referenced in this EMS Manual. These documents address specific requirements of ISO 14004:2004 as listed below.

- Environmental Policy (Section 4.2)
- Environmental Aspects (Section 4.3.1)
- Legal and Other Requirements (Section 4.3.2)
- Objectives, Targets and Programs (Section 4.3.3)
- Resources, Roles, Responsibilities and Authority (Section 4.4.1)
- Competence, Training and Awareness (Section 4.4.2)
- Communication (Section 4.4.3)
- Documentation (Section 4.4.4)
- Control of Documents (Section 4.4.5)
- Operational Controls (Section 4.4.6)
- Emergency Preparedness and Responses (Section 4.4.7)
- Monitoring and Measurements (Section 4.5.1)
- Evaluation of Compliance (Section 4.5.2)
- Nonconformity, Corrective Action and Preventative Action (4.5.3)
- Control of Records (Section 4.5.4)
- Internal Audit (Section 4.5.5)
- Management Review (Section 4.6)

As required in the standard, a procedure has been prepared to address how MDT will meet each of these requirements. Documentation is approved, issued, and controlled as detailed in our Control of Document Procedure as outlined in section 4.4.5.

## 4. ENVIRONMENTAL MANAGMENT SYSTEM

### 4.1 General requirements

MDT establishes, documents, implements and maintains an EMS and continually improves its effectiveness in accordance with the requirements of ISO 14004:2004.

MDT continuously improves its EMS by:

- Reviewing the organization's environmental goals
- Analyzing environmental impacts and legal requirements
- Setting environmental objectives and targets
- Establishing programs to meet objectives and targets
- Monitoring and measuring progress in achieving objectives and targets
- Ensuring employees' environmental awareness and competence
- Reviewing progress of the EMS and making continuous improvement

### 4.2 Environmental Policy

MDT has developed and approved an Environmental Policy (4.2-1) that is within the defined scope of its environmental management system. The policy:

1. Is appropriate to the nature, scale and environmental impacts of its activities, products and services;
2. Includes a commitment to continual improvement and prevention of pollution;
3. Includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects;
4. Provides the framework for setting and reviewing environmental objectives and targets;
5. Is documented, implemented and maintained;
6. Is communicated to all persons working for or on behalf of the organization; and,
7. Is available to the public.

Refer to **Attachment A** for a copy of MDT's Environmental Policy and Procedure.

## 4.3 Planning

### 4.3.1. Environmental aspects

MDT has established, implemented and maintains a procedure (EP 4.3.1-1):

- (a) to identify the environmental aspects of its activities, products and services within the defined scope of the environmental management system that MDT can control and those that it can influence, taking into account planned or new developments, or new or modified activities, products and services, and
- (b) to determine those aspects that have or can have significant environmental impact(s).

This information is documented and will be kept up to date. Significant environmental aspects are taken into account in establishing, implementing and maintaining the environmental management system.

Refer to **Attachment B** for a copy of MDT's Environmental Aspect Procedure, Aspect Evaluation Workbook, and Aspect Criteria Definitions.

### 4.3.2. Legal and other requirements

MDT has established, implemented and maintains a procedure (EP 4.3.2-1):

- (a) to identify and have access to the applicable legal requirements and other requirements to which the organization subscribes related to its environmental aspects, and
- (b) to determine how these requirements apply to its environmental aspects.

The procedure ensures that these applicable legal requirements and other requirements to which the organization subscribes are taken into account in establishing, implementing and maintaining the environmental management system.

Refer to **Attachment C** for a copy of MDT's Legal and Other Requirements Procedure and Matrix.

#### **4.3.3. Objectives, targets and programs**

MDT has established, implemented and maintains documented environmental objectives and targets at relevant functions and levels within the organization (EP 4.3.3-1). The objectives and targets are measurable and consistent with the environmental policy, including the commitments to prevention of pollution, and to continual improvement. MDT takes into account the legal requirements and other requirements to which the organization subscribes, and its significant environmental aspects. MDT also considers its technological options, its financial, operational and business requirements, and the views of interested parties.

MDT establishes, implements and maintains a program for achieving its objectives and targets. The objective and target action plans will be periodically reviewed to ensure that MDT is progressing towards meeting its objectives, targets, and programs.

Refer to **Attachment D** for a copy of MDT's Objectives, Targets, and Programs Procedure, and Action Plan.

### **4.4 Implementation and Operation**

#### **4.4.1. Resources, roles, responsibility and authority**

MDT's management ensures the availability of resources essential to establish, implement, maintain and improve the environmental management system. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources. Roles, responsibilities and

authorities are defined, documented and communicated in order to facilitate effective environmental management. (Refer to EP 4.4.1-1.)

MDT's top management has appointed the Manager of Safety and Environmental Protection to have defined roles, responsibilities and authority for:

- (a) ensuring that an Environmental Management System is established, implemented and maintained in accordance with the requirements of this International Standard; and
- (b) reporting to top management on the performance of the Environmental Management System, including recommendations for improvement.

Refer to **Attachment E** for a copy of MDT's Resources, Roles, Responsibility, and Authority Procedure and Matrix.

#### **4.4.2. Competence, training and awareness**

MDT has evaluated the people performing tasks for it or on its behalf who have the potential to cause significant environmental impacts. These people are competent on the basis of appropriate education, training or experience. MDT retains associated records primarily in the Training department's database. Where appropriate, some training documents may be maintained in the local area where the employee works or in the Human Resources department.

MDT has identified training needs associated with its environmental aspects and its environmental management system. MDT provides training or takes other action to meet these needs, and retains associated records. MDT has established, implemented and maintains procedures (refer to EP 4.4.2-1) to make people working for it or on its behalf aware of:

- (a) the importance of conformity with the environmental policy and procedures and with the requirements of the environmental management system;

- (b) the significant environmental aspects and related actual or potential impacts associated with their work, and the environmental benefits gained by using the EMS;
- (c) their roles and responsibilities in achieving conformity with the requirements of the environmental management system; and
- (d) the potential consequences of departure from specified procedures.

Refer to **Attachment F** for a copy of MDT's Competence, Training, and Awareness Procedure, and Training Plan.

#### **4.4.3. Communication**

With regard to its environmental aspects and EMS, MDT has established, implemented and maintains procedures (EP 4.4.3-1) for:

- (a) internal communication among the various levels and functions of the organization; and
- (b) receiving, documenting and responding to relevant communication from external interested parties.

Refer to **Attachment G** for a copy of MDT's Communication Procedure, and Communication Occurrence Template.

#### **4.4.4. Documentation**

The EMS documentation (refer to EP 4.4.4-1) includes:

- (a) the environmental policy, objectives and targets;
- (b) a description of the scope of the environmental management system;
- (c) a description of the main elements of the EMS, their interactions, and a list of related reference documents;
- (d) documents, including records, required by this International Standard; and
- (e) documents, including records, determined by MDT to be necessary to ensure the effective planning, operation and control of processes that relate to its significant environmental aspects.

Refer to **Attachment H** for a copy of MDT's Documentation Procedure and Related Definitions.

#### **4.4.5. Control of documents**

Documents required by the environmental management system and by this International Standard are controlled (refer to EP 4.4.5-1). Records are a special type of document and are controlled in accordance with the requirements given in section 4.5.4.

MDT has established, implemented and maintains procedures to:

- (a) approve documents for adequacy prior to issue;
- (b) review, update as necessary and re-approve documents;
- (c) ensure that changes and the current revision status of documents are identified;
- (d) ensure that relevant versions of applicable documents are available at points of use;
- (e) ensure that documents remain legible and readily identifiable;
- (f) ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the environmental management system are identified and their distribution controlled; and
- (g) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose.

Refer to **Attachment I** for a copy of MDT's Control of Documents Procedure and Master Document Matrix.

#### **4.4.6. Operational control**

MDT identifies and plans those operations that are associated with the identified significant environmental aspects consistent with its environmental policy,

objectives and targets (refer to EP 4.4.6-1). MDT will ensure that they are carried out under specified conditions, by:

- (a) establishing, implementing and maintaining documented Standard Operating Procedures (SOPs) to control situations where their absence could lead to deviation from the environmental policy, objectives and targets;
- (b) stipulating the operating criteria in the procedures; and
- (c) establishing, implementing and maintaining SOPs related to the identified significant environmental aspects of goods and services used by the organization and communicating applicable procedures and requirements to suppliers, including contractors.

Refer to **Attachment J** for a copy of MDT's Operational Control and Contractor Management Procedures, Work Instructions Tracking Sheet, and Work Instructions for Aspects.

#### **4.4.7. Emergency preparedness and response**

MDT has established, implemented and maintains an Emergency and Disaster Preparedness policy (MDT Corporate Emergency Plan) that directs the MDT Emergency Operations Plan to identify how MDT will respond to prevent or mitigate associated adverse environmental impacts during potential emergency situations and potential accidents (refer to EP 4.4.7-1).

The Emergency Operations Plan is periodically reviewed and updated where necessary, in particular after the occurrence of accidents or emergency situations. Periodic exercises are conducted to test the elements of the Emergency Operations Plan.

Refer to **Attachment K** for a copy of MDT's Emergency Preparedness and Response Procedure, Plan Review, Best Management Practices, and Inspection Checklist.

## 4.5 Checking

### 4.5.1. Monitoring and measurement

MDT has established, implemented and maintains procedures to monitor and measure, on a regular basis, the key characteristics of its operations that can have a significant environmental impact (refer to EP 4.5.1-1). The procedures include the documenting of information to monitor performance, applicable operational controls and conformity with the organization's environmental objectives and targets.

Equipment requiring calibration is calibrated, and equipment with factory set calibration is verified. Monitoring and measurement equipment is used and maintained. Records of calibration and monitoring are kept.

Refer to **Attachment L** for a copy of MDT's Monitoring and Measurement Procedure and Objectives & Targets & Programs.

### 4.5.2. Evaluation of compliance

Consistent with its commitment to compliance, MDT has established, implemented and maintains procedures for periodically evaluating compliance with applicable legal requirements (refer to EP 4.5.2-1). Records of the results of the periodic evaluations are kept. MDT also evaluates compliance with other requirements to which it subscribes.

Refer to **Attachment M** for a copy of MDT's Evaluation of Compliance Procedure and Self-Audit Environmental Compliance Evaluation Checklist/Report.

#### **4.5.3. Nonconformity, corrective action and preventive action**

MDT has established, implemented and maintains procedures for dealing with actual and potential nonconformity and for taking corrective action and preventive action (refer to EP 4.5.3-1). The procedures define requirements for:

- (a) identifying and correcting nonconformities and taking action to mitigate their environmental impacts;
- (b) investigating nonconformities, determining their causes and taking actions in order to avoid their recurrence,
- (c) evaluating the need for action to prevent nonconformities and implementing appropriate actions designed to avoid their occurrence;
- (d) recording the results of corrective actions and preventive actions taken; and
- (e) reviewing the effectiveness of corrective actions and preventive actions taken.

Actions taken will be appropriate to the magnitude of the problems and the environmental impacts encountered. Necessary changes will be made to environmental management system documentation.

Refer to **Attachment N** for a copy of MDT's Nonconformity, Corrective Action, and Preventive Action Procedure, Corrective Action Request Form, Corrective Action Log, and Preventive Action Proposal.

#### **4.5.4. Control of records**

MDT will establish and maintain records as necessary to demonstrate conformity to the requirements of its EMS and of this International Standard, and the results achieved.

MDT has established, implemented and maintains procedures (refer to EP 4.5.4-1) for the identification, storage, protection, retrieval, retention and disposal of records. Records shall be legible, identifiable and traceable.

Refer to **Attachment O** for a copy of MDT's Control of Records Procedure and Matrix.

#### **4.5.5. Internal audit**

MDT will conduct internal audits of the EMS at planned intervals to accomplish the following.

- (a) Determine whether the environmental management system:
  - (i) conforms to planned arrangements for environmental management, including the requirements of this International Standard;
  - (ii) has been properly implemented and is maintained.
- (b) Provide information on the results of audits to management.

Audit programs are planned, established, implemented and maintained by MDT, taking into consideration the environmental importance of the operations concerned and the results of previous audits.

Audit procedures are established, implemented and maintained (refer to EP 4.5.5-1) which:

- address the responsibilities and requirements for planning and conducting audits, reporting results and retaining associated records; and,
- determine the audit criteria, scope, frequency and methods.

Selection of auditors and the conducting of audits are designed to ensure objectivity and impartiality of the audit process. Auditors are not allowed to audit their own facilities or operations.

Refer to **Attachment P** for a copy of MDT's Internal Audit Procedure, Checklist/Report, and Notification and Schedule.

#### **4.6 Management review**

Top management reviews MDT's EMS approximately twice per year in the General Manager's Safety Committee, to ensure its continuing suitability, adequacy and effectiveness. Reviews include assessing opportunities for improvement and the need for changes to the environmental management system, including the environmental policy and environmental objectives and targets (refer to EP 4.6-1). Records of the management reviews are retained.

Input to management reviews includes:

- (a) results of internal audits and evaluations of compliance with legal requirements and with other requirements;
- (b) communication from external interested parties, including complaints;
- (c) the environmental performance of the organization;
- (d) the extent to which objectives and targets have been met;
- (e) status of corrective and preventive actions;
- (f) follow-up actions from previous management reviews;
- (g) changing circumstances, including developments in legal and other requirements related to its environmental aspects; and
- (h) recommendations for improvement.

The outputs from management reviews will include any decisions and actions related to possible changes to environmental policy, objectives, targets and other elements of the environmental management system, consistent with the commitment to continual improvement.

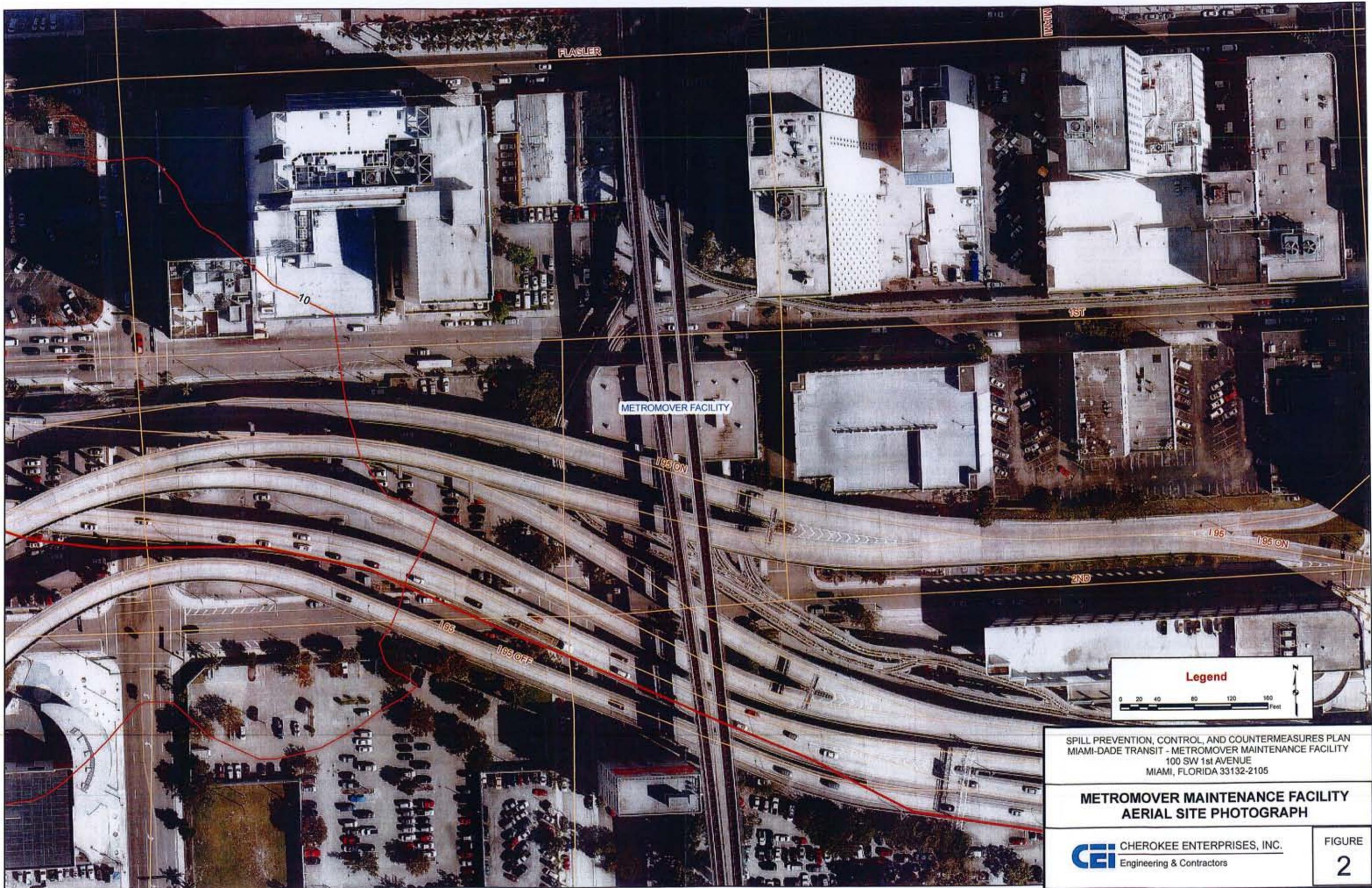
Refer to **Attachment Q** for a copy of MDT's Management Review Procedure, Attendance Sign-in Sheet, and Annual Evaluation Form.

# Figures

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METROMOVER FACILITY

**Legend**

0 20 40 80 120 160 Feet

SPILL PREVENTION, CONTROL, AND COUNTERMEASURES PLAN  
MIAMI-DADE TRANSIT - METROMOVER MAINTENANCE FACILITY  
100 SW 1st AVENUE  
MIAMI, FLORIDA 33132-2105

**METROMOVER MAINTENANCE FACILITY  
AERIAL SITE PHOTOGRAPH**

**CEI** CHEROKEE ENTERPRISES, INC.  
Engineering & Contractors

FIGURE  
**2**

# Attachments

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# **Attachment A**

## **Environmental Policy and Procedure**

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## **Miami-Dade Transit Environmental Policy**

The Miami-Dade Transit (MDT) overall environmental policy provides a roadmap for the Department to improve and protect the environment and the health and safety of our employees, customers and the general public. The Department is committed to achieving its environmental goals by utilizing sound environmental management practices. These include:

- Exceeding compliance with all applicable local, state, and federal environmental regulations through best management practices;
- Establishing waste minimization and pollution prevention programs to prevent or reduce impacts to the environment;
- Establishing management systems and controls for environmental compliance assurance and risk/liability management;
- Streamlining operations and management systems by periodically evaluating the achievement of targeted environmental objectives; and,
- Providing continuous training and communicating environmental policies and programs to employees.

The Department is committed to implementing pollution prevention programs and continually improving environmental performance to minimize environmental issues. The Environmental Policy will be communicated to all employees and available to the Public via the Department website.

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Harpal Kapoor, Director  
Miami-Dade Transit



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, PE			
Date	2/10/09	02/10/2010		

EMS Procedure

**EP-4.2-1 Environmental Policy**

The identification of environmental aspects includes elements arising from operations undertaken under normal, abnormal and emergency conditions. During the identification of environmental aspects, planned or new developments, new or modified activities, products and services were taken into account.

<b>Person responsible:</b> Akbar Sharifi, P.E.			
<b>Area of application:</b> Miami-Dade Transit (MDT)			
<b>Document location:</b> MDT's Main Office and Maintenance Facilities			
<b>Original issue date:</b> 2/10/09			
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/10	Reviewed and updated procedures	
<b>Recurring action items</b>			
<b>Activity</b>	<b>Responsibility</b>		<b>Frequency</b>
1. Review and if necessary revise Environmental Policy.	EMS Team		At least annually
2. Implement Environmental Policy during training awareness with employees and contractors.	EMS Team		On going

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, PE			
Date	2/10/09	02/10/2010		

EMS Procedure

**EP-4.2-1 Environmental Policy**

**1.0 Purpose**

- 1.1 The purpose of this procedure is to establish practices related to the development and implementation of the Environmental Policy for the Miami-Dade Transit (MDT) Metromover Maintenance Facility.

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.2 *Environmental Policy*, of the ISO 14001:2004 standard and covers operations of the MDT’s Metromover Maintenance Facility.
- 2.2 The Environmental Policy recognizes that all activities, products and services within the defined scope of the Environmental Management System (EMS) for the MDT’s Metromover Maintenance Facility may cause impacts to the environment.
- 2.3 The Environmental Policy defines the environmental commitments of MDT establishes the framework for setting objectives and targets, and provides guidance for the development, management and maintenance of the EMS.

**3.0 Responsibility**

- 3.1 **Senior Management** is responsible for:
  - 3.1.1 Approving the Environmental Policy;
  - 3.1.2 Ensuring the Environmental Policy is adhered to during decision-making processes;
  - 3.1.3 Must approve all revisions to the Environmental Policy.
- 3.2 The **EMS Management Representative** is responsible for:
  - 3.2.1 Documenting and implementing the Environmental Policy within the MDT’s Metromover Maintenance Facility
  - 3.2.2 Maintaining meeting minutes to provide objective evidence of the process used to adopt the Environmental Policy by the MDT’s Metromover Maintenance Facility;
  - 3.2.3 Properly communicating the Environmental Policy to all personnel, including all on-site contractors and those persons working for or on behalf of the MDT;
  - 3.2.4 Ensuring the necessary information is collected to allow Senior Management to review and determine the continuing suitability of the Environmental Policy;



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, PE			
Date	2/10/09	02/10/2010		

EMS Procedure

**EP-4.2-1 Environmental Policy**

3.2.5 Ensuring the Environmental Policy is available to the public.

- 3.3 The **EMS Team** is responsible for reviewing the Environmental Policy on a regularly scheduled basis and providing feedback to assist in the evaluation of the Environmental Policy during the Management Review.
- 3.4 The MDT is responsible for communicating the Environmental Policy to all persons working for or on behalf of the MDT’s Metromover Maintenance Facility.

**4.0 Definitions**

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

- 5.1 The Environmental Policy includes a commitment on behalf of the MDT’s Metro Mover Maintenance Facility to continual improvement and prevention of pollution. The text also includes a commitment to comply with applicable environmental legal requirements and other requirements to which the MDT’s Metromover Maintenance Facility subscribes relating to the environmental aspects.
- 5.2 The Environmental Policy provides the framework for setting & reviewing environmental objectives and targets. Specific initiatives and environmental programs adopted by the MDT will be included.
- 5.3 Preparation of the Environmental Policy will be managed by the designated EMS Management Representative and the EMS Team.
- 5.4 Comments, inquiries and suggestions submitted to MDT by external stakeholders, voluntarily or through consultation, will be considered when preparing and reviewing the Environmental Policy.
- 5.5 The Environmental Policy will be reviewed and approved by a Senior Management representative. This approval represents Senior Management’s endorsement and commitment to promote and adhere to the Environmental Policy.
- 5.6 A hard copy of the Environmental Policy will be displayed in a prominent location and maintained in the EMS. An electronic copy of the Environmental Policy will be available on MDT’s Internet and Intranet sites.
- 5.7 The Environmental Policy will be maintained and revised through the document control protocol detailed in **EP-4.4.5-1 Control of Documents** procedure.
- 5.8 The Environmental Policy is communicated to employees, external interested parties and the public via provisions set forth in **EP-4.4.3-1 Communication** procedure.



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Date	2/10/09	02/10/2010		

EMS Procedure

**EP-4.2-1 Environmental Policy**

- 5.9 Training on the Environmental Policy will be conducted during the Environmental Awareness Training and included as part of the new hire employee orientation-training program. Details for environmental training are outlined in **EP-4.4.2-1 Competence, Training and Awareness** procedure.
- 5.10 A Management Review of the Environmental Policy will be completed **at least annually**. The review will help ensure the Environmental Policy is current and reflects any changes in activities, products, services, technological options and legal and other obligations. The review will also help ensure the Environmental Policy continues to promote continual improvement and prevention of pollution. Refer to **EP-4.6-1 Management Review** procedure.
- 5.11 When a revision to the Environmental Policy is required, the Environmental Policy must be approved prior to its release as described in paragraph 5.5 above. The EMS Management Representative will coordinate the revisions of the Environmental Policy as required.

**6.0 References / Related Documents**

- 6.1 Meeting minutes, Agendas, and Attendance Sign-in Sheets
- 6.2 EP-4.4.5-1 Control of Documents Procedure
- 6.3 EP-4.4.3-1 Communication Procedure
- 6.4 EP-4.4.2-1 Competence, Training and Awareness Procedure
- 6.5 EP-4.6.-1 Management Review Procedure

# **Attachment B**

Environmental Aspect Procedure, Aspect Evaluation  
Workbook, and Aspect Criteria Definitions

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	2/19/09	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.1-1 Environmental Aspect**

<b>Person responsible:</b> Akbar Sharifi, P.E.			
<b>Area of application:</b> Miami-Dade Transit (MDT) Metromover Operations			
<b>Document location:</b> MDT's Main Office and Maintenance Facilities			
<b>Original issue date:</b> 2/20/09			
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/10	Reviewed and updated Procedure	
<b>Recurring action items</b>			
<b>Activity</b>		<b>Responsibility</b>	<b>Frequency</b>
1. Evaluate new aspects against the criteria. No action is necessary if the list has not changed.		EMS Team	Annually

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	2/19/09	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.1-1 Environmental Aspect**

**1.0 Purpose**

- 1.1 This procedure describes the process involved in identifying and evaluating the activities, products and services, which are the environmental aspects and significant aspects associated with the operations conducted or originating at the MDT's Metromover Maintenance Facility. Implementation of this procedure will result in the Metro Mover Maintenance Facility establishing and prioritizing environmental objectives and targets.

**2.0 Scope**

- 2.1 This procedure conforms to element 4.3.1 *Environmental Aspects* of the ISO 14001:2004 standard and covers operations of the Metromover Maintenance Facility
- 2.2 This procedure covers all of the activities, products and services that will or may impact the environment and are under the control or influence of the Metromover Maintenance Facility.
- 2.3 The identification of environmental aspects includes elements arising from operations undertaken under normal, abnormal and emergency conditions. During the identification of environmental aspects, planned or new developments, new or modified activities, products and services were taken into account.

**3.0 Responsibility**

- 3.1 The **EMS Management Representative** will schedule a meeting to assess the aspects with the EMS Team on an annual basis, or more frequently if physical or operational changes are made at the MDT's Metromover Maintenance Facility.
- 3.2 The **EMS Management Representative** is responsible for:
  - 3.2.1 Ensuring all EMS Team members are trained to identify and determine the significance of environmental aspects;
  - 3.2.2 Providing training to employees on sub-committees to identify and determine the significance of environmental aspects;
  - 3.2.3 Maintaining the list of environmental aspects and impacts that reside in the EMS;
  - 3.2.4 Ensuring current copies of environmental aspects are maintained in the MDT's main office and Metro Mover maintenance Facility.
  - 3.2.5 Ensuring minutes of all meetings are maintained and distributed to EMS Team members.



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.1-1 Environmental Aspect**

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3.3 The **EMS Team** will:

- 3.3.1 Review the current list of environmental aspects and impacts, in **ED-4.3.1-2 Evaluation of Aspects & Impacts Matrix**;
- 3.3.2 Periodically perform a complete site survey for the scope of the EMS and document all environmental aspects, impacts and activities. Review current activities, products and services to identify new environmental aspects and impacts;
- 3.3.3 Solicit input on aspects and impacts from the Metro Mover Maintenance Facility departmental representatives; Note: The EMS Team shall ensure environmental aspects which result from normal operations as well as abnormal operating conditions, shut-down and start-up conditions, as well as reasonably foreseeable emergency situations are identified;
- 3.3.4 Evaluate the identified environmental aspects and impacts using the **ED-4.3.1-3 Aspect Criteria Definitions**. The EMS Team will consider the potential regulatory and legal exposure during the review of environmental aspects;
- 3.3.5 Add the average *Environmental significance* score to the average *Business Significance* score to determine the total for each impact. This number is the total rating of the impact.
- 3.3.6 Use the Matrix to document each aspect that the EMS Team decides to manage as significant, taking into account the corresponding impact's total rating.
- 3.3.7 Prioritize significant environmental aspects using **ED-4.3.1-3 Aspect Criteria Definitions**;
- 3.3.8 The EMS Team will select (4-6) aspects to control and manage during the initial development and implementation process of the EMS for a period of approximately one year. The remaining significant aspects will be rolled into the EMS when the implementation process is complete.
- 3.3.9 Selection of the initial significant aspects to control and manage during the implementation process may be influenced by the similarity of the aspects. If multiple aspects are similar with respect to activities, impacts, and operational controls they may be combined into select categories or addressed as a single aspect during the implementation process. This flexibility assures greater diversity during the initial selection of significant aspects to control and manage.
- 3.3.10 Appropriate objectives, targets and programs to control and manage the overall impact of the aspects will take into account each significant aspect. This is addressed in detail in **EP-4.3.3-1 Objectives, Targets & Programs** procedure.



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.1-1 Environmental Aspect**

3.3.11 Periodically review the environmental aspect identification process (including this procedure) to verify it is current and meeting the needs of the Metromover Maintenance Facility for identifying areas of improvement in environmental performance.

**4.0 Definitions**

4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

- 5.1 The EMS Team will identify and evaluate all environmental aspects within the scope of the EMS in order to identify those with significance. The scope of the EMS includes all activities and services occurring at the Metromover Maintenance Facility as well as those occurring off site under the direction of the organization. The significant aspects will be managed in a way that reduces or eliminates the significant environmental impacts associated with them.
- 5.2 The inventory of aspects is maintained and evaluated using the significant criteria found in **ED-4.3.1-2 Evaluation of Aspects & Impacts Matrix**, **ED-4.3.1-3 Aspect Criteria Definitions** and established in this procedure.
- 5.3 The EMS Team will evaluate the legal and other requirements during the review of environmental aspects. Refer to **EP-4.3.2-1 Legal & Other Requirements** procedure.
- 5.4 At a minimum, the EMS Team will reassess the aspects annually to make any necessary modifications and to reflect any changes to operations regarding current, past, or new plans for modified activities, products and services at the Metromover Maintenance Facility. This review will be documented and attendance recorded (e.g., agenda, sign in sheets, meeting minutes).
- 5.5 If there are major changes to the aspects, as determined by the EMS Team, a Management Review will be held to review and endorse the changes. The frequency of Management Review is detailed in the **EP-4.6-1 Management Review** procedure. The Management Review will be documented and attendance recorded (e.g., agenda, sign in sheets, meeting minutes.)

**6.0 References / Related Documents**

- 6.1 Meeting Minutes, Agendas, and Attendance Sign in Sheets
- 6.2 ED-4.3.1-2 Evaluation of Aspects & Impacts Matrix
- 6.3 ED-4.3.1-3 Aspect Criteria Definitions



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.1-1 Environmental Aspect**

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- 6.4 EP-4.3.3-1 Objectives, Targets & Programs procedure
- 6.5 EP-4.6-1 Management Review procedure
- 6.6 EP-4.3.2-1 Legal & Other Requirements procedure



## Significant Aspects and Impacts

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The Miami-Dade Transit (MDT) Environmental Management System (EMS) team has developed the following environmental aspects and impacts including four (4) Significant Aspects/Impacts (SA/I). These include:

- **Used Oil (SA/I)** - Filling, Storing and Removing Used Oils from 200-Gallon AST
- **Fluorescent Lamp/Used Ballast** - Replacing Fluorescent Bulb as needed, and replacing Light Ballasts (an electrical component used with a fluorescent bulb or mercury vapor lamp or arc lamp)
- **Aerosol Cans (SA/I)** - Parts Cleaners, Paints, Coating, Lubricant, etc.
- **Motor Oil (SA/I)** - Lubricant Engine Oil (SAE 30) – stored in 55-gallon drums.
- **Tires** - Changing New and Used Tires – Tires used to guide the Metro Mover in its tracks. Tires are changed once every 90,000 miles (approximately once every 2 years)
- **Industrial Waste Treatment (SA/I)** - Oil/Water Separator
- **Air Compressor Oil** - Changing Air Compressor Oil – used on train brakes. ½-quart of oil is changed once every 3 months.
- **Differential Oil** - Changing Differential Oil – used on tire axel. Approximately 22-pint or 3 gallons of oil is drained during oil changing process and transferred to a small bucket, and ultimately into a 55-gallon drum.
- **Train HVAC Filter** - Replace Train HVAC Filter. Filters are washed every 3 months and changed once a year.
- **Train Batteries** - Battery Servicing (Emergency Light for the Trains) – seal gel battery, which is maintenance free and is changed once every 5 years.
- **Flash Light/Lantern Battery** – power source for the flash light providing light source during maintenance activity in areas not visible by regular light.
- **Used Air Filters** - Preventative Maintenance on Air Compressors
- **Filters** - Office Heat & A/C Units
- **Electricity** - Office Heat & A/C Units (including various Train Stations)
- **Freon** - Office Heat & A/C Units
- **Belts** - Preventative Maintenance of A/C Chillers
- **Water** - Preventative Maintenance of A/C Chillers
- **Freon** - Preventative Maintenance of A/C Chillers
- **Bio-Hazard Waste** - Human Waste Clean-up
- **Absorbent Pads** - Spill Clean Up
- **Socks/Rags** - Spill Clean Up
- **Cleaners** - Interior and Exterior Cleaning
- **Sludge** - Pumping out OWS



**Organization Name: Miami-Dade Transit**

Facility name: Metromover Facility

Period ending: 12/30/2010

Prepared by	Reviewed by	Approved by	Date
Akbar Sharifi, P.E.			04/14/2009 Update #1 05/29/2009 Update #2 02/10/2010

## ED 4.3. 1-2 Evaluation of Environmental Aspects and Impacts - Workbook

In the Aspect table below, the Miami-Dade Transit (MDT) has identified the environmental aspects and impacts associated with the organization's activities, products and services. Next, the MDT has evaluated the environmental and business significance of each impact identified by entering a value from 1 to 5 for each category specified, with 5 representing the highest level of impact for that category and 1 representing the lowest. Finally, the MDT has filled in the remaining columns in the table to complete the analysis. **Note – Values at or greater than 2.5 has been identified as “Significant Impact”.**

### Worksheet index

- A. Identify environmental aspects and impacts
- B. Staff time

### ISO 14001, Section 4.3.1, Environmental Aspects

#### Objective

*The purpose of this worksheet is to assist the Miami-Dade Transit (MDT) in establishing and maintaining a procedure to identify the environmental aspects of its activities, products and services and to determine which aspects have or can have significant impacts on the environment. These aspects were considered in setting the environmental objectives.*

This worksheet provides the MDT organization with a process for identifying the significant environmental aspects that it should address as a priority in its environmental management system. This process has considered the cost and time of undertaking the analysis and the availability of reliable data. Information already developed for regulatory or other purposes has been used. Since the MDT does not have an environmental management system, an environmental review was first conducted to assess its current position with respect to the environment. This review considered the environmental aspects of the organization.

Environmental aspects are determined by analyzing the inputs and outputs relating to current and past activities, products and services. The cause and effect relationship between environmental aspects and impacts means that once aspects have been identified, the impacts that result from these aspects can be determined.

The control and influence of an organization over the environmental aspects of its products can vary significantly, depending on the market situation of the organization. For example, a contractor or supplier to the organization may have relatively little control over the aspects, whereas the organization responsible for product design can alter the aspects significantly by changing a single input material. As well, although your organization may have limited control over the use and disposal of its products, it should consider proper handling and disposal mechanisms to the extent feasible. On the matrix in the Control / influence column indicate the level of control the organization has over each aspect. Designate the following; **H = High, M = Medium, and L = Low.**

Aspect Identifier	Activity/Product/Service: Aspect: • Impact:  * Considering = Normal unless otherwise noted.  * 1 (low) - 5 (high)	Environmental Significance of impact(s)					Business Significance of impact(s)					Significant	Control / Influence	Mandatory *	Priority #	Link
		Scale of impact	Severity of impact	Prob. of occur.	Duration of impact	Avg. score (out of 5)	Pot'l reg. & legal expos.	Ease of changing impact	Effect on public image	Concerns of interested parties	Avg. score (out of 5)					
		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	Y/N	HML	ICLO			

The process of identifying the significant environmental aspects associated with the activities at MDT's Metromover facility considered where relevant:

- a) releases to water;
- b) emissions to air;
- c) waste management;
- d) contamination of land;
- e) use of raw materials and natural resources; and
- f) local environmental and community issues.

This process has considered normal, abnormal and emergency operating conditions, as well as shut-down and start-up conditions and the potential significant impacts associated with reasonably foreseeable situations. However, the MDT has not conducted a life cycle assessment in the process of identifying the significant environmental aspects associated with its activities, products and services. It also have not evaluated each product, component and raw material input, but instead selected categories of activities, products and services in order to identify those aspects most likely to have a significant impact.

Once the environmental aspects and their associated impacts were identified, the MDT evaluated the environmental significance of each of the impacts in order to determine which aspects it should address in order of their significance (i.e., aspect significance can largely be determined by the significance of its associated impacts). Identifying environmental aspects is an ongoing process that determines the past, current and potential impacts (positive or negative) of MDT's activities on the environment, including identification of its potential regulatory, legal and business exposure. On the matrix the Mandatory column allows MDT to indicate whether a mandatory requirement relating to the aspect exists by designating the following; **I = industry requirement** (industry code of practice), **C = company requirement** (corporate policy), **L = legal requirement** (regulation), **O = ISO 14000**.

For example, paper use by an organization is an activity with an environmental aspect -- waste production. The aspect is one that the organization can control. The environmental impact associated with this aspect is the amount of waste disposed that can be reduced by recycling. However, if an organization has a serious toxic emissions problem associated with another environmental aspect, this other aspect should be considered a higher priority than the recycling opportunity as the environmental impact is more significant.

The aspect information identified in this worksheet will be linked to the worksheets listed below.

- Worksheet 4. 3. 21, "Identify Legal and Other Requirements"
- Worksheet 4. 3. 31, "Set Objectives and Targets"
- Worksheet 4. 3. 41, "Develop Environmental Management Programme(s)"
- Worksheet 4. 4. 61, "Develop operational controls"
- Worksheet 4. 5. 11, "Monitor Performance"
- Worksheet 4. 5. 21, "Identify Nonconformance, Corrective and Preventive Action"

Aspect Identifier	Activity/Product/Service: Aspect: • Impact:  * Considering = Normal unless otherwise noted.  * 1 (low) - 5 (high)	Environmental Significance of impact(s)					Business Significance of impact(s)					Significant	Control / Influence	Mandatory *	Priority #	Link
		Scale of impact	Severity of impact	Prob. of occur.	Duration of impact	Avg. score (out of 5)	Pot'l reg. & legal expos.	Ease of changing impact	Effect on public image	Concerns of interested parties	Avg. score (out of 5)					
		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*		Y/N	HML	ICLO		

## A. EVALUATE ENVIRONMENTAL ASPECTS AND IMPACTS

A1	<p><b>Activity/Product/Service: Parts Cleaners, Paints, Coating, Lubricant, etc.</b></p> <p><b>Aspect: Aerosol Cans</b></p> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>• Air, soil, surface water and groundwater pollutant if punctured or ruptured due to extreme temperature.</li> </ul>	3	2	3	5	3.25	3	3	2	2	2.75	Y	H	L		
A2	<p><b>Activity/Product/Service: Replacing Fluorescent Bulbs / Light Ballast -</b></p> <p><b>Aspect: Fluorescent Lamps / Used Ballast</b></p> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>• Hazardous waste from breakage.</li> <li>• Air, soil, surface and ground water pollution associated with landfill.</li> </ul>	3	3	3	5	3.50	3	3	3	2	2.75	N	H	L		
A3	<p><b>Activity/Product/Service: Filling, Storing and Removing Used Oils to and from the 200-Gallon AST- (i.e., changing air compressor/differential oil)</b></p> <p><b>Aspect: Used Oil</b></p> <p><b>Impacts:</b> Soil and groundwater pollution from spills from loading/unloading &amp; catastrophic failure of the tank.</p>	3	4	3	5	3.75	3	3	3	2	2.75	Y	H	L		
A4	<p><b>Activity/Product/Service: Lubricant Engine Oil (SAE 30) – stored in 55-gallon drums</b></p> <p><b>Aspect: Fresh Oil</b></p> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>• Air, soil, surface water and groundwater pollutant if discharged.</li> </ul>	3	4	3	5	3.75	3	3	3	2	2.75	Y	H	L		

Aspect Identifier	Activity/Product/Service: Aspect: • Impact:  * Considering = Normal unless otherwise noted.  * 1 (low) - 5 (high)	Environmental Significance of impact(s)					Business Significance of impact(s)					Significant Control / Influence	Mandatory *	Priority #	Link	
		Scale of impact	Severity of impact	Prob. of occur.	Duration of impact	Avg. score (out of 5)	Pot'l reg. & legal expos.	Ease of changing impact	Effect on public image	Concerns of interested parties	Avg. score (out of 5)					
		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	Y/N	HML	ICLO		
A5	<p><b>Activity/Product/Service: Train A/C</b></p> <p><b>Aspect: Chlorofluorocarbons (i.e., refrigerant / coolant / freon)</b></p> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>Air Pollution</li> </ul>	2	2	2	3	2.25	3	2	2	2	2.25	N	H	L		
A6	<p><b>Activity/Product/Service: Changing New and Used Tires – Tires used to guide the Metro Mover in its tracks. Tires are changes once every 90,000 miles (approximately once every 2 years)</b></p> <p><b>Aspect: Used Tires</b></p> <p><b>Impact:</b> -Water, soil and groundwater pollutant.</p>	3	1	1	1	1.5	2	3	1	1	1.75	N	H	L		
A7	<p><b>Activity/Product/Service: Oil/Water Separator</b></p> <p><b>Aspect: Industrial Wastewater / Sludge from cleaning out OWS, any potential spill draining into the OWS, and Train Washing Operation (Fence Line – Train Wash Station)</b></p> <p><b>Impacts:</b></p> <ul style="list-style-type: none"> <li>Soil and groundwater pollution from discharge associated with OWS (catastrophic failure of the OWS).</li> <li>Pollution from discharge from OWS to sanitary sewer system exceeding discharge guidelines.</li> </ul>	3	2	2	2	2.25	3	2	2	2	2.25	N	H	L		
A8	<p><b>Activity/Product/Service: Facility Maintenance activities</b></p> <p><b>Aspect: Shop Rags and Cotton Gloves</b></p> <p><b>Impact:</b> Air, soil, surface and ground water pollution associated with landfills.</p>	2	1	2	2	1.25	2	3	1	1	1.75	N	H	C		

Aspect Identifier	Activity/Product/Service: Aspect: • Impact:  * Considering = Normal unless otherwise noted.  * 1 (low) - 5 (high)	Environmental Significance of impact(s)					Business Significance of impact(s)					Significant Control / Influence	Mandatory *	Priority #	Link	
		Scale of impact	Severity of impact	Prob. of occur.	Duration of impact	Avg. score (out of 5)	Pot'l reg. & legal expos.	Ease of changing impact	Effect on public image	Concerns of interested parties	Avg. score (out of 5)					
		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*	Y/N	H M L	I C L O			
A9	<b>Activity/Product/Service:</b> <i>Flash Light/Lantern Battery – power source for the flash light providing light source during maintenance activity in areas not visible by regular light.</i> <b>Aspect:</b> <i>Flash Light and Lantern Batteries</i> <b>Impact:</b> air, soil and groundwater pollutant associated with landfills.	1	1	1	1	1.00	1	2	1	1	1.25	N	H	C		
A10	<b>Activity/Product/Service:</b> <i>Maintenance Building / Offices / Train Stations / Wash Facility</i> <b>Aspect:</b> <i>Shop and Office Recyclables</i> <b>Impacts:</b> air, soil and groundwater pollutant associated with landfills.	2	1	2	1	1.50	1	2	1	1	1.25	N	H	C		
A11	<b>Activity/Product/Service:</b> <i>Maintenance Building / Offices / Train Stations / Wash Facility</i> <b>Aspect:</b> <i>Electricity</i> <b>Impacts:</b> • Energy consumption	1	1	1	1	1.00	1	2	1	1	1.25	N	H	C		
A12	<b>Activity/Product/Service:</b> <i>Human Waste Clean-up</i> <b>Aspect:</b> <i>Bio-Hazard Waste</i> <b>Impact:</b> Soil, surface and groundwater pollution.	1	1	2	1	1.25	1	1	1	2	1.25	N	M	C		
A13	<b>Activity/Product/Service:</b> <i>Spill Clean Up</i> <b>Aspect:</b> <i>Used Absorbent Pads</i> <b>Impact:</b> Air, soil, surface water and groundwater pollution associated with landfill	2	2	2	2	2.00	2	2	1	1	1.50	N	M	C		
A14	<b>Activity/Product/Service:</b> <i>Interior and Exterior Cleaning</i> <b>Aspect:</b> <i>Cleaners</i> <b>Impact:</b> • Air pollution from aerosols • Groundwater and soil contamination from spills from liquid cleaners.	1	1	2	1	1.25	1	2	1	1	1.25	N	H	C		

Aspect Identifier	Activity/Product/Service: Aspect: • Impact:  * Considering = Normal unless otherwise noted.  * 1 (low) - 5 (high)	Environmental Significance of impact(s)					Business Significance of impact(s)					Significant	Control / Influence	Mandatory *	Priority #	Link
		Scale of impact	Severity of impact	Prob. of occur.	Duration of impact	Avg. score (out of 5)	Pot'l reg. & legal expos.	Ease of changing impact	Effect on public image	Concerns of interested parties	Avg. score (out of 5)					
		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*		(1 - 5)*	(1 - 5)*	(1 - 5)*	(1 - 5)*						

**B. STAFF TIME**

Staff	Position	Estimated time (hours)	Actual time (hours)
Akbar Sharifi, P.E.	Sr. Environmental Engineer	30	45
Steve Alvarez	Facility Supervisor	10	10
Freeman Wright	Manager of Materials	10	10
<b>Total</b>		<b>50</b>	<b>65</b>



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	04/09/09	02/10/2010		

**ED-4.3.1-3 Aspect Criteria Definitions**

Criteria	Description	Ranking Categories 1 (low) – 5 (high)				
		1	2	3	4	5
		<b>NO CHANGE</b>			<b>MAKE CHANGE</b>	
<b>Environmental Significance of Impact (s)</b>	Scale of Impact	<p>What is the relative size of the aspect or impact?</p> <p><i>insignificant volume/quantity</i></p> <p>The impact involves little or no resources and/or produces an insignificant amount of waste.</p>	<p><i>low volume/quantity</i></p>	<p><i>medium volume/quantity but sporadic</i></p>	<p><i>medium volume/quantity but ongoing</i></p>	<p><i>high volume/ quantity</i></p> <p>The aspect involves a large quantity of materials or resources or creates a continuous impact.</p>
	Severity of Impact	<p>How bad is the adverse environmental consequence caused by the aspect or impact?</p> <p><i>minimal impact</i></p> <p>negligible impact on the environment</p> <p>produces a recyclable waste</p>	<p><i>moderate impact but localized and readily containable</i></p> <p>speculated to contribute to environmental damage</p> <p>produces a solid waste or universal waste</p>	<p><i>moderate impact over multiple locations</i></p> <p>damaging to the environment in limited situations or in combination with other pollutants</p> <p>produces a haz waste</p>	<p><i>significant impact and/or regional</i></p> <p>damaging to the environment</p> <p>produces a RCRA hazardous waste</p>	<p><i>Extreme impact and/or potential for global impact</i></p> <p>damaging to fish or animals</p> <p>produces an extremely hazardous waste</p>
	Probability of Occurrence	<p>What is the likelihood that the aspect or impact will cause an adverse environmental impact?</p> <p><i>very unlikely under any operating condition</i></p> <p>so unlikely, it can be assumed an occurrence may not be experienced</p>	<p><i>occurs during abnormal/emergency conditions/probability anticipated and managed</i></p> <p>unlikely, but possible to occur in the life of an item</p>	<p><i>occurs during small-medium new projects or routine maintenance activities</i></p> <p>likely to occur sometime in the life of an item</p>	<p><i>occurs during major new projects or major maintenance activities</i></p> <p>will occur several times in the life of an item</p>	<p><i>occurring during normal operating conditions</i></p> <p>likely to occur frequently</p>
	Duration of Impact	<p>How long will the adverse environmental consequence persist in the environment?</p> <p><i>Spike situation extremely short-term duration within one day</i></p> <p>material degrades rapidly in the environment</p>	<p><i>less than one month</i></p> <p>material may persist for several months</p> <p>involves renewal resources that are recycled</p>	<p><i>one to six months</i></p> <p>material may persist for several years</p> <p>involves non-renewal resources that are recycled</p>	<p><i>less than one year</i></p> <p>material degrades slowly in the environment</p> <p>involves renewable resources that are not recycled</p>	<p><i>long-term duration greater than on year or continuous</i></p> <p>impact persists in the environment</p> <p>involves non-renewable resources that are not recycled</p>



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	04/09/09	02/10/2010		

**ED-4.3.1-3 Aspect Criteria Definitions**

Criteria	Description	Ranking Categories 1 (low) – 5 (high)				
		1	2	3	4	5
		<b>NO CHANGE</b>			<b>MAKE CHANGE</b>	
Potential Regulatory and Legal Exposure	The likelihood and severity of incurring fines or civil liability.	<i>No civil or criminal liability.</i>	<i>May expose the organization to minor administrative fines.</i>	<i>May expose the organization to administrative fines or minor civil liability.</i>	<i>Potential or significant administrative fines or civil liability.</i>	<i>Potential for large civil fines or criminal liability.</i>
Ease of Changing Impact	What are the technical difficulties of implementing the change and what will be the impacts to operational procedures?	<i>easy to accomplish</i> requires no change in current procedures	<i>minor level of effort required</i> requires minor changes in operations	<i>moderate effort required</i> involves some additional effort to implement	<i>major effort required</i> involves significant additional effort to implement	<i>impact cannot be changed only managed</i> involves redesign or major change in maintenance procedures
Effect on Public Image	To what degree will the impact negatively influence the public's perception?	<i>no effect</i> yawn	<i>minor / local scrutiny</i> special interest groups newsletter	<i>moderate public scrutiny manageable</i> community news letter	<i>intense local or regional scrutiny requiring more effort</i> small article inside section of newspaper	<i>extreme scrutiny – major facility profile impact</i> front page of newspaper
Minimal Change on Process	What is the complexity of implementing a change to mitigate the impact?	<i>not complex</i> can be implemented at the shop level	<i>minimal complexity</i> requires coordination with other shops or departments	<i>medium complexity</i> requires approval from engineering or procurement	<i>very complex</i> requires approval from legal or outside agencies	<i>extremely complex</i> requires GM or Board approval to change
Concerns of Interested Parties	Consider the concerns of interested parties and cultural changes necessary to implement the change.	<i>no concerns</i>	<i>minor interest at local level</i> limited number of parties	<i>moderate interest/manageable at local level</i> limited number of parties	<i>major interest at federal level more widespread</i> greater number of parties	<i>extreme/major impact</i> e.g., financing / litigation
Cost of Changing Impact	What is the cost consideration of changing the impact?	<i>procedural</i> less than \$1000	<i>minor process change</i> less than \$25,000	<i>moderate process changes</i> less than 500k	<i>major process change</i> greater than \$500k but less than \$5m	<i>extreme</i> greater than \$5m

# **Attachment C**

## **Legal and Other Requirements Procedure and Matrix**





Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	3/6/09	02/10/2010		

EMS Procedure

**EP-4.3.2-1 Legal & Other Requirements**

Person responsible: Akbar Sharifi, P.E.

Area of application: Miami-Dade Transit (MDT)

Document location: MDT's Main Office and Maintenance Facilities

Original issue date: 3/7/09

**Revisions**

Rev. No.	Date	Description
001	02/10/10	Reviewed and updated procedure

**Recurring action items**

Activity	Responsibility	Frequency
1. Update list of legal & other requirements and maintain accessibility to person(s) responsible.	EMS Management Representative	If new laws or requirements
2. Evaluate compliance	EMS Management Representative	Every three years

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	3/6/09	02/10/2010		

EMS Procedure

**EP-4.3.2-1 Legal & Other Requirements**

**1.0 Purpose**

- 1.1 The purpose of this procedure is to ensure that all legal & other requirements associated with the environmental aspects of the MDT's Metromover Maintenance Facility's activities, products and services are identified and to ensure the EMS Management Representative maintains access to these requirements.

**2.0 Scope**

- 2.1 This procedure conforms to the ISO 14001:2004 standard, section 4.2.2 *Legal and Other Requirements* and covers the operations of the Metro Mover Maintenance Facility
- 2.2 Legal and other requirements includes all municipal, state, and federal environmental legislation and regulations that the MDT Metromover Maintenance Facility is legally obligated to comply with and any environmentally related operating permits, licenses, and certificate of approvals. Legal and other requirements also includes the environmental requirements that the MDT Metromover Maintenance Facility has pledged to comply with through associations, memberships, and volunteer pledges.

**3.0 Responsibility**

- 3.1 The **EMS Management Representative** is responsible for:
  - 3.1.1 Ensuring all legal & other requirements that affect each department operating at the Metromover Maintenance Facility are identified;
  - 3.1.2 Maintaining access to these requirements;
  - 3.1.3 Maintaining the EMS document **ED-4.3.2-2 Legal & Other Requirements Matrix** in the EMS;
  - 3.1.4 Disseminating these requirements to the respective departments;
  - 3.1.5 Staying abreast of changes in these requirements and identifying new requirements;
  - 3.1.6 Evaluating physical and/or operational changes at the Metromover Maintenance Facility to determine if new requirements are triggered;
  - 3.1.7 Determining how the legal and other requirements apply to the Metromover Maintenance Facility's environmental aspects; and
  - 3.1.8 Communicating to all persons working for or on behalf of the organization including contractors whose responsibilities and actions can affect compliance requirements for



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	3/6/09	02/10/2010		

EMS Procedure

**EP-4.3.2-1 Legal & Other Requirements**

Metromover Maintenance Facility. Refer to **EP-4.4.3-1 Communication** procedure.

- 3.2 The **Departmental Management** is responsible for:
  - 3.2.1 Communicating proposed physical and/or operational changes to the EMS Management Representative;
  - 3.2.2 Refraining from making physical and/or operational changes, including the installation and use of stationary or portable equipment, prior to approval by the EMS Management Representative; and
  - 3.2.3 Communicating relevant environmental aspects of department operations or services to the EMS Management Representative.

**4.0 Definitions**

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

- 5.1 The EMS Team will evaluate the legal and other requirements during the review of environmental aspects. Refer to the environmental aspects documentation: **EP-4.3.1-1 Environmental Aspects** procedure, **ED-4.3.1-1 Evaluation of Aspects and Impacts Matrix**, and **ED-4.3.1-3 Aspect Criteria Definitions**.
- 5.2 The EMS Management Representative will review the current list of environmental aspects for the Metromover Maintenance Facility. From this list, the EMS Management Representative will develop a list of legal & other requirements that apply to the Metro Mover Maintenance Facility. The current list of legal & other requirements that apply to the Metro Mover Maintenance Facility is maintained in **ED-4.3.2-2 Legal & Other Requirements Matrix**.
- 5.3 The EMS Management Representative will obtain annual updates on pertinent environmental regulations from regulatory agencies. This is accomplished through multi media, internet accessibility, attending meetings, training, or by periodic written request for updated information from regulatory agencies. The EMS Management Representative will stay abreast of legal & other requirements by:
  - 5.3.1 Subscribing to a monthly regulatory update service;
  - 5.3.2 Maintaining access to Federal Regulations applicable to the Metromover Maintenance Facility.



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EMS Procedure

**EP-4.3.2-1 Legal & Other Requirements**

- 5.3.3 Searching, book marking and linking to internet accessible regulatory informational web sites;
- 5.3.4 Maintaining access to sections of the State Code applicable to the Metromover Maintenance Facility ;
- 5.3.5 Periodically reviewing the changes to applicable requirements and evaluating their impact on the Metromover Maintenance Facility ;
- 5.3.6 Periodically reviewing, and updating where necessary, the list of applicable requirements; and,
- 5.3.7 Anticipate and prepare for new or changed requirements, so that appropriate action can be taken to maintain compliance.
- 5.4 The EMS Management Representative stays abreast of proposed physical and/or operational changes to the Metromover Maintenance Facility so that additional legal & other requirements are identified and considered prior to the implementation of the changes by:
  - 5.4.1 Receiving written notification from Department Managers of any proposed operational or physical changes;
  - 5.4.2 Conducting a legal & other requirements analysis on any proposed changes;
  - 5.4.3 Providing written authorization to Department Managers for changes after the analysis has been conducted;
  - 5.4.4 Evaluating new or modified activities, products and services.

**6.0 References / Related Documents**

- 6.1 ED-4.3.2-2 Legal & Other Requirements Matrix
- 6.2 EP-4.3.1-1 Environmental Aspects procedure
- 6.3 ED-4.3.1-2 Evaluation of Aspects & Impacts Matrix
- 6.4 ED-4.3.1-3 Aspect Criteria Definitions
- 6.5 EP-4.4.3-1 Communication procedure



Person Responsible	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

## ED 4.3.2-2 Legal & Other Requirements Matrix

### FEDERAL

#### Environmental Protection Agency

Citation	Description	Program Reference
<b>40 Code Of Federal Regulations</b>	<b>Hyperlink:</b> <a href="http://www.epa.gov/epahome/cfr40.htm">http://www.epa.gov/epahome/cfr40.htm</a> <b>Description:</b> This site allows access to the Federal Register. The Federal Register is the official daily publication for rules, proposed rules, and notices of Federal agencies and organizations, as well as executive orders and other presidential documents.	
<b>Part 68</b>	Chemical Accident Prevention Provisions (Risk Management Plans) – AIR <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr68_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr68_00.html</a>	NA
<b>Part 110</b>	Discharge of Oil <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr110_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr110_00.html</a>	SPCC
<b>Part 112</b>	Oil Pollution Prevention (Spill, Pollution Control and Countermeasures Plan) <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr112_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr112_00.html</a>	SPCC
<b>Part 122</b>	National Pollutant Discharge Elimination System (NPDES) <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr122_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr122_00.html</a>	SWPPP
<b>Part 258</b>	Criteria For Municipal Solid Waste Landfills <b>Hyperlink:</b> * <a href="http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&amp;sid=401d1fa5a85e820674e669b8a3edf23b&amp;rgn=div5&amp;view=text&amp;node=40:24.0.1.4.38&amp;idno=40">http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&amp;sid=401d1fa5a85e820674e669b8a3edf23b&amp;rgn=div5&amp;view=text&amp;node=40:24.0.1.4.38&amp;idno=40</a>	Solid Waste
<b>Part 260</b>	Hazard Waste Management System: General <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr260_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr260_00.html</a>	Haz Waste
<b>Part 261</b>	Identification and Listing of Hazardous Waste <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr261_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr261_00.html</a>	Haz Waste
<b>Part 262</b>	Standards for Generators of Hazardous Waste <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr262_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr262_00.html</a>	Haz Waste
<b>Part 268</b>	Land Disposal Restrictions <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr268_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr268_00.html</a>	Haz Waste
<b>Part 273</b>	Standards for the Management of Universal Waste <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr273_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr273_00.html</a>	Univ Waste
<b>Part 279</b>	Standards for Management of Used Oil <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr279_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr279_00.html</a>	Oil Waste
<b>Part 280</b>	Underground Storage Tanks <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr280_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr280_00.html</a>	UST's
<b>Part 300</b>	National Oil and Hazardous Substance Pollution Contingency Plan <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr300_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr300_00.html</a>	SPCC
<b>Part 355</b>	Emergency Planning and Notification (SARA Title III, PPA) <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr355_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr355_00.html</a>	NA
<b>Part 370</b>	Hazardous Chemical Reporting: Community Right To Know (SARA Title III) <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr370_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr370_00.html</a>	NA
<b>Part 372</b>	Toxic Chemical Release Reporting: Community Right To Know (SARA Title III) <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr372_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr372_00.html</a>	NA
<b>Part 763</b>	Asbestos Management (TSCA) <b>Hyperlink:</b> <a href="http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr763_00.html">http://www.access.gpo.gov/nara/cfr/waisidx_00/40cfr763_00.html</a>	Asbestos



Person Responsible	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

## ED 4.3.2-2 Legal & Other Requirements Matrix

### LABOR

29 Code Of Federal Regulations	Description	Program Reference
Part 1910.1200	Hazard Communication Standard (OSHA) Hyperlink: <a href="http://www.access.gpo.gov/nara/cfr/waisidx_03/29cfr1910_03.html">http://www.access.gpo.gov/nara/cfr/waisidx_03/29cfr1910_03.html</a>	Haz Com
Part 1910.120	Hazardous Waste Operations & Emergency Response Hyperlink: <a href="http://www.access.gpo.gov/nara/cfr/waisidx_03/29cfr1910_03.html">http://www.access.gpo.gov/nara/cfr/waisidx_03/29cfr1910_03.html</a>	Emergency Response

### STATE - STATE OF FLORIDA

Citation	Description	Program Reference
State Regulations and Information – Chapter 62	<a href="http://www.dep.state.fl.us">http://www.dep.state.fl.us</a> Codification of statutes relating specifically to the environment and Florida Department of Environmental Protection (FDEP) programs. 1. <a href="http://www.dep.state.fl.us/waste/categories/solid_waste/pages/rulemaking_62-701.htm">http://www.dep.state.fl.us/waste/categories/solid_waste/pages/rulemaking_62-701.htm</a> Solid Waste Management 2. <a href="http://www.dep.state.fl.us/waste/categories/solid_waste/pages/rulemaking_62-705.htm">http://www.dep.state.fl.us/waste/categories/solid_waste/pages/rulemaking_62-705.htm</a> Industrial Waste Disposal 3. <a href="http://www.dep.state.fl.us/waste/categories/tanks/pages/761and762.htm">http://www.dep.state.fl.us/waste/categories/tanks/pages/761and762.htm</a> Underground Storage Tank (UST) and Aboveground Storage Tank (AST) Systems 4. <a href="http://www.dep.state.fl.us/waste/quick_topics/rules/default.htm#62-710">http://www.dep.state.fl.us/waste/quick_topics/rules/default.htm#62-710</a> Used Oil Management 5. <a href="http://www.dep.state.fl.us/waste/quick_topics/rules/default.htm#62-730">http://www.dep.state.fl.us/waste/quick_topics/rules/default.htm#62-730</a> Hazardous Waste Management 6. <a href="http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-711">http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-711</a> Waste Tire Rule 7. <a href="http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-737">http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-737</a> Management of Spent Mercury-Containing Lamps and Devices Destined for Recycling 8. <a href="http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-740">http://www.dep.state.fl.us/waste/quick_topics/rules/documents/62-740</a> Petroleum Contact Water	Solid Waste  Industrial Waste  UST/AST  Used Oil  Haz.Waste  Waste Tire  Lamps  PCW

### LOCAL – MIAMI-DADE COUNTY

Document Title	Description	Program
Miami-Dade County Chapter 24 Code	<a href="http://www.miamidade.gov/derm">http://www.miamidade.gov/derm</a> The Miami-Dade County Department of Environmental Resources Management (DERM) rules and regulations. <a href="http://www.municode.com/resources/gateway.asp">http://www.municode.com/resources/gateway.asp</a> <b>Chapter 15</b> - Solid Waste Management <b>Chapter 24</b> – Environmental Protection, Biscayne Bay and Environs Designated Aquatic Park and Conservation Area, the Biscayne Bay Environmental Enhancement Trust Fund, and the Environmentally Endangered Lands Program.	Environmental Protection



Person Responsible	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

### ED 4.3.2-2 Legal & Other Requirements Matrix

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#### PERMITS

Permit/Order #	Description	Authority	Renewal Date
IW5-006894-2009/2010	Industrial Waste 5 - Annual Operating Permit	Miami-Dade County	1 year
APCF-003674-2008/2009	Stratospheric Ozone Protection – Annual Operating Permit	Miami-Dade County	1 year

#### **OTHER REQUIREMENTS**

Other requirements applicable to the MDT Metro Mover Facility include:

- Best Management Practices (BMPs); and,
- Various general and specific conditions stipulated by the permits issued for the facility by regulatory agencies.

#### Revision History

Revision:	Sec/Para Changed	Change Made:	Date
0	N/A	Initial Issue of Document	04/14/2009
01	N/A	Added permits and state/local regulations	05/29/2009
02	N/A	Updated document	02/10/2010
03			
04			

**Attachment D**  
Objectives, Targets, and Program Procedure, and  
Action Plan

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	06/18/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.3.3-1 Objectives, Targets and Programs Procedure Template**

<b>Person responsible:</b>	Akbar Sharifi, P.E.		
<b>Area of application:</b>	Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b>	MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b>	June 18, 2009		
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/2010	Reviewed and updated procedure	
<b>Recurring action items</b>			
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>	
1. Develop and document objectives and targets, taking into account the significant environmental aspects.	Akbar Sharifi, P.E.	Annually or upon identification of new aspects	
2. Develop action plans for the objectives and targets.	EMS Team Members	Annually as needed	
3. Modify / amend the objectives, targets and programs.	EMS Team Members	Annually as needed	
4. nd programs.			
5. Monitor progress of objectives, targets and programs.	Akbar Sharifi, P.E./ Steve Alvarez	At progress milestones and potential scheduled targets	
6. Distribute summary of action plans.	Akbar Sharifi, P.E./ Steve Alvarez	During management review	

**Procedure Index**

- 1.0 Purpose**
- 2.0 Scope**
- 3.0 Responsibility**
- 4.0 Definitions**
- 5.0 Process**
- 6.0 References / Related Documents**



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	06/18/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.3-1 Objectives, Targets and Programs Procedure Template**

**1.0 Purpose**

- 1.1 The purpose of this procedure is to establish practices related to the identification, establishment, implementation and maintenance of objectives and targets associated with the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 This procedure also establishes practices related to the development and maintenance of environmental programs (or action plans) used to manage and ensure progress toward the objectives and targets.

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.3.3 Objectives and Targets of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 The scope of establishing the environmental programs (or action plans) relate to managing those activities, products and services that are under the control or influence of the MDT Metromover Facility and can impact the ability to achieve the environmental objectives and targets.
- 2.3 The environmental programs (or action plans) contain the identification and allocation of resources and responsibilities at each relevant function and level to provide the structure and framework for achieving the objectives and targets of MDT Metromover Facility.

**3.0 Responsibility**

- 3.1 **Senior Management** - will review and endorse the initial objectives, targets and programs at a Management Review meeting. All major changes to the objectives, targets and programs recommended by the EMS Team will also be endorsed during the Management Review meeting. The frequency of Management Review is detailed in **EP-4.6-1 Management Review procedure**. The Management Review meeting will be documented and attendance recorded (i.e. agendas, sign in sheets, meeting minutes).
- 3.2 **EMS Management Representative** - will schedule a meeting with the EMS Team for initial development and for **semi-annual** review of objectives, targets and programs, or more frequently if physical or operational changes are made at the MDT Metro Mover Facility. The EMS Management Representative will also be responsible for the following:
  - 3.2.1 Ensure that minutes of all meetings are maintained and distributed to the EMS Team;
  - 3.2.2 Ensure that current copies of the objectives, targets and programs are maintained in the EMS Document Control files;
  - 3.2.3 Ensure that minutes of all meetings are maintained and distributed to the EMS Team; and,
  - 3.2.4 Ensure that current copies of the objectives, targets and programs are maintained in the EMS Document Control files.



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	06/18/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.3.3-1 Objectives, Targets and Programs Procedure Template**

- 3.3 **EMS Team** -is responsible for initial development and for **semi-annual** review of objectives, targets and programs to reflect changes to MDT Metromover Facility’s operations. At a minimum, the EMS Team will reassess the programs **semi-annually** and make any necessary modifications to existing environmental programs (or action plans), develop new programs or discontinue existing programs. Particular attention should be focused on changes to the MDT Metromover Facility’s operations that affect significant environmental aspects. This may be conducted concurrently with the aspect evaluation. This review will be documented and attendance recorded (i.e. agendas, sign in sheets, and meeting minutes). These documented discussions will provide evidence of the decision making process for establishing, implementing and maintaining objectives, targets and programs.
- 3.4 **All Employees** - Assignment of responsibilities within the **EP-4.3.3-2 Objectives, Targets & Programs Action Plans** may occur at many levels of the MDT Metromover Facility. This procedure considers objectives, targets and programs pertinent to environmental management for all persons working for or on behalf of the MDT Metromover Facility.

**4.0 Definitions**

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

**5.1 Developing objectives and targets:**

- 5.1.1 Environmental objectives and targets shall be developed and documented at relevant functions and levels within the MDT Metromover Facility. They will be documented on **EP-4.3.3-2 Objectives, Targets & Programs Action Plans**.
- 5.1.2 Objectives and targets will be consistent with the environmental policy. Objectives must address the commitment to the prevention of pollution.
- 5.1.3 When establishing the MDT Metromover Facility objectives and targets the EMS Team will take into account the:
  - 5.1.3.1 Legal and other requirements, as documented in **EP-4.3.2-1 Legal & Other Requirements procedure**.
  - 5.1.3.2 Significant environmental aspects, as documented in **EP-4.3.1-1 Environmental Aspects procedure**.
- 5.1.4 When establishing the objectives and targets the EMS Team will also consider:
  - 5.1.4.1 Technological options,
  - 5.1.4.2 Financial, operational and business requirements,
  - 5.1.4.3 Views of interested parties,



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	06/18/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.3.3-1 Objectives, Targets and Programs Procedure Template**

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5.1.4.4 Environmental Policy,

5.1.4.5 Commitment to continual improvement.

5.1.5 *Objectives* will represent environmental goals and will have an associated quantifiable target that the MDT Metromover Facility can reasonably be expected to meet.

5.1.6 *Targets* will provide quantifiable milestones for measuring the MDT Metromover Facility's performance against set objectives.

**5.2 Developing environmental programs (or action plans):**

5.2.1 Environmental programs shall be established that list the specific tasks or means by which to achieve the desired objective and target.

5.2.2 For each objective and target, one or more tasks will provide a step-by-step description of how the objective and target will be achieved.

5.2.3 Environmental programs will be completed and documented in a logical sequence, with objectives, targets and tasks building upon each other to reach the all the identified objectives and targets. The objectives, targets and environmental programs will be documented on the same form as listed in 5.1.1 above.

5.2.4 Environmental programs will designate the responsible position or authority for each task listed. Relevant functions and levels of the organization necessary to complete tasks will be addressed.

5.2.5 Environmental programs will include the time frame for completion of each task.

5.2.6 Environmental programs will be developed and maintained by the EMS Team. The EMS Team should use their judgment in developing the tasks so they are practical and realistically obtainable for the MDT Metromover Facility.

**5.3 Implementing and maintaining the EP-4.3.3-2 Objectives, Targets & Programs Action Plans**

5.3.1 The *Start Date* and *Date Fully Completed* will define the overall objective, target and program. The *Date Fully Completed* will indicate that all items are complete and the action plan is closed.

The *Date of issue* and *Effective until date* will document the periodic updates or **semi-annual** reviews of the objectives, targets and programs and demonstrates that the items are on-going.

5.3.2 The objective and target action plans will be periodically reviewed and revised and take into consideration legal and other requirements as well as views of interested parties.

5.3.3 The **EP-4.4.5-1 Control of Documents procedure** should be reviewed for additional guidelines relating to establishing/documenting/revising the objectives, targets & programs.



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Initials	Akbar Sharifi, P.E.			
Date	06/18/2009	02/10/2010		

## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.3.3-1 Objectives, Targets and Programs Procedure Template

- 5.3.4 As a means of ensuring that the MDT Metromover Facility is progressing towards satisfying its objectives, targets and programs; and that they are current and reflective of the nature and scale of their operations the EMS Team will review each objective, target and program **semi-annually**. An *unscheduled* review may be required prior to a *scheduled* review due to changes in processes, operations or the considerations listed in 5.1 above.
- 5.3.5 A review of the **EP-4.3.3-2 Objectives, Targets & Programs Action Plans** will include an evaluation toward the progress for achieving the tasks detailed in the **6.0 Programs Plan** section. Progress will be documented in section 6.0 and 7.0 in accordance to the **EP-4.5.1-1 Monitoring & Measurement procedure**. If there is a failure to meet the **EP-4.3.3-2 Objectives, Targets & Programs Action Plans**, the Environmental Management Representative will evaluate and document the root cause of the nonconformance and take the required action to keep the program on track. The root cause and actions taken will be tracked and carried out in accordance to the **EP-4.5.3-1 Nonconformity, Corrective & Preventive Action procedure**.
- 5.3.6 Upon completion of a review, the **EP-4.3.3-2 Objectives, Targets & Programs Action Plans** documents will be saved as a record. The saved documents will include a record of the review and a record of the **EP-4.3.3-2 Objectives, Targets & Programs Action Plans** in its current state. The record retention time is prescribed by the associated legal or non-regulatory requirements and should be listed in the **EP-4.5.4-1 Control of Records procedure**. If no record retention time is associated with the **EP-4.3.3-2 Objectives, Targets & Programs Action Plans** and the review, the record will be retained for at least 5 years.

#### 6.0 References / Related Documents

- 6.1 EP-4.3.1-1 Environmental Aspects procedure
- 6.2 EP-4.3.2-1 Legal & Other Requirements procedure
- 6.3 EP-4.3.3-2 Objectives, Targets & Programs Action Plans
- 6.4 EP-4.4.5-1 Control of Documents procedure
- 6.5 EP-4.4.4-2 EMS Related Definitions procedure
- 6.6 EP-4.5.4-1 Control of Records procedure
- 6.7 EP-4.5.1-1 Monitoring & Measurement procedure
- 6.8 EP-4.5.3-1 Nonconformity, Corrective & Preventive Action procedure
- 6.9 EP-4.6-1 Management Review procedure



Person resp	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

**EMS Document**

**ED 4.3.3-2 Objective & Target Action Plan**

<b>Document Name:</b> Reduction of Waste Action Plan and Pollution Prevention	<b>Facility Affected:</b> Maintenance Facility
<b>Document No:</b> ED 4.3.3 – AP#001	<b>Relevant Process:</b> Storage and shipment of wastes, and Maintenance Activities
<b>Start Date:</b> 07/01/2009	<b>Related Significant Aspect or Legal and Other Requirement:</b>
<b>Date Fully Completed:</b>	Waste Management

<b>1.0</b>	<b>Person Responsible for Overall Action Plan:</b> Steve Alvarez, Facility Manager
<b>2.0</b>	<b>Goal Statement:</b> 5% reduction in the amount of waste generated during 2009 – 2010 by improving, training and educating facility employees on the proper handling of wastes generated at the Maintenance Facility. In addition, zero spill during 2009 – 2010 by implementing the Spill Prevention, Control and Countermeasure (SPCC) Plan, and conducting training. To develop housekeeping practices and records that goes beyond compliance.
<b>3.0</b>	<b>Objective:</b> Reduce the amount of waste generated and prevent any spill
<b>4.0</b>	<b>Measurable Target and completion date:</b> Reduce by 5% the amount of waste generated and prevent any spill by December 31, 2010.
<b>5.0</b>	<b>Strategy:</b> To establish, implement and maintain the Reduction of Waste Action and Pollution Prevention Plans by establishing baselines, evaluating waste streams, documenting processes and training employees.

**6.0 Program Plan**

Task	Responsible Individual	Implementation Schedule	Date Task Completed	Comments
Establish a baseline by reviewing the past two years manifests and identify types & quantities of waste generated.	F. Wright and S. Alvarez	June 8, 2009	11/01/2009	Baseline list may need to be adjusted based on facility audit.
Evaluate each waste stream for reduction, reuse, and recycling of waste by 5% from baseline. Review findings with the EMS team by 06/18/09 to determine methods for reduction.	A. Sharifi	06/01/2009 to 06/18/2009	11/01/2009	See EMS Team meeting minutes from 6/18/09 for additional details regarding methods discussed.



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Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

**EMS Document**

**ED 4.3.3-2 Objective & Target Action Plan**

Task	Responsible Individual	Implementation Schedule	Date Task Completed	Comments
Begin awareness and operational training for affected employees relating to this action plan for methods of reducing waste generation.	S. Alvarez	Start training on 7/1/09 and complete on <b>04/15/2010</b>		EMS Team members A. Worku and A. Sharifi will assist with the EMS Awareness training. All training will be coordinated with the training department.
a) Reduce waste generation by implementing an Aerosol Compliant System and tight control with strict standard operating procedures.	S. Alvarez	Complete by 12/30/2009	09/01/2009	
b) Reduce waste generation by implementing a Light Bulb/Ballast Compressor (i.e., E-Lampinator) and tight control with strict standard operating procedures.	S. Alvarez	Complete by 06/30/2009	09/01/2009	
c) Reduce/Eliminate Used Oil discharges by implementing Spill Prevention, Control and Countermeasure (SPCC) plan and Best Management Practices. In addition, reduce total generation of used oil by purchasing new trains that require less maintenance.	S. Alvarez / A. Sharifi	Complete by 12/31/2009	09/01/2009	
d) Reduce/Eliminate Fresh Oil discharges by implementing Spill Prevention, Control and Countermeasure (SPCC) plan and Best Management Practices. In addition, reduce total generation of fresh oil by purchasing new trains that require less maintenance.	S. Alvarez	Complete by 12/31/2009	On going	
e) Proper management of Chlorofluorocarbons (CFCs) including refrigerants, coolants, and freon through servicing, and documenting all CFCs that are removed from a refrigeration unit for recharging or disposal. In addition, reduce total generation of CFCs by purchasing new trains that require less maintenance.	S. Alvarez	Complete by 12/31/2009	On going	



Person resp	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

## EMS Document

## ED 4.3.3-2 Objective &amp; Target Action Plan

Task	Responsible Individual	Implementation Schedule	Date Task Completed	Comments
f) Reduce tire waste generation by acquiring tires with longer useful life and/or recycling	S. Alvarez	Complete by 12/31/2009	On going	
g) Reduce/Eliminate industrial waste discharges by implementing Spill Prevention, Control and Countermeasure (SPCC) plan and Best Management Practices.	S. Alvarez	Complete by 12/31/2009	On going	
h) Reduce generation of used rags and cotton gloves increasing the useful life of rags/cotton gloves, implementing better tracking system and purchasing new trains that require less maintenance.	S. Alvarez	Complete by 12/31/2009	On going	
i) Reduce used batteries generation by implementing tight control with strict standard operating procedures (i.e., one on one exchange) and acquiring rechargeable batteries that require less recycling and disposal.	S. Alvarez	Complete by 12/31/2009	On going	
j) Reduce shop and office recyclables (i.e., paper and cardboard) implementing new recycling equipment and more electronic communication.	S. Alvarez	Complete by 12/31/2009	On going	
Evaluation of work instructions (SOPs) relating to this action plan. Have written SOPs in place, and reviewed by the EMS Team for possible revisions as needed.	S. Alvarez and F. Wright	Complete by 10/30/2009	02/05/2010	SOPs must be completed, reviewed and approved for the employee training by <b>04/15/2010</b>
Measure quarterly waste generation to track progress toward this action plan and present to the EMS Team.	S. Alvarez and F. Wright	Manifests, Weekly Tracking and Inspections	02/25/2010	Tracking records and inspection records kept in the Safety Department.
Prepare and present a semi-annual progress reports on this action plan for the scheduled Management Review meetings.	S. Alvarez, F. Wright, and A. Sharifi	Prior to each scheduled meeting.	02/25/2010	Steve will gather the necessary information from the responsible individuals for each task.



Person resp	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

**EMS Document**

**ED 4.3.3-2 Objective & Target Action Plan**

7.0	<b>Monitoring and Measurement Activities and Frequency:</b> The aggregate quantity of waste generated and/or recycled in pounds is reflected on the manifests. These records are kept by the Warehouse Supervisor. Weekly Tracking records and inspection records are maintained by the Facility Manager. A summary of this information will be given to A. Sharifi.
8.0	<b>Reference to Related Procedures/Work Instructions/Tracking Spreadsheets:</b> <ul style="list-style-type: none"> <li>• Manifests</li> <li>• Weekly Tracking Forms</li> <li>• Inspection Report Form</li> <li>• Disposal/Recycling of Waste Products SOPs</li> </ul>
9.0	<b>Training Needs:</b> <ul style="list-style-type: none"> <li>• Employee New Hire Orientation Program</li> <li>• EMS Awareness Training Program</li> <li>• Operational Control Training on SOPs for Waste</li> </ul>
10.0	<b>Environmental Policy Commitment:</b> Reduce waste and pollution prevention as stated in the Environmental Policy.
11.0	<b>Importance Relative to other Objective &amp; Target Action Plans:</b> EMS initiative to standardize waste management and pollution prevention - Objective & Target Action Plan for electricity usage reduction (ED 4.3.2 – AP – 002)
12.0	<b>Comments regarding current progress toward completion:</b> At the 6/18/2009 bi-weekly meeting, the EMS Team discussed tracking progress on the tasks which are on target for completion.
13.0	<b>Management Review Dates:</b> 06/18/2009
14.0	<b>Has Senior Management approved the resources necessary to implement this Objective and Target Action Plan?</b> Yes
15.0	<b>Date of Senior Management approval:</b> 02/18/2010

**13.0 Revision Table**

Rev. No.	Date	Revised by	Description
1	02/10/2010	Akbar Sharifi, P.E.	Reviewed and updated action plan



Person resp	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

**EMS Document**

**ED 4.3.3-2 Objective & Target Action Plan**

<b>Document Name:</b> Reduction of Electric Use	<b>Facility Affected:</b> Maintenance Facility and Various Stations
<b>Document No:</b> ED 4.3.2 – AP#002	<b>Relevant Process:</b> Facility Electricity System
<b>Start Date:</b> 07/01/2009	<b>Related Significant Aspect or Legal and Other Requirement:</b>
<b>Date Fully Completed:</b>	Energy Efficiency

<b>1.0</b>	<b>Person Responsible for Overall Action Plan:</b> Steve Alvarez, Facility Manager
<b>2.0</b>	<b>Goal Statement:</b> 5% reduction in the amount of electricity use during 2009 – 2010 by improving, training and educating facility employees on the proper energy efficiency management. In addition, replace all existing light bulbs with energy efficient bulbs.
<b>3.0</b>	<b>Objective:</b> Reduce energy use
<b>4.0</b>	<b>Measurable Target and completion date:</b> Reduce by 5% the electricity use by December 31, 2010.
<b>5.0</b>	<b>Strategy:</b> To establish, implement and maintain the reduction of electricity by establishing baselines, replacing light bulbs and other equipment with energy efficient bulbs and equipment, and training employees.

**6.0 Program Plan**

Task	Responsible Individual	Implementation Schedule	Date Task Completed	Comments
Establish a baseline by reviewing the past two years of bills associated with electricity use.	S. Chayt	June 8, 2009	July 16, 2009	See EMS Team meeting minutes from 6/18/2009.
Evaluate options for reduction of electricity use by 5% from baseline. Review findings with the EMS team by 07/2/09 to determine methods for reduction.	A. Sharifi	06/18/2009 to 07/02/2009	06/18/2009	See EMS Team meeting minutes from 6/18/09 for additional details regarding methods discussed.



Person resp	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

**EMS Document**

**ED 4.3.3-2 Objective & Target Action Plan**

Task	Responsible Individual	Implementation Schedule	Date Task Completed	Comments
Begin awareness and operational training for affected employees relating to this action plan for methods of reducing energy use.	S. Alvarez, S. Chayt, and F. Wright	Start training on 8/1/09 and complete on <b>04/15/2010</b>		EMS Team member A. Worku and A. Sharifi will assist with the EMS Awareness training. All training will be coordinated with the training department.
Evaluation of work instructions (SOPs) relating to this action plan. Have written SOPs in place, and reviewed by the EMS Team for possible revisions as needed.	S. Alvarez, S. Chayt, and F. Wright	Complete by 02/25/2010		SOPs must be completed, reviewed and approved for the employee training by 10/30/2009
Measure semi-annual electricity use to track progress toward this action plan and present to the EMS Team.	S. Chayt	Semi-Annual Tracking and Inspections		Tracking records and inspection records kept in the Maintenance Department.
Prepare and present a semi-annual progress reports on this action plan for the scheduled Management Review meetings.	S. Alvarez and S. Chayt	Prior to each scheduled meeting.		Steve will gather the necessary information from the responsible individuals for each task.



Person resp	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		

**EMS Document**

**ED 4.3.3-2 Objective & Target Action Plan**

7.0	<b>Monitoring and Measurement Activities and Frequency:</b> The electricity usage will be reflected in the utility bill. These records are kept by the Maintenance Manager. Monthly Tracking records and inspection records are maintained by the Facility Manager. A summary of this information will be given to A. Sharifi.
8.0	<b>Reference to Related Procedures/Work Instructions/Tracking Spreadsheets:</b> <ul style="list-style-type: none"> <li>Electricity Bills</li> <li>Tracking Forms (to be developed)</li> <li>Inspection Report Form (to be developed)</li> </ul>
9.0	<b>Training Needs:</b> <ul style="list-style-type: none"> <li>Employee New Hire Orientation Program</li> <li>EMS Awareness Training Program</li> <li>Operational Control Training on SOPs for Energy Efficiency</li> </ul>
10.0	<b>Environmental Policy Commitment:</b> Reduce waste as stated in the Environmental Policy.
11.0	<b>Importance Relative to other Objective &amp; Target Action Plans:</b> EMS initiative to develop energy management plan
12.0	<b>Comments regarding current progress toward completion:</b> At the 6/18/2009 bi-weekly meeting, the EMS Team discussed tracking progress on the tasks which are on target for completion.
13.0	<b>Management Review Dates:</b> 6/18/2009
14.0	<b>Has Senior Management approved the resources necessary to implement this Objective and Target Action Plan?</b> Yes
15.0	<b>Date of Senior Management approval:</b> 2/18/2010

**13.0 Revision Table**

Rev. No.	Date	Revised by	Description
1	02/10/2010	Akbar Sharifi, P.E.	Reviewed and updated action plan.

# **Attachment E**

## Resources, Roles, Responsibility, and Authority Procedure and Matrix

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	3/20/09	02/10/2010		

EMS Procedure

**EP-4.4.1-1 Resources, Roles, Responsibility & Authority**

<b>Person responsible:</b> Akbar Sharifi, P.E.		
<b>Area of application:</b> Miami-Dade Transit (MDT)		
<b>Document location:</b> MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b> 3/21/09		
<b>Revisions</b>		
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>
001	02/10/10	Reviewed and updated Procedure
<b>Recurring action items</b>		
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>
1. Evaluate and update	Akbar Sharifi, P.E.	Annually

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	3/20/09	02/10/2010		

## EMS Procedure

### EP-4.4.1-1 Resources, Roles, Responsibility & Authority

#### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish practices related to the definition, documentation and communication of resources, roles, responsibilities and authorities within the environmental management system (EMS) to ensure effective control of the environmental performance associated with the MDT's Metromover Maintenance Facility.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.4.1 *Resources, roles, responsibility and authority* in the ISO 14001:2004 standard and covers operations of the Metromover Maintenance Facility.
- 2.2 This procedure describes management's responsibility to ensure the appropriate resources for the day-to-day tasks associated with the establishment, implementation and maintenance of the EMS for MDT and Metromover Maintenance Facility.

#### 3.0 Responsibility

- 3.1 It is the responsibility of the Miami Dade Transit and Metromover Maintenance Facility **Senior Management** to assign qualified individuals to fulfill the following duties:
  - 3.1.1 Assigning the necessary resources to ensure the implementation and control of the EMS. Resources include the consideration of infrastructure, information systems, training, technology, financial, human resources and resources specific to operations.
  - 3.1.2 Reviewing and approving the procedure and related documents for the element 4.4.1 *Resources, roles, responsibility and authority* in the ISO standard.
  - 3.1.3 Assigning a specific EMS Management Representative(s) with sufficient authority, awareness, competence and resources to oversee the responsibilities of the EMS. This will include reporting to Senior Management the EMS performance, improvements, and recommendations. The MDT and Metromover Maintenance Facility EMS Management Representative is designated as (Manager of Environmental Protection) and is documented in **ED-4.4.1-2 Roles & Responsibility Matrix**.
- 3.2 The **EMS Management Representative** is responsible for defining, documenting and communicating roles and responsibilities to ensure development, implementation and maintenance of the EMS and aligning its elements with existing management structure and responsibilities. The EMS Management Representative will also be responsible for the following:
  - 3.2.1 Keeping Senior Management informed on the progress, implementation and maintenance of the MDT and Metromover Maintenance Facility EMS by reporting the EMS performance and improvements. This includes collecting the necessary information and making appropriate recommendations to allow Senior Management to evaluate the EMS during a Management



Verification	Originator	Revised	Approved	Issued
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Date	3/20/09	02/10/2010		

## EMS Procedure

### EP-4.4.1-1 Resources, Roles, Responsibility & Authority

Review as documented in **EP-4.6-1 Management Review** procedure.

- 3.2.2 Ensuring that a current copy of the EMS is maintained in the MDT's main office and Mover Facility's control room.
- 3.2.3 Development and maintenance of the procedure and related documents for the element 4.4.1 *Resources, roles, responsibility and authority* in the ISO standard. Refer to **ED- 4.4.1-2 Roles & Responsibility Matrix**.
- 3.2.4 Communicating the responsibilities and authorities to employees or persons working for or on behalf of the MDT and Metromover Maintenance Facility whose work relates to the EMS. Refer to **EP-4.4.2-1 Competence, Training and Awareness** procedure.
- 3.3 The **EMS Team** will assist the EMS Management Representative (Manager of Environmental Protection) in the development, identification requirements for this procedure and related documents addressing roles and responsibilities in the MDT and Metromover Maintenance Facility's EMS.

#### 4.0 Definitions

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

#### 5.0 Process

- 5.1 The Miami Dade Transit and the Metromover Maintenance Facility has defined and documented the roles, responsibilities and authorities for effective environmental management in this procedure and the **ED- 4.4.1-2 Roles & Responsibility Matrix**. Further environmental responsibilities are documented in the following:
  - 5.1.1 Organizational charts, job descriptions and annual employee evaluations.
  - 5.1.2 Specific responsibilities associated with the EMS *Objectives, Targets and Programs* will be identified and documented in the **EP-4.3.3-1 Objectives, Targets and Programs** procedure and related documents.
  - 5.1.3 The above listed documents are updated annually, or as appropriate.
- 5.2 All employees should know who is responsible for what function, and the key environmental responsibilities should be communicated to the appropriate personnel.
- 5.3 The identification and documentation of environmental responsibilities will be developed and maintained by the EMS Management Representative with the assistance of the EMS Team or designated members.



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	3/20/09	02/10/2010		

## EMS Procedure

### EP-4.4.1-1 Resources, Roles, Responsibility & Authority

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#### 6.0 References / Related Documents

- 6.1 Organizational Charts
- 6.2 Meeting Minutes, Agendas and Attendance Sign in Sheets
- 6.3 ED-4.4.1-2 Roles & Responsibility Matrix
- 6.4 EP-4.6-1 Management Review procedure
- 6.5 EP-4.4.2-1 Competence, Training & Awareness procedure
- 6.6 EP-4.3.3-1 Objectives, Targets and Programs procedure

<b>Miami-Dade Transit</b>	<b>Prepared by</b>	<b>Reviewed by</b>	<b>Approved by</b>	
	Akbar Sharifi, P.E.	EMS Team		<i>Initial Document Date: 5/29/2009</i>
<b>Environmental Management System</b>				
<b>ED 4.4.1-2 Roles and Responsibility Matrix</b>				

<b>Title/Position/Role/</b>	<b>Responsibilities in the Environmental Management System (EMS)</b>
<b>Director</b> * <i>Mr. Harpal Kapoor, P.E.</i>	<ul style="list-style-type: none"> <li>• Endorses the MDT Corporate Environmental Policy.</li> <li>• Assures all department areas are committed to continual improvement in environmental performance.</li> <li>• Supports the development and continued implementation of the overall EMS program.</li> <li>• Participates in a Management Review of MDT's EMS.</li> </ul>
<b>Manager of Materials</b> * <i>Mr. Freeman Wright</i>	<ul style="list-style-type: none"> <li>• Documents procedures and Standard Operational Procedures (SOPs) pertaining to operations (handling, shipping and receiving, and hazardous waste handling).</li> <li>• Assures delivery, transport, handling and storage of all materials on-site is done accordingly to regulatory guidelines, directives, and EMS requirements.</li> </ul>
<b>Manager of Training</b> * <i>Ms. Vivian Urchdorf</i>	<ul style="list-style-type: none"> <li>• Ensures complete training of employees in the environmental policy and SOPs as specified in the training procedures.</li> <li>• Collaborates with the EMS Coordinator on the development of training needs and programs.</li> <li>• Facilitates internal communication of EMS elements according to the Communication Procedure. Coordinates with Security to facilitate external communication of EMS elements according to the Communication Procedure.</li> </ul>
<b>Manager of Environmental Protection</b> ** *** <i>Mr. Akbar Sharifi, P.E.</i>	<ul style="list-style-type: none"> <li>• Develops, implements, and maintains MDT's EMS.</li> <li>• Ensures the Environmental Office activities meet the environmental regulations, permit conditions, terms, and policies.</li> <li>• Ensures EMS Procedures and SOPs are established, maintained, and followed.</li> <li>• Reviews non-conformances generated by the internal audit process.</li> <li>• Implements and verifies corrective and preventive action plans when required.</li> <li>• Communicates the status of the EMS to the Sr. Mgmt. for the purposes of improvement.</li> <li>• Ensures overall maintenance of the MDT's EMS, including the update and maintenance of: <ul style="list-style-type: none"> <li>➤ The Environmental Policy</li> <li>➤ Environmental Aspects and Significant Aspects</li> <li>➤ Maintenance of legal and other requirements</li> <li>➤ Evidence of progress towards objectives and targets</li> <li>➤ Environmental Management Programs (EMPs)</li> <li>➤ Environmental Department procedures and SOPs</li> <li>➤ Environmental Compliance Manual</li> <li>➤ Pollution Prevention Plan</li> <li>➤ Forms and environmental records</li> </ul> </li> </ul>

**KEY ROLES**

\* SENIOR MANAGEMENT STAFF

\*\* MANAGEMENT REPRESENTATIVE

\*\*\* ENV TEAM

*UNCONTROLLED WHEN PRINTED – THIS PRINTED COPY WILL NOT BE KEPT UP TO DATE.  
VERIFY LATEST REVISIONS DATE ELECTRONICALLY IN EMS SOFTWARE.*

<b>Miami-Dade Transit</b>	<b>Prepared by</b>	<b>Reviewed by</b>	<b>Approved by</b>	
	Akbar Sharifi, P.E.	EMS Team		<i>Initial Document Date: 5/29/2009</i>
<b>Environmental Management System</b>				
<b>ED 4.4.1-2 Roles and Responsibility Matrix</b>				

<b>Title/Position/Role/</b>	<b>Responsibilities in the Environmental Management System (EMS)</b>
<b>Facilities Maintenance Manager</b> ** <i>Mr. Mario Rodriguez</i> <i>Mr. Steve Chayt</i>	<ul style="list-style-type: none"> <li>Ensures the Facility Maintenance department activities meet the environmental regulations, permit conditions, terms and policies.</li> <li>Ensures the EMS SOPs are established, maintained, and followed.</li> </ul>
<b>Supervisors</b> ** *** <i>Mr. Steve Alvarez</i>	<ul style="list-style-type: none"> <li>Communicates employee feedback on the Environmental Policy.</li> <li>Trains and communicates pertinent SOPs to the employees of their respective areas.</li> <li>Ensures employees in their respective areas have the training and tools to meet the requirements of the procedures.</li> </ul>
<b>Employees</b>	<ul style="list-style-type: none"> <li>Performs assigned tasks in accordance with the regulations, the Environmental Policy, pertinent procedures and SOPs.</li> <li>Communicates concerns to the supervisor regarding the performance of tasks, in accordance to the above listed requirements.</li> </ul>
<b>Internal Auditors / Audit Team</b> *** <i>Mr. Akbar Sharifi, P.E.</i> <i>Mr. Adien Toledo</i>	<ul style="list-style-type: none"> <li>Performs audits according to a specific audit plan or schedule.</li> <li>Conducts internal audits of the MDT, comparing against procedural requirements and the ISO 14001 standard.</li> <li>Reports the results of the audits to the Manager of Safety and Environmental Protection.</li> </ul>
<b>Environmental Team</b> *** <i>Mr. Akbar Sharifi, P.E.</i> <i>Mr. Adien Toledo</i>	<ul style="list-style-type: none"> <li>Represents each operational area during the Environmental Team Meetings.</li> <li>Identifies MDT's Environmental Aspects, Significant Aspects, Objectives and Targets.</li> <li>Facilitates the initial drafts of MDT's procedures, SOPs and other elements of the EMS.</li> </ul>
<b>Public Safety Officer</b> ** <i>Mr. Eric Muntan</i>	<ul style="list-style-type: none"> <li>Notifies the Manager of Environmental Protection and Manager of Security in reference to environmental emergencies.</li> <li>Transfers external calls to the Environmental Office in reference to environmental inquiries and complaints.</li> </ul>
<b>Manager of Construction</b> ** *** <i>Mr. Surinder Sahota, P.E.</i>	<ul style="list-style-type: none"> <li>Ensures construction activities meet the environmental regulations permit conditions, terms and policies.</li> <li>Ensures the EMS procedures are established, maintained, and followed.</li> </ul>
<b>Manager of Contract Procurement</b> ** <i>Mr. Fred Shields</i>	<ul style="list-style-type: none"> <li>Ensures contractor support of EMS policies through contractual obligations.</li> <li>Documents SOPs pertaining to purchasing materials and/or services with environmental impacts.</li> </ul>

**KEY ROLES**

- \* SENIOR MANAGEMENT STAFF
- \*\* MANAGEMENT REPRESENTATIVE
- \*\*\* ENV TEAM

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**Attachment F**  
Competence, Training, and Awareness Procedure,  
and Training Plan

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	02/10/2010		
Date	09/24/2009			

## Metromover Maintenance Facility

### EMS Procedure

### EP-4.4.2-1 Competence, Training & Awareness Procedure

<b>Person responsible:</b>	Akbar Sharifi, P.E. and Steve Alvarez		
<b>Area of application:</b>	Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b>	MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b>	09/24/2009		
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/10	Reviewed and updated procedure	
<b>Recurring action items</b>			
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>	
1. Develop and evaluate annual training plan	Akbar Sharifi and Steve Alvarez	Annually	
2. Provide training and refresher training as appropriate	Steve Alvarez and Vivian Urchdorf	On going	
3. Coordinate new employee training with Human Resources	Steve Alvarez and Vivian Urchdorf	Annually or as needed	

### Procedure Index

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	02/10/2010		
Date	09/24/2009			

## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.2-1 Competence, Training & Awareness Procedure

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##### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish practices related to environmental *Competence, Training and Awareness* for the Miami-Dade Transit (MDT) Metromover Facility.

##### 2.0 Scope

- 2.1 This procedure is responsive to element 4.4.2, *Competence, Training and Awareness*, of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 This procedure pertains to all persons working for or on behalf of the MDT Metromover Facility and the decisions that will influence activities, products and services of the facility.
- 2.3 Persons working for or on behalf of the MDT Metromover Facility includes all full-time, part-time and casual employees employed at the MDT Metromover Facility as well as contract personnel working on their behalf or providing services.
- 2.4 The design and delivery of EMS training programs will ensure that personnel have the required competencies to effectively carry out the tasks and responsibilities associated with job descriptions defined in **EP-4.4.1-1 Resources, Roles, Responsibilities & Authority Procedure**.

##### 3.0 Responsibility

- 3.1 The **EMS Management Representative** is responsible for developing and maintaining the **ED-4.4.2-3 Annual EMS Training Plan**. The Annual EMS Training Plan will ensure employee awareness, identify training needs, and maintain the training schedule. The training will be coordinated with the **Human Resources** (HR) department.
- 3.2 The **EMS Management Representative**, the **EMS Team** and the **HR department** are responsible for evaluating and updating the Annual EMS Training Plan's: training materials and schedule at least annually to ensure its continuing adequacy.
- 3.3 The **HR department** will implement the Annual EMS Training Plan by **April 15<sup>th</sup>** of each year. The HR department is responsible for coordinating with Supervisors the scheduling and conducting of environmental training.
- 3.4 **Supervisors** shall determine competence for all employees whose jobs are associated with significant aspects. Only competent employees will be permitted to do work that is associated with significant aspects. When determining competence Supervisors shall consider factors such as training, education, experience and observation.
- 3.5 The **HR departments** will maintain the training records for employees.



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	02/10/2010		
Date	09/24/2009			

## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.2-1 Competence, Training & Awareness Procedure

- 3.6 The **Purchasing department** will maintain records of qualification/competencies and training contacts for MDT Metromover Facility's contractors, suppliers and vendors.

#### 4.0 Definitions

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

#### 5.0 Process

- 5.1 **The Annual EMS Training Plan will be divided into four categories:**

- 5.1.1 **General EMS Awareness** - basic EMS training including New Employee Orientation;
- 5.1.2 **Job -Specific EMS Training** - Significant Aspects & Operational Control (Work Instructions);
- 5.1.3 **Emergency and Regulatory-Required Training** - Responders or apt to be exposed to an emergency situation
- 5.1.4 **Contractor EMS Training** – for approved Contractors/Suppliers/Vendors.

- 5.2 **General EMS Awareness**

- 5.2.1 The initial EMS **General EMS Awareness** training is given to all employees of the MDT Metromover Facility. The EMS Management Representative and the HR department will coordinate and conduct the training.
- 5.2.2 New employees of the MDT Metromover Facility are given **General EMS Awareness** training as part of the new employee orientation.
- 5.2.3 On going **General EMS Awareness** training will be conducted according to the Annual EMS Training Plan and will include training on the MDT Metromover Facility's:
  - a) *Environmental Policy*;
  - b) significant *Aspects* and environmental impacts of work activities;
  - c) relevant *Objectives, Targets and Programs*;
  - d) roles and responsibilities;
  - e) general EMS performance;
  - f) environmental benefits of improved personal performance;
  - g) potential consequences of departure from operating procedures;
  - h) emergency preparedness and response requirements.

- 5.3 **Job-Specific EMS Training**

- 5.3.1 All employees whose work may create a significant impact on the environment must have



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Initials	Akbar Sharifi, P.E.	02/10/2010		
Date	09/24/2009			

## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.2-1 Competence, Training & Awareness Procedure

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the necessary skills, experience, and awareness to perform their duties in a manner that conforms to the *Environmental Policy*, Procedures and Work Instructions, under normal, abnormal and emergency working conditions.

- 5.3.2 **Job-Specific EMS Training** for *Operational Control* (Work Instructions) is monitored and tracked by the EMS Management Representative and coordinated with the HR department.
- 5.3.3 Supervisors will conduct **Job-Specific EMS Training** on the Work Instructions for the employees under their supervision. The Supervisors will train their employees using training subject matter and material approved and/or provided by the EMS Management Representative. Supervisors will ensure that **Job-Specific EMS Training** is effective and relevant for employees whose work may create a significant environmental impact.
- 5.3.4 Supervisors shall determine and schedule **Job-Specific EMS Training** for their employees upon initial assignment, reassignment to new duties and responsibilities, assignment of new tasks, or annually as appropriate.
- 5.4 **Emergency and Regulatory-Required Training**
  - 5.4.1 All employees who are directly involved in responding to an emergency situation or require regulatory training must have the necessary skills, experience, and awareness to carry out the environmental activity.
  - 5.4.2 Employees who are directly involved in responding to an emergency situation or who are more apt to be exposed to an emergency situation, as identified in the **EP-4.4.7-1 Emergency Preparedness and Response Procedure**, will receive the necessary and required training per the specific emergency plans.
- 5.5 **Contractor EMS Training**
  - 5.5.1 Approved contractors, suppliers and vendors working on projects that involve significant environmental aspects on behalf of the MDT Metromover Facility will be briefed on the MDT Metromover Facility EMS; *Environmental Policy*; relevant *Objectives, Targets and Programs*; and appropriate Work Instructions. Contractor communication, briefings and training will be documented per **EP-4.4.6-2 Contractor Management Procedure**.
- 5.6 **Competence**
  - 5.6.1 Supervisors will determine the competence of employees based upon their observation and evaluation of the employee's ability to carry out environmental management functions.
  - 5.6.2 A review of the training programs should not be completed until the competencies of the employees, who completed the training program, can be adequately observed. Whenever possible, employee competencies will be evaluated in the work setting.



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Initials	Akbar Sharifi, P.E.	02/10/2010		
Date	09/24/2009			

## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.2-1 Competence, Training & Awareness Procedure

- 5.6.3 As revisions and changes are required for EMS procedures and Work Instructions, the EMS Management Representative will revise the Annual EMS Training Plan as necessary. Training on the revisions and changes will be directed by the EMS Management Representative in an appropriate time frame.
- 5.6.4 Reassigned employees from other departments receive **Job-Specific EMS Training** from the Supervisor as part of their new assignment if needed.

#### 5.7 Training Records

- 5.7.1 All EMS training for the MDT Metromover Facility employees will be documented by use of the **ED-4.4.2-2 (F) Training Sign-in Sheet**. The Supervisor conducting the training will forward the completed sign-in sheets to the EMS Management Representative. The original sign-in sheets will be maintained by the EMS Management Representative as EMS records. Copies will be forwarded to the HR department for a complete employee training history.
- 5.7.2 The EMS Training records will be audited as per **EP-4.5.5-1 Internal Audit Procedure**.

### 6.0 References / Related Documents

- 6.1 Individual Employee Training Records maintained by EMS Management Representative
- 6.2 EP-4.4.7-1 Emergency Preparedness and Response Procedure
- 6.3 EP-4.4.1-1 Resources, Roles, Responsibilities & Authority Procedure
- 6.4 EP-4.4.6-2 Contractor Management Procedure
- 6.5 ED-4.4.2-2 (F) Training Sign-in Sheet
- 6.6 EP-4.5.5-1 Internal Audit Procedure
- 6.7 ED-4.4.2-3 Annual EMS Training Plan



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	09/24/2009	02/10/2010		

**ED-4.4.2-3 Annual EMS Training Plan**

Training	Personnel						Timing	Records
	Administration	Maintenance	Facilities	Vendors				
<b>General EMS Awareness</b>								
1	EMS requirements refer to EP-4.4.2-1 Training Procedure in sec. 5.2.3						Initial implementation of EMS. Determine need for re-fresher annually.	Personnel records, Sign-in sheets, Agenda, Trainers notes, Meeting minutes
2	Significant Aspects						Same as above	Same as above
3	New Employee Orientation						When person is initially hired	Same as above
<b>Job-Specific EMS Training</b>								
4	Management of aerosol cans						Prior to assuming job responsibilities; then periodically	Personnel records, Sign-in sheets, Agenda, Trainers notes, Meeting minutes
5	Management of fluorescent tube and ballast						Same as above	Same as above
6	Management of used oil						Same as above	Same as above
7	Management of fresh oil						Same as above	Same as above



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Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	09/24/2009	02/10/2010		

**ED-4.4.2-3 Annual EMS Training Plan**

	Training	Personnel					Timing	Records
		Administration	Maintenance	Facilities	Vendors			
8	Management of chlorofluorocarbons (i.e., refrigerant/coolant/Freon)						Same as above	Same as above
9	Maintenance of Facility Air Conditioners						Same as above	Same as above
10	Management of used tires						Same as above	Same as above
11	Management of shop rags and cotton gloves							
12	Management of used batteries							
13	EMS Electronic Access						Same as above	Same as above
14	Train-the Trainer						Same as above	Same as above
	<b>Emergency and Regulatory-Required Training</b>							
15	Management of industrial wastewater (i.e., oil/water separator)						Prior to assuming job responsibilities; annual update	Statement of training, Personnel records, Sign-in sheets
16	Others						Same as above	Same as above



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Date	09/24/2009	02/10/2010		

**ED-4.4.2-3 Annual EMS Training Plan**

Training	Personnel						Timing	Records
	Administration	Maintenance	Facilities	Vendors				
<b>Contractor EMS Training</b>								
17 EMS Requirements: Env. Policy; Objectives & Targets; Work Instructions. Refer to EP-4.4.6-2 Contractor Management Procedure							Evaluate training needs based on activities	Refer to ED-4.4.6-3 Checklist, and ED-4.4.6-4 Activities statement

**Attachment G**  
Communication Procedure and Communication  
Occurrence Template

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	08/27/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.3-1 Communication**

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<b>Person responsible:</b>	EMS Team		
<b>Area of application:</b>	Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b>	MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b>	08/27/2009		
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/2010	Reviewed and updated procedure	
<b>Recurring action items</b>			
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>	
1. Ensure EMS contact information for inquiry and complaint protocols from employees and general public are accessible and available.	EMS Team	As needed	
2. Ensure communication procedure for directing external communication is followed and information is provided to the EMS Management Representative.	Akbar Sharifi and Steve Alvarez	Annually or as needed	

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	08/27/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.4.3-1 Communication**

**1.0 Purpose**

- 1.1 The purpose of this procedure is to establish **internal** and **external** communication practices related to environmental issues for the Miami-Dade Transit (MDT) Metromover Facility.

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.4.3 Communication, of the ISO 14001:2004 standard, and covers operations of the MDT Metromover Facility.
- 2.2 This procedure has been written to facilitate two-way communication between the MDT Metromover Facility's entire employee body, key external stakeholders and its EMS personnel, as well as to establish and maintain communication channels between the various management levels and departments.
- 2.3 This procedure will document the decision whether to communicate externally about the significant environmental aspects for the MDT Metromover Facility and establish a method for this external communication.

**3.0 Responsibility**

- 3.1 The **EMS Management Representative** is responsible for notifying public authorities regarding compliance issues, emergency planning, compliance violations and emergencies.
- 3.2 The **EMS Management Representative** is responsible for maintaining external communication and internal communication folders within the EMS. This responsibility includes documenting and maintaining **ED- 4.4.3-2 (F) Environmental Communication Occurrence** forms from interested parties.
- 3.3 The **EMS Team** is responsible for coordinating the implementation and maintenance of all EMS channels of communication. For example, keeping the EMS bulletin board and Internet/Intranet pages up to date and submitting articles for the monthly employee newsletter.
- 3.4 Individuals on the **EMS Team** will be responsible for representing the interests of their respective departments' personnel as well as disseminating pertinent information to the departments.
- 3.5 This procedure applies to those working for or on behalf of the MDT Metromover Facility on site vendors, contractors and interested parties. This procedure considers internal and external communication pertinent to environmental management to include permanent and temporary employees of the (Facility Name), and its respective vendors and contractors.

**4.0 Definitions**



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	08/27/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.3-1 Communication**

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4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

5.1 Internal Communication

5.1.1 Suggestions, recommendations, issues, concerns, ideas or activities associated with environmental issues raised by the employees will be directed to the EMS Management Representative by the following:

- i) Supervisor
- ii) EMS Team member
- iii) Employee suggestion box
- iv) Internal e-mail system
- v) Periodic supervisor communications meetings

5.1.2 Changes or additions to the environmental policy and procedures will be communicated to the affected supervisors by the EMS Team through the e-mail system or through meetings. Supervisors will then communicate the changes to their employees through training sessions, as necessary.

5.1.3 Whenever possible, the EMS Team will use existing media to communicate internally with employees. The Internet/Intranet, employee newsletter and bulletin-boards will be used as media to communicate and post general information about the environment and the EMS, including but not limited to environmental awareness postings, eco-friendly tips, the Environmental Policy, self guided information seminars and awards.

5.2 External Communication

5.2.1 Environmental inquires and complaints communicated by interest parties should be forwarded to the MDT Metromover Facility EMS Management Representative. The EMS Management Representative will review inquiries on a case-by-case basis and document the non routine inquires in the **ED- 4.4.3-2 (F) Environmental Communication Occurrence** forms. The completed form and related documentation (attachments) will become hard copy records maintained by the EMS Management Representative. The information on the form includes:

- i) Date and time of communication



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Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	08/27/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.4.3-1 Communication**

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ii) Name, Address and Phone Number of External Party

iii) Nature of Inquiry

5.2.2 The EMS Management Representative is responsible for providing external interested parties with the *Environmental Policy* as requested in writing and verbally (if requested by telephone conversation).

5.3 Communication of **significant aspects** to external interested parties will be decided by the EMS Team and will be documented in meeting minutes.

5.4 Methods for communicating and promoting the EMS for MDT Metromover Facility will be considered and recommended to Senior Management by the EMS Team. Proactive methods will increase the effectiveness of external communication and the EMS. Methods of communication may include: informal discussions; organization open house days; focus groups, newsletters, annual (or other periodic) reports and telephone hotlines.

5.5 Emergency Communication

5.5.1 In the event of an environmental emergency or spill situation, employees are to immediately contact their supervisors. The supervisor will follow the communication protocol detailed in the **EP-4.4.7-1 Emergency Preparedness and Response Procedure including the Spill Prevention, Control and Countermeasure (SPCC) plan.**

**6.0 References / Related Documents**

6.1 ED-4.4.3-2 (F) Environmental Communication Occurrence

6.2 EP-4.4.7-1 Emergency Preparedness and Response Procedure



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.			
Date	08/27/2009			

## ED-4.4.3-2 (F) Environmental Communication Occurrence Template

Refer to EP-4.4.3-1 Communication Procedure for detailed instructions regarding this EMS form/record.	
1.0	Date and time of occurrence:
2.0	Inquiry or complaint from Name:  Phone:  Address:  e-mail:
3.0	Nature of inquiry or complaint:
4.0	Occurrence received by (internal personnel) Name:  Date and time:
5.0	Response:
6.0	Respondent (internal personnel) Name:  Date and time:
This form may be used for internal and external environmental communication. Completed forms and related attachments are records maintained in the EMS; route to the EMS Management Representative.	

# Environmental Management System



Volume 1

Issue 1

Miami-Dade Transit

May 2010

## What is an EMS?

An Environmental Management System (EMS) is a set of management processes and procedures that allows an organization to analyze, control, and reduce the environmental impact of its activities, products, and services. The basic elements of an EMS include:

- Reviewing the organization's environmental goals
- Analyzing its environmental impacts and legal requirements
- Setting environmental objectives and targets to reduce environmental impacts
- Establishing programs to meet these objectives and targets
- Monitoring and measuring the progress in achieving the objectives
- Reviewing the progress of the EMS and making improvements
- Ensuring employees' awareness and competence in environmental issues
- Insert Text here

MDT has identified the following "environmental aspects", which are MDT's activities, products, and services that can interact with the environment:

- **Aerosol Cans\***;
- **Fluorescent Tube and Ballast\***;
- **Used oil\***;
- **Fresh Oil\***;
- Chlorofluorocarbons (i.e., coolant/freon);
- Battery servicing;
- Used Tires;
- Industrial Wastewater (i.e., Oil/Water Separator);
- Shop Rags and Cotton Gloves;
- Used Batteries; and,
- Shop and Office Recyclables.

\*These are "significant environmental aspects" that can cause "significant impact" to the environment.

## EMS Principles

The EMS Model is based on the following Principles:

**Principle 1:** Commitment and Policy - An organization should define its policy and ensure commitment to its EMS.

**Principle 2:** Planning - An organization should plan to fulfill its environmental policy.

**Principle 3:** Implementation and Operation - An organization should develop the capabilities and support mechanisms to achieve its policy, objectives and targets.

**Principle 4:** Measurement and Evaluation - An organization should measure, monitor and evaluate its environmental performance.

**Principle 5:** Review and Improvement - An organization should review and continually improve its environmental management system with the objective of improving its overall performance.

### NEWS!

- FTA conducted its gap audit of the MDT's Metromover facility on March 10, 2010
- FTA will conduct its final audit on June 11, 2010
- MDT completed its SPCC and EMS training on May 20, 2010.

# Benefits of an EMS

An EMS provides tools to help manage your organization's environmental impacts efficiently and effectively and to improve environmental stewardship across the entire organization. Some of the benefits include:

- Cost savings.
- Reduced Risk.
- Increased Operational Efficiency.
- Positive External Relations and Public Image.
- Improved Communication.
- Greater Employee Stewardship.
- Shared Environmental Solutions.
- Improved Public Relations.

# Objectives and Targets

The Miami-Dade Transit (MDT) objectives and targets reflect the Environmental Policy of the organization, and are measurable, realistic, and attainable. Some of the objectives include:

**Waste Identification and Reduction**  
Objective: Properly identify and reduce waste generation by 5%

**Energy Use**  
Objective: Reduce by 5% the amount of electricity used at the Metromover facility and various stations

# Recycling Program

- ✓ Paper and Cardboard
- ✓ Light Bulbs
- ✓ Used Batteries
- ✓ Used Tires



# Elements of an EMS

- Environmental Policy
- Environmental Aspects
- Legal and Regulatory
- Objectives and Targets
- Management Programs
- Structure and Responsibility
- Training and Awareness
- Communications
- EMS Documentation
- Document Control
- Operational Control
- Emergency Preparedness
- Monitoring and Measurement

# Environmental Policy

The Miami-Dade Transit (MDT) overall environmental policy provides a roadmap for the Department to improve and protect the environment and the health and safety of our employees, customers and the general public. The Department is committed to achieving its environmental goals by utilizing sound environmental management practices. These include:

- Exceeding compliance with all applicable local, state, and federal environmental regulations through best management practices;
- Establishing waste minimization and pollution prevention programs to prevent or reduce impacts to the environment;
- Establishing management systems and controls for environmental compliance assurance and risk/liability management;
- Streamlining operations and management systems by periodically evaluating the achievement of targeted environmental objectives; and,
- Providing continuous training and communicating environmental policies and programs to employees.

The Department is committed to implementing pollution prevention programs and continually improving environmental performance to minimize environmental issues. The Environmental Policy will be communicated to all employees and available to the Public via the Department website.

<http://www.miamidade.gov/transit/EMS>

# **Attachment H**

## **Documentation Procedure and Related Definitions**

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.4-1 EMS Documentation**

<b>Person responsible:</b> Akbar Sharifi, P.E.		
<b>Area of application:</b> Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b> MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b> 06/24/2009		
<b>Revisions</b>		
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>
001	02/10/10	Reviewed and updated procedure
<b>Recurring action items</b>		
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>
1. Develop / Revise Environmental Procedures (EP)	Akbar Sharifi, P.E.	As necessary
2. Develop / Maintain document control system	Akbar Sharifi, P.E.	As necessary
3. Determine / Distribute controlled documents	Akbar Sharifi, P.E.	According to control of document procedure
4. Evaluate / Review the EMS Documentation (4.4.4) element using ED-4.4.4-3 Core EMS Documentation Checklist	Akbar Sharifi, P.E.	Annually

**Procedure Index**

- 1.0 Purpose**
- 2.0 Scope**
- 3.0 Responsibility**
- 4.0 Definitions**
- 5.0 Process**
- 6.0 References / Related Documents**



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-1 EMS Documentation

##### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish practices related to the documentation of the core elements of the environmental management system (EMS) for the Miami-Dade Transit (MDT) Metromover Facility. This procedure describes the method by which personnel understand the interaction of the environmental documents and the flow of information between various types and levels of EMS documentation.

##### 2.0 Scope

- 2.1 This procedure is responsive to element 4.4.4 Documentation, of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 This procedure describes the type of documents that the MDT Metromover Facility will establish to describe the core elements of its EMS.

##### 3.0 Responsibility

- 3.1 The MDT Metromover Facility **Senior Management**, the **EMS Management Representative** and the **EMS Team** will review and endorse the environmental procedures during a Management Review meeting.
- 3.2 The EMS Management Representative will ensure the designated environmental documents are maintained and periodically reviewed.

##### 4.0 Definitions

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**
- 4.2 **EMS documents:** refer to documents in both electronic and hardcopy that contain information pertinent to the implementation and operation of the EMS in a manner that complies with the environmental policy and the legal and other requirements. Records are address in the Records procedure.

##### 5.0 Process

- 5.1 The EMS document structure will provide a framework for informing personnel of what is required to achieve the set environmental objectives and for evaluating the environmental performance and effectiveness of the EMS.
- 5.2 The EMS Team will establish at least one procedure for each element of the ISO 14001:2004 standard as the core of the EMS documentation. **ED-4.4.5-2 Master Document Matrix** identifies the environmental policy, environmental procedures (EP), environmental documents (ED), operational controls / work instructions (WI), forms (F) and other relevant documents for each section of the EMS. The EMS Team may elect to use **ED-4.4.4-3 Core EMS Documentation**



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-1 EMS Documentation

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**Checklist** as a means to determine if the requirements for the ISO 14001 standard are met. The frequency of the evaluation / review will need to be determined by the EMS Management Representative and the EMS Team.

- 5.3 The EMS documents are maintained through document control protocol detailed in **EP-4.4.5-1 Control of Documents Procedure**. This procedure will provide the structure and numbering for each element as required by the standard.
- 5.4 Documents of external origin determined by the EMS Management Representative and EMS Team necessary for the planning and operation of the EMS must be identified and their distribution controlled. This may include equipment and product service / maintenance information, owners manuals, and installation instructions (either hard copy or electronic). *(The EMS Team may decide a matrix or electronic fold is necessary to fulfill this requirement.)*
- 5.5 A documented description of the scope (or fence line) for the EMS is located MDT Metromover Facility.

The level of management required to approve a document shall be consistent with the document's position in the hierarchy. The higher a document is in the EMS document hierarchy, the more senior the personnel must be in MDT's management structure to approve it. In general, senior management will approve the comprehensive EMS guidance documents located in the upper levels of the EMS document hierarchy. They will not be required to approve detailed, lower-level EMS documents that have been drafted to be consistent with the more general guidance documents.

#### Environmental Policy

- The Environmental Policy establishes the overall direction of the EMS and provides a framework for the development, management and maintenance of MDT's EMS.
- One Environmental Policy will be released.
- All released EMS documents must be consistent with the environmental commitments and EMS framework defined by the Environmental Policy.
- The Director shall approve and sign the Environmental Policy.

#### Environmental Procedures/Standard Operating Procedures

- EPs must support and promote the commitments and framework set out in MDT's Environmental Policy.
- EPs describe the core elements of the EMS, define environmental processes and provide a framework for the interaction of the core elements and functional components of the EMS. EPs do not provide task-level information.
- EPs shall be written in a manner that describes the relationship between the core elements of MDT's EMS and the supporting documentation. For example, EPs shall be written to



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-1 EMS Documentation

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clearly show how the setting of objectives and targets is related to the Environmental Policy and how the establishment of environmental management programs is related to objective and targets.

- At least one EP shall be established for each section of the standard.
- The Sr. Environmental Engineer shall approve each EP.
- EPs should identify all related Worksheets and Operational Controls and define the relationship between the documents including the flow of information and how the related Worksheets and Operational Controls are to be distributed, prepared, reviewed and controlled.
- For additional information pertaining to EPs see EP 4.4.5-1, "Control of Documents".

#### Worksheets

- A Worksheet will be written and managed in a manner that is consistent with each of the EPs in which the Worksheet is referenced.
- Worksheets provide detailed data, facts and information about the core components of the EMS. Worksheets provide the data, facts and information required to support the EPs.
- The level of personnel required to approve a Worksheet shall be consistent with the document's impact on MDT's EMS and its operations, as well as with the resource requirements of the Worksheet. To the extent reasonable, Worksheet approval shall be obtained from personnel whose commitment and/or ability to secure specific resources are essential to the successful execution of the Worksheet.
- Worksheets will identify all related EPs and Standard Operating Procedures.
- For additional information pertaining to Worksheets see EP 4.4.5-1, "Control of Documents".

#### Standard Operating Procedures

- Standard Operating Procedures (SOPs) will be written and managed in a manner that is consistent with each of the EPs and Worksheets in which the SOP is referenced.
- By providing task level information, SOPs define how a job or activity is to be completed.
- SOPs will be written to ensure that all tasks or jobs are completed in a defined manner, if they may create a significant impact on the environment, or could have an impact on MDT's ability to achieve an objective or target, or could cause a nonconformance.
- The Sr. Environmental Engineer shall approve each SOP.
- SOPs will identify all related EPs and Worksheets.

**For additional information pertaining to SOPs, please see EP 4.4.6-1, "Operational Control Procedure".**



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-1 EMS Documentation

- 5.6 The EMS is communicated to employees via provisions set forth in **EP-4.4.3-1 Communication Procedure**.
- 5.7 The MDT Metromover Facility will use the EMS audit and nonconformance processes to ensure that the guidelines in this procedure are adhered to. When modifying this procedure or the EMS document structure as the result of an EMS Audit or the identification of a Nonconformance, the decision-making process and outcome must be consistent with the processes as detailed in the **EP-4.5.3-1 Nonconformity, Corrective & Preventive Action Procedure** and **EP-4.5.5-1 Internal Audit Procedure**.
- 5.8 The EMS Management Representative (or designee) and the EMS Team will review and endorse the core environmental procedures (EP). The status of the EMS and its related documents will be summarized as needed at the regularly schedule Management Review as detailed in **EP-4.6-1 Management Review Procedure**. This review will be documented and attendance recorded (i.e., agenda, sign in sheets and meeting minutes).

#### 6.0 References / Related Documents

- 6.1 EP-4.4.5-1 Control of Documents Procedure
- 6.2 EP-4.4.4-2 EMS Related Definitions Procedure
- 6.3 ED-4.4.5-2 Master Document Matrix
- 6.4 ED-4.4.4-3 Core EMS Documentation Checklist
- 6.5 EP-4.4.3-1 Communication Procedure
- 6.6 EP-4.5.3-1 Nonconformity, Corrective & Preventive Action Procedure
- 6.7 EP-4.5.5-1 Internal Audit Procedure
- 6.8 EP-4.6-1 Management Review Procedure



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**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.4-2 EMS Related Definitions**

<b>Person responsible:</b>	Akbar Sharifi, P.E.		
<b>Area of application:</b>	Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b>	MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b>	06/24/2009		
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/2010	Reviewed and updated definitions	
<b>Recurring action items</b>			
<b>Activity</b>		<b>Responsibility</b>	<b>Frequency</b>
1.			

**Procedure Index**

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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-2 EMS Related Definitions

##### 1.0 Purpose

- 1.1 The purpose of this procedure is to describe and define the related definitions contained within the documentation of the EMS.

##### 2.0 Scope

- 2.1 This procedure is responsive to element 4.4.4 *EMS Documentation* of the ISO 14001:2004 standard and covers documents relating to the EMS for the Miami-Dade Transit (MDT) Metromover Facility.
- 2.2 This procedure will provide definitions and guidance for documents in the EMS, which are linked in section 4.0 Definitions.
- 2.3 This procedure applies to all paper and electronic environmental documents designated as “controlled” and used for the EMS of the Miami-Dade Transit (MDT) Metromover Facility. Refer to **EP-4.4.5-1 Control of Documents** procedure.

##### 3.0 Responsibility

- 3.1 The **EMS Team** is responsible for the development, evaluation, and revisions to this document during the development and implementation of the EMS.
- 3.2 The **EMS Management Representative** is responsible for maintaining this document within the EMS.

##### 4.0 Definitions

Refer to **EMS Related Definitions** :

- 4.1 **Accreditation:** Procedure by which an authoritative body formally recognizes that a body or person is competent to carry out specific tasks.
- 4.2 **Audit Cycle:** The period of time in which all the activities in a given site are audited.
- 4.3 **Audit team:** Group of auditors, or a single auditor, designated to perform a given audit; the audit team may also include technical experts and auditors-in-training. Note-One of the auditors on the audit team performs the function of lead auditor.
- 4.4 **Certification:** The EMS of a company, location, or plant is certified for conformance with ISO 14001 after it has demonstrated such conformance through the audit process. When used to indicate EMS certification, it means the same thing as registration.
- 4.5 **Certification body:** A third party that assesses and certifies/registers the EMS of Organizations with respect to published EMS standards and any supplementary documentation required under the system.



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-2 EMS Related Definitions

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- 4.6 **Compliance:** An affirmative indication or judgment that the supplier of a product or service has met the requirements of the relevant specifications, contract, or regulation; also, the state of meeting the requirements. In ISO terms, compliance to regulations. Compare with Conformance.
- 4.7 **Conformance / Conformity:** Action in accordance with customs, rules, prevailing opinion. In terms of ISO, conformance to ISO 14001. Compare with compliance. An affirmative indication or judgment that a product or service has met the requirements of the relevant specifications, contract, or regulation; also the state of meeting the requirements.
- 4.8 **Continual improvement:** Enshrined in the published Standards for EMS is the principle of continual improvement, which is intended to ensure that an organization does not simply adopt an EMS for cosmetic purposes and thereby remain static, without commitment to reduce its impact on the environment. Continual improvement is the process of enhancing the environmental management system to achieve improvement in overall environmental performance in line with the organizations environmental policy.
- 4.9 **Controlled document:** Documents controlled by the EMS so as to be current, authorized, available, and accessible. Document control provides a tracking system to ensure these properties are maintained.
- 4.10 **Emergency response plan:** A detailed plan that describes the logistics and reporting requirements in the event of fire, erosion or spills.
- 4.11 **Environment:** Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation.
- 4.12 **Environmental Aspect:** Element of an organization’s activities, products or services that can interact with the environment.
- 4.13 **Environmental Impact:** Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization’s activities, products or services.
- 4.14 **Environmental Management Representative:** The clearly identified EMS team leader who has responsibility for the EMS from start to finish and has the designated authority of senior manager to get the job done.
- 4.15 **Environmental Management System (EMS):** A management approach, which enables an organization to identify, monitor and control its environmental aspects. An EMS is part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.
- 4.16 **Environmental Management System Audit:** A systematic documented verification process of objectively obtaining and evaluating evidence to determine whether an organization’s environmental management system conforms to the environmental



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-2 EMS Related Definitions

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management system audit criteria set by the organization, and for communication of the results of this process to management.

- 4.17 **Environmental Objective:** Overall environmental goal, arising from the environmental policy, that an organization sets itself to achieve, and which is quantified where practicable.
- 4.18 **Environmental Performance:** Measurable results of the environmental management system related to an organization’s control of its environmental aspects, based on its environmental policy, objectives and targets.
- 4.19 **Environmental Policy:** Statement by the organization of its intentions and principles in relation to its overall environmental performance, which provides a framework for action and for the setting of its environmental objectives and targets.
- 4.20 **Environmental Target:** Detailed performance requirement, quantified where practicable, that arises from the environmental objectives and that needs to be set and met in order to achieve those objectives.
- 4.21 **EMS Team:** The Environmental Management System (EMS) Team consisting of the Environmental Manager and representatives of relevant areas/departments. The EMS Team is responsible for the implementation and maintenance of the Environmental Management System.
- 4.22 **External Communication:** Communication, through written or verbal means, with entities external to the organization.
- 4.23 **Fenceline:** The area in which an organization chooses to implement its EMS – a department, division or specific operation.
- 4.24 **Form:** A document developed for the purposes of facilitating the collection, storage, and/or interpretation of information. Note: A blank form is not a record.
- 4.25 **Hazard:** A source of potential harm or damage, or a situation with potential for harm or damage.
- 4.26 **Influenced Environmental Aspect:** Element of an activity, product, or service that is not under the direct management control of the organization, however, the environmental performance can be influenced by the organization. (e.g., Pesticides used by the contracted grounds keepers can be influenced by procurement conditions and specifications.)
- 4.27 **Interested Party:** Individual or group concerned with or affected by the environmental performance of an organization.
- 4.28 **Internal Communication:** Communication, relayed by written or verbal means, within the organization and its internal entities.



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-2 EMS Related Definitions

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- 4.29 **Internal Environmental Audit:** A systematic, documented, periodic and objective review of an organizations operations that relate to meeting the environmental requirements.
- 4.30 **ISO:** The International Organization for Standardization (ISO) is a worldwide federation of national standards bodies from some 140 countries, one from each country. ISO is responsible for the development of ISO 14001.
- 4.31 **ISO14001:** An international voluntary standard for environmental management systems. This is one standard in the ISO 14000 series of International Standards on environmental management.
- 4.32 **Lead auditor:** Person qualified to manage and perform EMS audits.
- 4.33 **Long Term Corrective Action:** The best permanent action that when implemented with appropriate controls, assures that the root cause of the non-conformance finding is eliminated.
- 4.34 **Non-conformity:** The non-fulfillment of a specified requirement. Any or all of the following: a) one or more EMS requirements have not been addressed; or b) one or more EMS requirements have not been implemented; or c) several nonconformities exist that, taken together, lead a reasonable auditor to conclude that one or more EMS requirements have not been addressed or implemented.
- 4.35 **Objective Evidence:** Verifiable evidence based on qualitative or quantitative information, records, or statements of fact.
- 4.36 **Observation:** A practice, while not in strict violation of EMS requirements, may constitute a poor practice that can lead to a nonconformance
- 4.37 **Prevention of Pollution:** Use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.
- 4.38 **Preventive Action:** If it is determined that similar, non-conformance findings can occur in other areas, preventive actions are taken to arrest their recurrence.
- 4.39 **Pollution Prevention:** Any activity that reduces or eliminates pollutants prior to recycling, treatment, control or disposal.
- 4.40 **Record:** Objective evidence generated as a result of an activity, product or service. This includes training records, environmental performance data, audit results, and management review results. A completed form such as a log of disposed hazardous drums is considered an environmental record. The blank form is a controlled document.
- 4.41 **Registrar:** Third party, which audits and registers the environmental management system of an organization with respect to the ISO 14001 environmental management system



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## Metromover Maintenance Facility

### EMS Procedure

#### EP-4.4.4-2 EMS Related Definitions

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standard.

- 4.42 **Senior Management Staff:** Senior or top management may include the group responsible for facility operations. This group may include, but is not limited to, Management Representative, and all senior staff managers.
- 4.43 **Significant Aspect:** An aspect that has or can have a significant environmental impact.  
  
**Short-Term Corrective Action:** Actions taken to immediately contain and isolate the effect of the problem created by a non-conformance finding. Short-term corrective action is to be implemented within **2 hours**. Short-term corrective action may not be warranted in all situations.
- 4.44 **Stakeholders:** Those groups and organizations having an interest or stake in a organization’s EMS program (e.g., regulators, shareholders, customers, suppliers, special interest groups, residents, competitors, investors, bankers, media, lawyers, geologists, insurance companies, trade groups, unions, ecosystems and cultural heritage).
- 4.45 **Verification:** The act of reviewing, inspecting, testing, checking, auditing, or otherwise establishing and documenting whether items, processes, services, or documents conform to specified requirements.
- 4.46 **Visual Aid:** A document developed for the purposes of facilitating the collection, storage, and/or interpretation of information.
- 4.47 **Waste Minimization:** Simple strategic reduction of waste at source, through improved manufacturing methodologies, more careful work procedures, revised, usually improved product specifications, is capable of releasing massive cash returns, either for use in the business, returning to stakeholders or rewarding workers, thus upgrading their ability to become consumers of the goods being produced.

#### 5.0 Process

- 5.1 This document describes, in section 4.0 above, the related definitions pertaining to the EMS and the MDT Metromover Facility.
- 5.2 This document will contain general EMS terms as well as terms and acronyms specific to the operations of the MDT Metromover Facility and defined scope of the EMS.

#### 6.0 References / Related Documents

- 6.1 EP-4.4.4-1 EMS Documentation Procedure
- 6.2 EP 4.4.52-1 Control of Documents Procedure



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## ED-4.4.4-3 Core EMS Documentation Checklist

<b>Document Name:</b> EMS Manual <b>Document No:</b> ED 4.4.4 <b>Review start Date:</b> 07/01/2009 <b>Date Fully Completed:</b> To be determined	<b>Facility/Department:</b> Miami-Dade Transit (MDT) Metromover Facility  <b>Personnel participating in the review:</b>
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### 1.0 EMS Documentation Checklist/Review

EMS Documentation Checklist/Review		Conformance/Comments/and Actions
1.1	Does the MDT Metromover Facility's core procedure describe the core elements of the EMS and their interaction?	Yes.
1.2	Do the core procedures provide direction on where to obtain more detailed information relating to the operation of specific parts of the EMS? If not, will an EMS Manual need to be developed?	Yes, EMS manual will be developed.
1..3	Are the core procedures integrated, as appropriate, with the documentation of other systems implemented by the MDT Metro Mover Facility	On going.
1.4	Can employees access the procedures they need?	Yes.
1.5	Is there a process for developing and maintaining the core procedures?	Yes.



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**ED-4.4.4-3 Core EMS Documentation Checklist**

1.6	Are core procedures identified, documented, communicated and revised?	On going.
1.7	Ensure that documents of external origin determined by the MDT Metromover Facility to be necessary for the planning and operation of the EMS are identified and their distribution controlled. This may include equipment and product service / maintenance information, owners manuals, and installation instructions (either hard copy or electronic).	On going.
1.8	Is there a written description of the scope or fence line for the EMS?	On going.

**2.0 Revision Table**

Rev. No.	Date	Revised by	Description

# **Attachment I**

## Control of Documents Procedure and Master Document Matrix

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Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	04/03/2009	02/10/2010		

EMS Procedure

**EP-4.4.5-1 Control of Documents**

Person responsible: Akbar Sharifi, P.E.

Area of application: Miami-Dade Transit (MDT) Metromover Operations

Document location: MDT's Main Office and Maintenance Facilities

Original issue date: 04/03/2009

**Revisions**

Rev. No.	Date	Description
001	02/10/10	Reviewed and updated procedure

**Recurring action items**

Activity	Responsibility	Frequency
1. Create EMS records when documents are revised.	Akbar Sharifi, P.E.	As situation arises
2. Appropriate distribution of approved documents.	Akbar Sharifi, P.E.	During implementation
3. Notification of revisions/updates to EMS.	Akbar Sharifi, P.E.	As needed

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## EMS Procedure

### EP-4.4.5-1 Control of Documents

#### 1.0 Purpose

- 1.1 The purpose of this procedure is to describe the means by which the MDT and Metromover Maintenance Facility will control the environmental documents of the EMS including those, which are required by the ISO 14001 standard.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.4.5 *Control of Documents* in the ISO 14001: 2004 standard and covers operations of the Metromover Maintenance Facility.
- 2.2 This procedure will provide guidance in controlling the following documents:
  - 2.2.1 The Environmental Policy;
  - 2.2.2 Environmental Procedures (EP)
  - 2.2.3 Environmental Documents (ED)
  - 2.2.4 Work Instructions (WI)
  - 2.2.5 Forms (F)

*For the purpose of this procedure, the above list will be referred to collectively as documents.*
- 2.3 This procedure applies to paper and electronic versions of documents.

#### 3.0 Responsibility

- 3.1 **Senior Management** is responsible for approving the MDT's Environmental Policy.
- 3.2 The **EMS Management Representative** (or designee) is responsible for:
  - 3.2.1 Ensuring the document control system is in place and effectively maintained;
  - 3.2.2 Facilitating and delegating preparation of documents;
  - 3.2.3 Soliciting input from Departmental Managers and employees;
  - 3.2.4 Maintaining and controlling the documents.
- 3.3 The **EMS Team** is responsible for:



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## EMS Procedure

### EP-4.4.5-1 Control of Documents

- 3.3.1 Decisions regarding development, implementation and control of documents;
- 3.3.2 Evaluation, and revision of documents, especially documents pertaining to the *Objective, Targets and Programs* of the EMS;
- 3.3.3 Determining the appropriate approval process of original and revised documents.
- 3.4 **Departmental Managers** are responsible for:
  - 3.4.1 Informing the EMS Management Representative or the EMS Team of opinions, ideas and concerns during proposal, preparation and revision of documents;
  - 3.4.2 Approving documents that relate, have an impact, or may have an impact in the future on any activity, product and service associated with the Metromover Maintenance Facility. (For example Work Instructions or WIs)

#### 4.0 Definitions

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

#### 5.0 Process

- 5.1 **Location and access of documents**
  - 5.1.1 All documentation will be accessible electronically from the MDT's network.
  - 5.1.2 One hard copy of the Environmental Policy, Environmental Procedures (EP), Environmental Documents (ED), Work Instructions (WI), Forms (F) and other related documents will be maintained in the MDT's main office and Mover Facility's control room.
  - 5.1.3 Departmental Managers, Supervisors and designated personnel are responsible for knowing how to access relevant documents required to complete tasks or jobs in their area.
  - 5.1.4 Access to relevant documents at points of use is provided via hard copies and electronic forms.
- 5.2 **Preparation of documents**
  - 5.2.1 A new document or a revision to an existing document may be initiated by the EMS Team as necessary. Affected individuals will have the opportunity to comment on the draft document.
  - 5.2.2 All relevant employee comments, inquiries and suggestions submitted to the EMS Team will be considered when proposing and preparing documents.



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EMS Procedure

**EP-4.4.5-1 Control of Documents**

5.2.3 All new documentation will be reviewed, and approved by the appropriate personnel. (The appropriate level of approval will be determined during development of the EMS by the EMS Team and detailed in this procedure.) All new documentation will be maintained in MDT's main office and have final approval from the MDT's Environmental Engineer or EMS Team.

5.3 **Document Format**

5.3.1 The documents will be created to ensure they are; legible, dated, (including revision dates), clearly identifiable, maintained in an orderly manner, and retained for specific periods.

5.3.2 The EPs, EDs and WIs will be created using approved standardized templates for consistency of documents. **ED-4.4.5-1(F) Blank Procedure Template** and **ED-4.4.5-1(F) Blank Matrix Template**.

5.3.3 The format of the EPs and WIs are as follows:

- Procedure Index
- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 Reference / Related Documents

5.3.4 All documents will follow the approved template and will contain the following control items:

- Organization and Facility Name
- Document Name and Number
- Approval
- Page X of Y
- Print date
- Original date of issue
- Current issue date
- "WARNING! This document is uncontrolled when printed."
- "Previous versions or printed copies may be obsolete. Verify current revisions using the EMS web site."

5.3.5 Environmental Procedures and Environmental Documents are organized by the document identifier (EP or ED), the ISO 14001 section number, and sequential document numbers. For example, the second EP in a series of EPs written to support ISO 14001 section 4.5.1, Monitoring and Measurement, is as follows: EP-4.5.1-2. Forms follow the same format followed by (F). For example, EP-4.5.1-3 (F).

5.3.6 Work Instructions organized by document identifier (WI), the ISO 14001 section number for *Operational Control* (4.4.6) and sequential document numbers. For example, the second WI in a series is as follows: WI-4.4.6-2. Forms relating to these documents use the same



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## EMS Procedure

### EP-4.4.5-1 Control of Documents

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format followed by (F). For example, WI-4.4.6-3 (F). (The EMS team may consider adding a departmental identifier to the document.)

- 5.3.7 Definitions contained in documents may be defined in the procedure or referenced to a listing of EMS related definitions in **EP-4.4.4-2 EMS Related Definitions Procedure**.
- 5.3.8 A master document matrix is maintained by the EMS Management Representative or designee to index, track and control the relevant documents in the EMS. **ED-4.4.5-2 Master Document Matrix**.

#### 5.4 Revision of documents

- 5.4.1 Document modifications will be implemented within a reasonable time frame. The time frame will be based on the relevance and importance of the revision to the document, the EMS and preventing impacts to the environment.
- 5.4.2 All relevant employee comments, inquiries and suggestions submitted to the EMS Management Representative will be considered when reviewing and revising documents.
- 5.4.3 Revisions to documents are recorded in the Revision table on the first page of the document.
- 5.4.4 When a revision to a document is required, the document must be approved prior to release as described in **paragraph 5.2.3**.
- 5.4.5 Obsolete documents are maintained in accordance with record retention criteria in **EP-4.5.4-1 Control of Records** procedure.

#### 5.5 Hard copy document control

- 5.5.1 A hard copy of the documentation is located in the MDT's main office and the Metromover Facility's control room. The EMS Management Representative or designee is responsible for maintaining the documents, including updating the current revisions.

#### 5.6 Electronic document control

- 5.6.1 Access to electronic documents is strictly limited to those with authorization. The ability to revise electronic documents is password secure and limited to designated individuals as determined by the EMS Management Representative.
- 5.6.2 Backups and restore to the system are made in accordance with the Metromover Maintenance Facility's practice and the (department of Information Technology). The EMS Management Representative or designee will maintain a current electronic backup of the documents quarterly or more often if needed.



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**EP-4.4.5-1 Control of Documents**

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5.6.3 Printed copies of original documents contain the print date at the bottom and may be obsolete. These documents are considered uncontrolled when printed and verification of latest versions with revisions must be accessed electronically in MDT’s web site.

**6.0 References / Related Documents**

- 6.1 ED-4.4.5-3(F) Blank Procedure Template
- 6.2 ED-4.4.5-4(F) Blank Matrix Template
- 6.3 EP-4.4.4-2 EMS Related Definitions Procedure
- 6.4 EP-4.5.4-1 Control of Records Procedure
- 6.5 ED-4.4.5-2 Master Document Matrix



**MIAMI-DADE TRANSIT**

*Environmental Management System*

*Document: ENVD (EMSFRM-10.02)*

*Issue Date : 04/14/2009*

*Revised 05/29/2009, #2 (02/10/2010)*

***ED-4.4.5-2 Master Document List***

Document Number	Revision Number	Document Name	Location	Issue Date	Revision Date
<b>Environmental Management Programs</b>					
<b>Environmental Documents</b>					
ENVD-001		Legal and Other Requirements	MDT's Main Office and Maintenance Facilities	03/06/2009	2/10/2010
ENVD-002		EMS Related Definitions	MDT's Main Office and Maintenance Facilities	06/24/2009	2/10/2010
ENVD-003		MDT Metromover Facility ISO 14001 EMS Manual	MDT's Main Office and Maintenance Facilities	02/25/2010	2/10/2010
ENVD-004		Permits, Registrations, & Reports	MDT's Main Office and Maintenance Facilities	12/20/2009	-
ENVD-005		Master Document List	MDT's Main Office and Maintenance Facilities	04/14/2009	2/10/2010
ENVD-006		Hazardous Material	MDT's Main Office and Maintenance Facilities	06/24/2009	2/10/2010
ENVD-007		Spill Prevention, Control and Countermeasure (SPCC) Plan.	MDT's Main Office and Maintenance Facilities	09/2009	6/2009
<b>Level 1 Procedures</b>					
EMS-001		Development and Implementation of Environmental Policy	MDT's Main Office and Maintenance Facilities	02/10/2009	2/10/2010
EMS-002		Environmental Aspects and Significant Aspects	MDT's Main Office and Maintenance Facilities	02/19/2009	2/10/2010

*Uncontrolled When Printed –  
Authorized by: Akbar Sharifi, P.E.*

*Last printed: 02-10-2010*



**MIAMI-DADE TRANSIT**

*Environmental Management System*

***ED-4.4.5-2 Master Document List***

*Document: ENVD (EMSFRM-10.02)*

*Issue Date : 04/14/2009*

*Revised 05/29/2009, #2 (02/10/2010)*

<b>Document Number</b>	<b>Revision Number</b>	<b>Document Name</b>	<b>Location</b>	<b>Issue Date</b>	<b>Revision Date</b>
EMS-003		Legal and Other Requirements	MDT's Main Office and Maintenance Facilities	03/06/2009	2/10/2010
EMS-004		Objectives and Targets	MDT's Main Office and Maintenance Facilities	06/18/2009	2/10/2010
EMS-005		Environmental Management Programs	MDT's Main Office and Maintenance Facilities	10/21/2009	2/10/2010
EMS-006		Documenting Structure and Responsibility	MDT's Main Office and Maintenance Facilities	03/20/2009	2/10/2010



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**ED-4.4.5-2 Master Document Matrix**

Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.1 General requirements – ISO 14001 standard</b>						
1	A written description of scope (fence line) for the EMS can be placed here or in the <b>EP-4.4.4-1 EMS Documentation Procedure</b>			2/10/2009	2/10/2010	
<b>4.2 Environmental policy – ISO 14001 standard</b>						
2	<b>EP-4.2-1</b> Environmental Policy Procedure	Environmental Management Rep		2/10/2009	2/10/2010	
3	<b>Instruction</b> Homework - Policy					
4	<b>Instruction</b> ISO Requirements - Policy					
<b>4.3.1 Environmental aspects – ISO 14001 standard</b>						
5	<b>EP-4.3.1-1</b> Environmental Aspects Procedure			2/19/2009	2/10/2010	
6	<b>ED-4.3.1-2</b> Evaluation of Aspects & Impacts Matrix			4/14/2009	2/10/2010	
7	<b>ED-4.3.1-3</b> Aspect Criteria Definitions			4/9/2009	2/10/2010	
8	<b>Instruction</b> Homework - Aspects					



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**ED-4.4.5-2 Master Document Matrix**

	Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
9	Instruction	ISO Requirements - Aspects					
<b>4.3.2 Legal and other requirements – ISO 14001 standard</b>							
10	EP-4.3.2-1	Legal & Other Requirements Procedure	Environmental Management Rep		3/6/2009	2/10/2010	
11	ED-4.3.2-2	Legal & Other Requirements Matrix	Environmental Management Rep		3/6/2009	2/10/2010	
12	Instruction	Homework – Legal & Other Req.					
13	Instruction	ISO Requirements - Legal & Other Req.					
<b>4.3.3 Objectives, targets and programs – ISO 14001 standard</b>							
14	EP-4.3.3-1	Objectives, Targets & Programs Procedure			6/18/2009	2/10/2010	
15	ED-4.3.3-2	Objectives, Targets & Programs Action Plan			6/18/2009	2/10/2010	
16	Instruction	Homework – Objectives, targets and programs					
17	Instruction	ISO Requirements – Objectives, targets and programs					



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**ED-4.4.5-2 Master Document Matrix**

Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.4.1 Resources, roles, responsibility and authority – ISO 14001 standard</b>						
18	EP-4.4.1-1	Resources, Roles, Responsibilities & Authority Procedure		3/21/2009	2/10/2010	
19	ED-4.4.1-2	Roles & Responsibility Matrix		3/21/2009	2/10/2010	
20	Instruction	Homework – Roles & Responsibilities				
21	Instruction	ISO Requirements - Roles & Responsibilities				
<b>4.4.2 Competence, training and awareness – ISO 14001 standard</b>						
22	EP-4.4.2-1	Competence, Training & Awareness Procedure		9/24/2009	2/10/2010	
23	ED-4.4.2-2 (F)	Training Sign-in Sheet		9/24/2009	2/10/2010	
24	ED-4.4.2-3	Annual EMS Training Plan Matrix		9/24/2009	2/10/2010	
25	Instruction	Homework – Training				
26	Instruction	ISO Requirements – Training				



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**ED-4.4.5-2 Master Document Matrix**

Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.4.3 Communication – ISO 14001 standard</b>						
27	EP-4.4.3-1	Communication Procedure		8/27/2009	2/10/2010	
28	ED-4.4.3-2 (F)	Environmental Communication Occurrence		8/27/2009	2/10/2010	
29	Instruction	Homework - Communication				
30	Instruction	ISO Requirement - Communication				
<b>4.4.4 Documentation – ISO 14001 standard</b>						
31	EP-4.4.4-1	EMS Documentation Procedure	Environmental Management Rep	6/24/2009	2/10/2010	
32	EP-4.4.4-2	EMS Related Definitions Procedure	Environmental Management Rep	6/24/2009	2/10/2010	
33	ED-4.4.4-3	Core EMS Documentation Checklist	Environmental Management Rep	6/24/2009	2/10/2010	
34	Instruction	Homework – EMS Documentation				
35	Instruction	ISO Requirements – EMS Documentation				



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**ED-4.4.5-2 Master Document Matrix**

Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.4.5 Control of documents – ISO 14001 standard</b>						
36	EP-4.4.5-1	Control of Documents Procedure	Environmental Management Rep		4/3/2009	2/10/2010
37	ED-4.4.5-2	Master Document Matrix			4/3/2009	2/10/2010
38	ED-4.4.5-3 (F)	Blank Procedure Template	Environmental Management Rep		4/3/2009	2/10/2010
39	ED-4.4.5-4 (F)	Blank Matrix	Environmental Management Rep		4/3/2009	2/10/2010
40	Instruction	Homework – Control of Documents				
41	Instruction	ISO Requirements - Control of Documents				
<b>4.4.6 Operational control – ISO 14001 standard</b>						
42	EP-4.4.6-1	Operational Control Procedure			6/29/2009	2/10/2010
43	EP-4.4.6-2	Contractor Management Procedure	Environmental Management Rep		6/29/2009	2/10/2010
44	ED-4.4.6-3 (F)	Contractor Management Environmental Checklist	Environmental Management Rep		6/29/2009	2/10/2010
45	ED-4.4.6-4 (F)	Contractor Management Environmental Activities Manual	Environmental Management Rep		6/29/2009	2/10/2010



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**ED-4.4.5-2 Master Document Matrix**

	Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
46	ED-4.4.6-5	Operational Control, Work Instruction (WI) Tracking			6/29/2009	2/10/2010	
47	Instruction	Homework – Operational Control (Work Instructions, Workshop #2)					
48	Instruction	ISO Requirements – Operational Control (Work Inst. Workshop #2)					
49	Instruction	Homework – Operational Control (Contractor Mgmt. Workshop #3)					
50	Instruction	ISO Requirements – Operational Control (Contractor Mgmt. W#3)					
<b>4.4.7 Emergency preparedness and response – ISO 14001 standard</b>							
51	EP-4.4.7-1	Emergency Preparedness and Response Procedure			5/25/2009	2/10/2010	
52	ED-4.4.7-2	Emergency Preparedness Plan Review					
53	Instruction	Homework – Emergency Prep. & Response					
54	Instruction	ISO Requirements – Emergency Prep. & Response					



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Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.5.1 Monitoring and measurement – ISO 14001 standard</b>						
55	EP-4.5.1-1	Monitoring & Measurement Procedure		10/21/2009	2/10/2010	
56	ED-4.5.1-2	Monitoring & Measurement of Objectives, Targets & Programs		10/21/2009	2/10/2010	
57	ED-4.5.1-3	Monitoring & Measurement Calibration Log		10/21/2009	2/10/2010	
58	ED-4.5.1-4	Monitoring & Measurement Annual Evaluation		10/21/2009	2/10/2010	
59	Instruction	Homework – Monitoring & Measurement				
60	Instruction	ISO Requirements – Monitoring & Measurement				
<b>4.5.2 Evaluation of compliance – ISO 14001 standard</b>						
61	EP-4.5.2-1	Evaluation of Compliance Procedure	Environmental Management Rep	1/14/2010	2/10/2010	
62						
63						
64						



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**ED-4.4.5-2 Master Document Matrix**

Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.5.3 Nonconformity, corrective action and preventive action – ISO 14001 standard</b>						
65	EP-4.5.3-1	Nonconformity, Corrective & Preventive Action Procedure	Environmental Management Rep		1/20/2010	2/10/2010
66						
67						
68						
<b>4.5.4 Control of records – ISO 14001 standard</b>						
69	EP-4.5.4-1	Control of Records Procedure			1/21/2010	2/10/2010
70						
71						
72						
73						



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**ED-4.4.5-2 Master Document Matrix**

Document Number	Document Name	Person Responsible		Original issue date	Last Review	Next Review
<b>4.5.5 Internal audit – ISO 14001 standard</b>						
74	EP-4.5.5-1	Internal Audit Procedure	Environmental Management Rep		1/22/2010	2/10/2010
75						
76						
77						
<b>4.6 Management review – ISO 14001 standard</b>						
78	EP-4.6-1	Management Review Procedure	Environmental Management Rep		10/21/2009	2/10/2010
79	ED-4.6-2	Management Review Annual Evaluation			10/21/2009	2/10/2010
80	ED-4.6-3 (F)	Attendance Sign-in Sheet			10/21/2009	2/10/2010
81	Instruction	Homework – Management Review				
82	Instruction	ISO Requirements – Management Review				

**Attachment J**  
Operational Control and Contractor Management  
Procedures, Work Instructions Tracking Sheet, and  
Work Instructions for Aspects

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Date	06/24/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.6-1 Operational Control**

<b>Person responsible:</b>	Akbar Sharifi, P.E.		
<b>Area of application:</b>	Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b>	MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b>	06/24/2009		
<b>Revisions</b>			
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>	
001	02/10/2010	Reviewed and updated procedure	
<b>Recurring action items</b>			
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>	
1. Identify activities needing Work Instructions (WI) under the significant aspects.	EMS Team	Annually and when developing objective, targets and programs	
2. Develop WI tracking system	EMS Team	Annually and when developing objective, targets and programs	
3. Evaluate and implement training needs based on new and revised WI	EMS Team	As needed	
4. Monitoring and evaluating the application and effectiveness of the operational controls and WI.	Akbar Sharifi, P.E./ Steve Alvarez	Annually or more frequently as needed	

**Procedure Index**

- 1.0 Purpose**
- 2.0 Scope**
- 3.0 Responsibility**
- 4.0 Definitions**
- 5.0 Process**
- 6.0 References / Related Documents**



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Date	06/24/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.4.6-1 Operational Control**

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**1.0 Purpose**

- 1.1 The purpose of this procedure is to establish practices related to the development and implementation of operational controls associated with the significant environmental aspects of the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 This procedure will also describe the method by which the MDT Metromover Facility will plan and control each of the identified operations and activities.

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.4.6 Operational Control, of the ISO 14001:2004 standard and covers operations of MDT Metromover Facility.
- 2.2 The scope establishes Operational Controls for Work Instructions (WI) to manage those activities, products and services:
  - 2.2.1 That is under the control or influence of the MDT Metromover Facility.
  - 2.2.2 That is associated with the significant environmental aspects.
  - 2.2.3 Where the absence of a work instruction could lead to a deviation from the EMS.

**3.0 Responsibility**

- 3.1 The **EMS Management Representative** and the **EMS Team** are:
  - 3.1.1 Responsible for **identifying** processes and activities of the operational control needs. Following the identification they will be responsible for coordinating the documentation of the selected processes.
  - 3.1.2 Responsible for evaluating the Operational Control, WIs on an annual basis or more frequently if physical or operational changes are made at the MDT Metromover Facility and make any necessary revisions. The WI evaluation will be documented and attendance recorded (e.g. agendas, sign in sheets, and meeting minutes) and the **ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking** as needed.
- 3.2 **Supervisors**, with the assistance of the EMS Team, will train and update employees under their supervision about the proper execution of the Operational Control, WIs for which the employees are responsible.
- 3.3 The EMS Management Representative, with the purchasing department, will develop and maintain a process to address suppliers and contractors who will be required to follow one or more of the Operational Control, WIs.



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.4.6-1 Operational Control**

**4.0 Definitions**

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

- 5.1 Operational controls will be established to provide for the proper management of significant aspects. Operational controls should be in place for situations at MDT Metromover Facility where their absence could lead to deviation from the environmental policy, or the objectives and targets.
- 5.2 Processes and activities related to significant aspects will be identified by the MDT Metromover Facility EMS Management Representative and the EMS Team. These activities will be assessed for the need of a written Work Instruction (WI) to document the process. The development and implementation of the WIs shall be monitored using **ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking**.
- 5.3 Documentation of the operational control for selected processes will be the responsibility of the EMS Management Representative and the EMS Team. This responsibility includes the drafting of WIs. The WIs should be written in sufficient detail to provide the necessary level of instruction to ensure the desired outcome. Consideration may be given to the experience, education, and / or training of the person(s) who are executing the instructions. Particular attention will be given to the potential or actual consequences of certain information not being provided.
- 5.4 All relevant employee comments, inquires and suggestions submitted to the EMS Team will be considered when proposing and preparing the WIs.
- 5.5 The EMS Management Representative and EMS Team will reassess the operational control documentation annually.
- 5.6 All documents pertaining to Operational Control for WIs will follow the document control system in **EP-4.4.5-1 Control of Documents Procedure**.
- 5.7 Electronic copies of all documentation will be accessible from (give location and access instructions).
- 5.8 Only hardcopies of those EMS documents deemed critical to the daily operation of MDT Metromover Facility’s EMS will be maintained and controlled.
- 5.9 EMS documents critical to the daily operation must be accessible to personnel who rely on such documents to complete their tasks in accordance to the EMS.
- 5.10 Operational Control requirements (implementation of WIs) will occur through training as detailed in **EP-4.4.2-1 Competence, Training and Awareness Procedure**.
- 5.11 The MDT Metromover Facility will use the Audit and Nonconformance elements to ensure that the Operational Control , WIs are adhered to and provide an effective means of planning and controlling critical activities. Auditing and Nonconformance are detailed in **EP-4.5.3-1 Nonconformity**,



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**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.6-1 Operational Control**

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**Corrective & Preventive Action Procedure and EP-4.5.5-1 Internal Audit Procedure.**

**6.0 References / Related Documents**

- 6.1 EP-4.4.2-1 Competence, Training and Awareness Procedure
- 6.2 ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking
- 6.3 EP-4.4.4-2 EMS Related Definitions Procedure
- 6.4 EP-4.4.5-1 Control of Documents Procedure
- 6.5 EP-4.5.3-1 Nonconformity, Corrective & Preventive Action Procedure
- 6.6 EP-4.5.5-1 Internal Audit Procedure



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Date	06/24/2009	01/29/2010		

**ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking**

Aspect	WI – Number & Name	Description/Comments	Person Responsible	Status	Target Date	Training Needs
1 Aerosol Cans	WI-4.4.6-5.1 Aerosol Cans Management	Proper management of recycling and/or disposal of aerosol cans. <i>(Impact - air, soil, surface water and groundwater pollutant if punctured or ruptured due to extreme temperature).</i>	Steve Alvarez/ Freeman Wright	Recycling material implemented by purchasing can puncturing equipment	11/30/2009	Yes
2 Fluorescent Tube and Ballast	WI-4.4.6-5.2 Fluorescent Light Bulbs Management	Proper management of recycling and/or disposal of light bulbs <i>(Impact - soil, groundwater pollution associated with landfill).</i>	Steve Alvarez/ Freeman Wright	Recycling material implemented by purchasing bulb crushing equipment	11/30/2009	Yes
3 Used Oil	WI-4.4.6-5.3 Used Oil Management	Proper management of used oil in the maintenance shop by filling, storing, and removing used oils from the 200-gallon tank/parts washer tank <i>(Impact - soil and groundwater pollution from spills from loading /unloading &amp; catastrophic failure of the tank).</i>	Steve Alvarez	Implemented Program	12/31/2009	Yes
4 Fresh Oil	WI-4.4.6-5.4 Fresh Oil Management	Proper management of motor oil storage and pollution prevention associated with filling, storing, and removing oils from 55-gallon drums <i>(Impact - air, soil, surface water and groundwater pollutant if discharged).</i>	Steve Alvarez	Implemented Program	12/31/2009	Yes
5 Chlorofluorocarbons (CFCs) Management – (i.e., Refrigerant/Coolant/ Freon)	WI-4.4.6-5.5 CFCs Management	Proper management through servicing, and documenting all CFC's that are removed from a refrigeration unit for recharging or disposal <i>(Impact – air pollution)</i>	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes



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Date	06/24/2009	01/29/2010		

**ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking**

6	Used Tires	WI-4.4.6-5.6 Management	Used Tires	Disposal and/or recycling of used tires in the maintenance shop ( <i>Impact</i> - water, soil and groundwater pollutant).	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes
7	Industrial Wastewater (i.e., Oil/Water Separator)	WI-4.4.6-5.7 Wastewater Management	Industrial	Proper management of industrial wastewater (i.e., oil/water separator) and pollution prevention. ( <i>Impact</i> - 1. Soil and groundwater pollution from discharge associated with OWS (catastrophic failure of the OWS).  2. Pollution from discharge from OWS to sanitary sewer system exceeding discharge guidelines.	Steve Alvarez/ Steve Chayt	Implemented Program	12/31/2009	Yes
8	Shop Rags and Cotton Gloves	WI-4.4.6-5.8 Used Shop Rags and Cotton Gloves Management	Used Shop Rags	Proper recycling and/or disposal methods used shop rags and gloves ( <i>Impact</i> - air, soil, surface water and groundwater pollution associated with landfill).	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes
9	Used Batteries	WI-4.4.6-5.9 Management	Used Batteries	Proper recycling and/or disposal methods for used shop batteries ( <i>Impact</i> - air, soil, surface water and groundwater pollution associated with landfill).	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes
10	Shop and Office Recyclables	WI-4.4.6-5.10 Management	Recyclables	Proper recycling of shop and office recyclables (i.e., card boards, papers, etc.) by designated containers in shop and office areas, and documenting recycling activities ( <i>Impact</i> - soil, groundwater pollution associated with landfill).	Steve Alvarez	Implemented Program	12/31/2009	Yes



MDT Internal Document No.	Person responsible	Prepared by	Reviewed by	Approved by
08.04.00	Valerie Gary/ Freeman Wright	Freeman Wright		

## WI 4.4.6-5.1 AEROSOL CANS MANAGEMENT

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### 1 Purpose

1.1 To identify procedures for the issue, collection and disposal of Aerosol Cans.

### 2 Scope

2.1 This procedure is responsive to the Miami-Dade Transit (MDT) Metro Mover Facility Storeroom goal to minimize impacts to the environment from operating practices and waste disposal.

2.2 This procedure applies to disposal of Aerosol Cans.

2.3 This procedure covers operations at the MDT Metro Mover Facility.

### 3 Responsibility

3.1 Storeroom personnel are responsible for the collection and disposal of all aerosol cans.

3.2 Storeroom supervisor is responsible for weekly inspection of storage areas to verify compliance with these requirements.

3.3 Environmental Procurement is responsible for contracting for proper disposal of Aerosol Cans.

### 4 Procedure

4.1 Aerosol cans are to be issued from the storeroom on a one to one exchange basis. There will be no issue of these items without an even exchange of a punctured can unless authorized in writing from a supervisor.

4.2 The storeroom personnel are responsible for insuring that aerosol cans are properly disposed within the designated drums outside the storeroom by the maintenance employee.

4.3 The storeroom personnel will seal filled drums of punctured cans and label with a "non-hazardous" waste label and arrange for pickup by the contracted vendor.



Aerosol Can Crushing and Waste Collection Area



MDT Internal Document No.	Person responsible	Prepared by	Reviewed by	Approved by
08.04.00	Valerie Gary/ Freeman Wright	Freeman Wright		

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## WI 4.4.6-5.1 AEROSOL CANS MANAGEMENT

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### 5 Consequences

- 5.1 Failure to comply with this procedure may:
  - 5.1.1 Subject the Department to fines for non-compliance to environmental laws and regulation.
  - 5.1.2 Violate Department policy.

### 6 References



MDT Internal Document No.	Person responsible	Prepared by	Reviewed by	Approved by
08.02.01 and Division 86	Steve Alvarez/Valerie Gray/Freeman Wright	Freeman Wright		

## WI 4.4.6-5.2 FLUORESCENT TUBE AND BALLAST MANAGEMENT

---

### 1 Purpose

- 1.1 Eliminate mercury from lamps entering landfills, eliminate or reduce material salvaged from processing mercury from entering landfills, eliminate PCB from electronic ballast entering landfills.

### 2 Scope

- 2.1 This procedure is responsive to the Miami-Dade Transit (MDT) Metro Mover Facility goal to minimize impacts to the environment from operating practices and waste disposal.
- 2.2 This procedure applies to disposal of mercury lamps (including fluorescent tubes) and electronic ballast
- 2.3 This procedure covers operations at the MDT Metro Mover Facility.

### 3 Responsibility

- 3.1 Storeroom personnel and/or maintenance workers will be responsible for handling fluorescent tubes and electronic ballasts in accordance with this procedure.
- 3.2 Storeroom supervisor is responsible for weekly inspection of storage areas to verify compliance with these requirements.
- 3.3 MDT Procurement is responsible for contracting for proper disposal of fluorescent tubes and electronic ballasts.

### 4 Procedure

- 4.1 Mercury is used in the manufacture of fluorescent tube and HID (high intensity discharge) lamps. Mercury is a potent neurotoxin with the potential to build up in the food chain, particularly fish.
- 4.2 PCB (polychlorinated biphenyls) is highly toxic and is known to cause a wide range of health problems, ranging from liver injury to skin disorders. PCB was used in electronic ballast prior to 1978.
- 4.3 The MDT Metro Mover Facility contracts with a certified hazardous waste disposal contractor to remove waste containing mercury and PCB from a controlled collection point at the Metro Mover Shop. This Procedure describes the responsibility of storeroom and maintenance workers in collection and storage of fluorescent tubes, HID lamps and electronic ballast, prior to disposal by the responsible contractor.
- 4.4 Fluorescent Tubes and HID Lamps:
  - 4.4.1 Fluorescent tubes and HID lamps shall be handled and transported with caution, protected from accidental breakage, and not left unattended in public areas.
  - 4.4.2 Tubes are to transported and stored within the proper shipping containers provided by the manufacture.
  - 4.4.3 Fluorescent tube containers shall be secured with the tape provided by the manufacture. Duct tape shall not be used.
  - 4.4.4 All reclaimed fluorescent tubes shall be stored in the designated collection site located outside of the Stock Room to be crushed and recycled using the E-Lampinator Machine.
  - 4.4.5 Tubes will be collected semi-annually from the collection site.



MDT Internal Document No.	Person responsible	Prepared by	Reviewed by	Approved by
08.02.01 and Division 86	Steve Alvarez/Valerie Gray/Freeman Wright	Freeman Wright		

## WI 4.4.6-5.2 FLUORESCENT TUBE AND BALLAST MANAGEMENT

- 4.4.6 Reclaimed HID lamps shall be placed within the 55-gallon drums, marked "Used HID Lamps", located adjacent to Stock Room.
- 4.5 Electronic Ballasts
  - 4.5.1 Identification of electronic ballast containing PCB.
    - A. All ballast manufactured after July 1, 1978, must have "Non PCB" printed on the label.
    - B. Ballast manufactured prior to July 1, 1978, may or may not have "Contains PCB" on its label.
    - C. If the label does not mention or specifically states it contains PCB, it shall be assumed it contains PCB.
  - 4.5.2 Ballast containing PCB shall be disposed in the 55-gallon drum, labeled "Used Fluorescent Ballast w/PCB", located outside of the Stock Room
  - 4.5.3 Non-PCB electronic ballast can be disposed in the general waste 55-gallon drums outside of the stockroom.



Fluorescent Tube/Ballast Crushing Equipment

### 5 Consequences

- 5.1 Failure to comply with this procedure may:
  - 5.1.1 Subject the Department to fines for non-compliance to environmental laws and regulation.
  - 5.1.2 Violate Department policy.

### 6 References



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
08.02.09	Steve Alvarez	Steve Alvarez		

## WI 4.4.6-5.3 USED OIL MANAGEMENT

---

### 1.0 Purpose

- 1.1 The purpose of this Work Instruction (WI) procedure is to outline the proper handling for used oil.

### 2.0 Scope

- 2.1 This WI applies all Miami-Dade Transit (MDT) Metro Mover Facility personnel who handle used oil to ensure proper disposal methods. The Environmental Management Program (EMP) monitors the disposal of oil filters as a significant environmental aspect for the MDT Metro Mover Facility.

### 3.0 Responsibility

- 3.1 Environmental Team and Environmental Team Leader
- 3.2 MDT Metro Mover Facility Personnel

### 4.0 Definitions

- 4.1 Refer to 4.1.60 EMS Related Definitions

### 5.0 Process

- 5.1 Used engine or equipment oil that have been removed on site are to be taken to the 200-gallon used oil storage tank in the MDT Metro Mover Facility storage area located by the loading dock (in front of the stock room).
- 5.2 The used oils are transferred to the 200-gallon tank for proper disposal.
- 5.3 The used oil released during the transfer during loading/unloading process is to be collected and properly managed as USED OIL per the Used Oil Management WI 4.4.6-5.3 and the Spill Prevention, Control and Countermeasure (SPCC) plan.
  - 5.3.1 Drips, leaks and small spills will be cleaned up using oil dry. The oil dry / oil mix may be handled as general waste and discarded in the trash bins.
  - 5.3.2 Larger spills are also cleaned up using oil dry. The oil dry / oil mix is then collected in drums provided, labeled and removed to the waste accumulation area for disposal or recycling.
- 5.4 As for used oil filter, directly transfer the used filters into a 55-gallon drum for proper disposal.
- 5.5 Oil filters are to be collected in 55 gallon drums. These drums are to be labeled with the words "Used Oil Filters". When full, these drums will be replaced and the full drums transported to the waste accumulation area for disposal or recycling.
- 5.6 Notify the MDT Metro Mover Facility Supervisor (305-375-2971 office or 305-218-0885 cell) when drum is full to schedule pick up and disposal.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
08.02.09	Steve Alvarez	Steve Alvarez		

**WI 4.4.6-5.3 USED OIL MANAGEMENT**



**Used Oil Storage Tank**

**6.0 References / Related Documents**

- 6.1 4.3.41 Environmental Management Program (EMP)
- 6.2 SPCC Plan.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
Division 86	Steve Alvarez/ Freeman Wright	Steve Alvarez		

**Metromover Maintenance Facility**

**WI 4.4.6-5.4 FRESH OIL MANAGEMENT**

---

**1.0 Purpose**

- 1.1 The purpose of this Work Instruction (WI) procedure is to outline the proper handling for Fresh Oil.

**2.0 Scope**

- 2.1 This WI applies all Miami-Dade Transit (MDT) Metromover Facility personnel who handle fresh oil to ensure proper disposal methods. The Environmental Management Program (EMP) monitors the management of fresh oil as a significant environmental aspect for the MDT Metromover Facility

**3.0 Responsibility**

- 3.1 Environmental Team and Environmental Team Leader
- 3.2 MDT Metromover Facility Personnel

**4.0 Definitions**

- 4.1 Refer to 4.1.60 EMS Related Definitions

**5.0 Process**

- 5.1 New engine or equipment oil that will be used on site are to be taken to the new 55-gallon drums in the MDT Metromover Facility Fresh Oil storage area located upstairs by the train maintenance area.
- 5.2 The fresh oils are transferred to smaller containers to be used as part of train maintenance activities.
- 5.3 The fresh oil released during the transfer during loading/unloading process is to be collected and properly managed as USED OIL per the Used Oil Management WI 4.4.6-5.3 and the Spill Prevention, Control and Countermeasure (SPCC) plan.
  - 5.3.1 Drips, leaks and small spills will be cleaned up using oil dry. The oil dry / oil mix may be handled as general waste and discarded in the trash bins.
  - 5.3.2 Larger spills are also cleaned up using oil dry. The oil dry / oil mix is then collected in drums provided, labeled and removed to the waste accumulation area for disposal or recycling.
- 5.4 Notify the MDT Metromover Facility Supervisor (305-375-2971 office or 305-218-0885 cell) when drum is empty to schedule pick up and disposal.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
Division 86	Steve Alvarez/ Freeman Wright	Steve Alvarez		

Metromover Maintenance Facility

## WI 4.4.6-5.4 FRESH OIL MANAGEMENT

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Fresh Oil Storage Drum

### 6.0 References / Related Documents

- 6.1 4.3.41 Environmental Management Program (EMP)
- 6.2 SPCC Plan.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
08.03.00 and 86.02.09	Valerie Gary/Freeman Wright	Freeman Wright/Steve Alvarez		

## WI 4.4.6-5.5 CHLOROFLUOROCARBONS (CFCs) MANAGEMENT

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### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish a standard in which CFC substances are managed.

### 2.0 Scope

- 2.1 This procedure applies to the proper training, maintaining disposal, and record keeping of CFC handling operations. The Environmental Management Program (EMP) monitors the CFC emissions as a significant environmental aspect for the Miami-Dade Transit (MDT) Metro Mover Facility.

### 3.0 Responsibility

- 3.1 Environmental Team
- 3.2 MDT Metro Mover Facility Store Room Personnel (i.e., Freeman Wright)
- 3.3 MDT Metro Mover Facility Maintenance Personnel (i.e., Steve Alvarez)

### 4.0 Definitions

- 4.1 Refer to 4.1.60 EMS Related Definitions
- 4.2 CFC - Chlorofluorocarbons, i.e. Refrigerant, Coolant, or Freon
- 4.3 Refrigeration Units - Any units which may contain CFCs.

### 5.0 Procedure

- 5.1 The MDT Metro Mover Facility Storekeeper receives all incoming CFC product. Only certified employees are permitted to use these products and log receipt of CFC products on Metro Mover Refrigerant Form.
- 5.2 The Manager of MDT Metro Mover Facility will maintain a list of current certified technicians, training records, and service records.
- 5.3 The certified technicians have the overall responsibility of managing, servicing, and documenting all CFC's that are removed from a refrigeration unit for recharging or equipment disposal.
  - 5.3.1 Document using Report Log on Metro Mover Refrigerant Form
  - 5.3.2 If additional CFCs are required, log the amount of refrigerant added on Metro Mover Refrigerant Form.
  - 5.3.3 The certified technician must also document material that is lost through leaks, during repair, or the reclaiming process.
- 5.4 The Storeroom Clerk will document the issue of all CFC's to maintenance personnel. The Storeroom Clerk will log the tank serial number, date, and starting weight on the Metro Mover Refrigerant Form.
- 5.5 The Storeroom Clerk will issue, with the computerized inventory system, the CFC tank to the Chief Supervisor once the tank is empty and attach the applicable Metro Mover Refrigerant Usage Form to the issue ticket before filling.
- 5.6 Different types of CFCs cannot be stored in the same container.
- 5.7 If different types of CFCs are mixed, do not reuse it in the vehicle or equipment. Mark the bottle as contaminated and contact the MDT Metro Mover Facility Supervisor for disposal.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
08.03.00 and 86.02.09	Valerie Gary/Freeman Wright	Freeman Wright/Steve Alvarez		

## WI 4.4.6-5.5 CHLOROFLUOROCARBONS (CFCs) MANAGEMENT

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### 6.0 Purpose

- 6.1 Failure to comply with this procedure may:
  - 6.1.1 Subject the Department to fines for non-compliance to environmental laws and regulation.
  - 6.1.2 Violate Department policy.

### 7.0 References / Related Documents



MDT Internal Document No.	Person responsible	Prepared by	Reviewed by	Approved by
08.05.00 and Division 86	Valerie Gary/ Freeman Wright	Freeman Wright		

## WI 4.4.6-5.6 USED TIRES MANAGEMENT

---

### 1 Purpose

- 1.1 To identify procedures for the issue collection and disposal of used tires.

### 2 Scope

- 2.1 This procedure is responsive to the Miami-Dade Transit (MDT) Metro Mover Facility Storeroom goal to minimize impacts to the environment from operating practices and waste disposal.
- 2.2 This procedure applies to disposal of used tires.
- 2.3 This procedure covers operations at the MDT Metro Mover Facility.

### 3 Responsibility

- 3.1 Storeroom personnel are responsible for the collection and disposal of all used tires.
- 3.2 Storeroom supervisor is responsible for weekly inspection of storage areas to verify compliance with these requirements.
- 3.3 Materials Management is responsible for contracting for proper disposal of used tires.

### 4 Procedure

- 4.1 Used Tires are to be issued from the storeroom on a one to one exchange basis. There will be no issue of these items without an even exchange unless authorized in writing from a supervisor.
- 4.2 Drive Tires - The storeroom personnel will arrange for the contacted vendor to dismount defective tires and remount serviceable tires. Storeroom Clerks will insure that all defective tires are removed from the facility by the vendor according to contract requirements.
- 4.3 Guide Tires – The Maintenance Technicians will remove the rims and hardware from worn guide tires. Storeroom Clerks will insure that all defective tires are removed by the vendor from the facility according to contract requirements.

### 5 Consequences

- 5.1 Failure to comply with this procedure may:
  - 5.1.1 Subject the Department to fines for non-compliance to environmental laws and regulation.
  - 5.1.2 Violate Department policy.

### 6 References





MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
Division 86	Steve Alvarez	Steve Alvarez		

**Metromover Maintenance Facility**

**WI 4.4.6-5.7 INDUSTRIAL WASTEWATER (I.E, OIL/WATER SEPARATOR) MANAGEMENT**

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**1.0 Purpose**

- 1.1 The purpose of this Work Instruction (WI) procedure is to outline the proper handling for industrial wastewater.

**2.0 Scope**

- 2.1 This WI applies all Miami-Dade Transit (MDT) Metromover Facility personnel who handle industrial wastewater to ensure proper disposal methods. The Environmental Management Program (EMP) monitors the disposal of industrial wastewater as an environmental aspect for the MDT Metromover Facility.

**3.0 Responsibility**

- 3.1 Environmental Team and Environmental Team Leader
- 3.2 MDT Metromover Facility Personnel

**4.0 Definitions**

- 4.1 Refer to 4.1.60 EMS Related Definitions

**5.0 Process**

- 5.1 Under and near each of the six Metromover maintenance tracks, there are a number of invert drains to capture wash water contacted with oily residue. Each of these drains is connected to an Oil/Water Separator (OWS) located adjacent to the loading dock. The OWS separates oil and water, and discharges water to the sewer system.
- 5.2 The industrial wastewater from the floor drains are transferred to the OWS.
- 5.3 The industrial wastewater released during the train maintenance activities are to be collected and properly managed as Industrial Waste per the Industrial Wastewater Management WI 4.4.6-5.7 and the Spill Prevention, Control and Countermeasure (SPCC) plan.
  - 5.3.1 Drips, leaks and small spills will be cleaned up using oil dry. The oil dry / oil mix may be handled as general waste and discarded in the trash bins.
  - 5.3.2 Larger spills are also cleaned up using oil dry. The oil dry / oil mix is then collected in drums provided, labeled and removed to the waste accumulation area for disposal or recycling.
- 5.4 Notify the MDT Metromover Facility Supervisor (305-375-2971 office or 305-218-0885 cell) when the OWS is full of oil water or sludge in order to schedule pump out and cleaning of the OWS.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
Division 86	Steve Alvarez	Steve Alvarez		

Metromover Maintenance Facility

## WI 4.4.6-5.7 INDUSTRIAL WASTEWATER (I.E, OIL/WATER SEPARATOR) MANAGEMENT

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Floor Drains Inside Maintenance Area

### 6.0 References / Related Documents

- 6.1 4.3.41 Environmental Management Program (EMP)
- 6.2 SPCC Plan.



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
08.01.00 and 86.02.09	Valerie Gary/ Freeman Wright	Freeman Wright		

## WI 4.4.6-5.8 SHOP RAGS AND COTTON GLOVES MANAGEMENT

---

### 1 Purpose

1.1 To identify procedures for the issue collection and disposal of shop rags and gloves.

### 2 Scope

2.1 This procedure is responsive to the Miami-Dade Transit (MDT) Metro Mover Facility Storeroom goal to minimize impacts to the environment from operating practices and waste disposal.

2.2 This procedure applies to disposal of shop rags and cotton gloves.

2.3 This procedure covers operations at the MDT Metro Mover Facility.

### 3 Responsibility

3.1 Storeroom personnel are responsible for the collection and disposal of all shop rags and cotton gloves.

3.2 Storeroom supervisor is responsible for weekly inspection of storage areas to verify compliance with these requirements.

3.3 MDT Procurement is responsible for contracting for proper disposal of shop rags and cotton gloves.

### 4 Procedure

4.1 Shop rags and cotton gloves are to be issued from the storeroom on a one to one exchange basis. There will be no issue of these items without an even exchange unless authorized in writing from a supervisor.

4.2 The storeroom personnel are responsible for insuring that used shop rags and cotton gloves are properly disposed within the designated drums outside the storeroom by the maintenance employee.

4.3 The storeroom personnel will bag dirty rags placed in the 55 gallon drums and have the contracted vendor pick them up for cleaning on a weekly basis.

4.4 The storeroom personnel will seal filled drums of rags and label with a "non-hazardous" waste label and arrange for pick up by the contracted vendor.

### 5 Consequences

5.1 Failure to comply with this procedure may:

5.1.1 Subject the Department to fines for non-compliance to environmental laws and regulation.

5.1.2 Violate Department policy.

### 6 References



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
08.06.00 and Division 86	Valerie Gary/ Freeman Wright	Freeman Wright		

## WI-4.4.6-5.9 USED BATTERY MANAGEMENT

---

### 1 Purpose

- 1.1 To identify procedures for the issue collection and disposal of used batteries.

### 2 Scope

- 2.1 This procedure is responsive to the Miami-Dade Transit (MDT) Metro Mover Facility Storeroom goal to minimize impacts to the environment from operating practices and waste disposal.
- 2.2 This procedure applies to disposal of used batteries.
- 2.3 This procedure covers operations at the MDT Metro Mover Facility.

### 3 Responsibility

- 3.1 Storeroom personnel are responsible for the collection and disposal of all used batteries.
- 3.2 Storeroom supervisor is responsible for weekly inspection of storage areas to verify compliance with these requirements.
- 3.3 MDT Procurement is responsible for contracting for proper disposal of used batteries.

### 4 Procedure

- 4.1 All batteries are to be issued from the storeroom on a one to one exchange basis. There will be no issue of these items without an even exchange unless authorized in writing from a supervisor.
- 4.2 The storeroom personnel are responsible for insuring that used Alkaline, Nickel Cadmium, and Lead acid batteries are segregated in the designated drums outside the storeroom by the maintenance employee.
- 4.3 The storeroom personnel will seal filled drums and label with a “non-hazardous” waste label and arrange for pick up by the contracted vendor.

### 5 Consequences

- 5.1 Failure to comply with this procedure may:
  - 5.1.1 Subject the Department to fines for non-compliance to environmental laws and regulation.
  - 5.1.2 Violate Department policy.

### 6 References



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
86.02.09	Steve Alvarez	Steve Alvarez		

## WI-4.4.6-5.10 SHOP AND OFFICE RECYCLABLES MANAGEMENT

### 1 Purpose

1.1 To identify procedures for collection and disposal of shop and office recyclable materials.

### 2 Scope

2.1 To ensure compliance with the Miami-Dade Transit (MDT) Metro Mover Facility goal to minimize disposal of waste products into the landfill by recycling all reusable materials.

### 3 Responsibility

3.1 All personnel assigned to the MDT Metro Mover Facility

### 4 Definition

4.1 Recycle Disposal Area: A recycle bin will be established in the MDT Metro Mover Facility recycle area located near the stock room. Located in this area will be:

- 4.1.1 A large mixed/ combined recycle bin for paper, glass (except safety), and small (<5 gal) plastic containers
- 4.1.2 A large scrap metal bin
- 4.1.3 A cage basket for plastic containers 5 gallon and larger

### 5 Procedures

5.1 All reusable paper, cartridges, cans, bottles, and plastics are to be captured for recycling in the manner described below.

#### 5.2 Office Waste

- 5.2.1 Mixed Recycle: A clearly marked recycle bin will be placed in all offices areas; maintenance shop, and electronic repair, for the collection of mixed recycle products. All paper, recyclable plastic and cans are to be disposed of in this bin. Metro Mover workers shall empty these bins into the mixed/ combined recycle bin at appropriate intervals.
- 5.2.2 A separate bin will be located in all office areas for the collection of used printer/toner cartridges. The Metro Mover facility supervisor will be responsible for collection and recycle of these cartridges.
- 5.2.3 Monitors and electronic waste: The Metro Mover facility supervisor will be responsible for creation of a central location in the shop for temporary storage of computer monitors and electronic waste awaiting recycle disposal.
- 5.2.4 All cardboard shall be disposed of in the small white dumpster marked "CARDBOARD ONLY" located in the recycle area.

#### 5.3 Lunchrooms/ Break Rooms:

- 5.3.1 Mixed Recycle: A clearly marked recycle bin will be placed in all lunchrooms and break areas for the collection of mixed recycle products. All clean (not contaminated by food) paper, recyclable plastic and cans are to be disposed of in this bin.
- 5.3.2 Metro Mover workers shall empty these bins into the mixed/ combined recycle bin at appropriate intervals.

#### 5.4 Transit Train Cleaners

- 5.4.1 Train cleaners are to separate recyclable material from food waste at the time of pick-up.
- 5.4.2 Recyclable material is to be removed plastic trash bag and disposed of in the large mixed recycle bin located in the recycle area. **NOTE: THERE CANNOT BE ANY FOOD WASTE DUMPED INTO THIS CONTAINER.**
- 5.4.3 Mixed recycle waste removed from the transportation buildings shall be



MDT Internal Document No.	Person Responsible	Prepared by	Reviewed by	Approved by
86.02.09	Steve Alvarez	Steve Alvarez		

## WI-4.4.6-5.10 SHOP AND OFFICE RECYCLABLES MANAGEMENT

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disposed the large mixed recycle bin located in the recycle area. **NOTE:** THERE CANNOT BE ANY FOOD WASTE DUMPED INTO THIS CONTAINER.

- 5.5 Maintenance Personnel:
  - 5.5.1 Clearly marked mixed recycle bins will be located throughout the maintenance area. Maintenance personnel will dispose of clean glass (NO shatter proof glass or revenue vehicle windows.) and clean plastic bottles, smaller than 5 gallon, in these bins. Shop Utility workers shall empty these bins into the mixed/ combined recycle bin at appropriate intervals.
  - 5.5.2 Five gallon plastic buckets shall be neatly stacked next to mixed recycle bins. Shop Utility workers will place them in the cage basket located in the recycle area.
  - 5.5.3 Wooden pallets are to be stack next to the stock room near the loading area.
  - 5.5.4 All cardboard shall be disposed of in the small white dumpster marked "CARDBOARD ONLY" located in the recycle area.
  - 5.5.5 All scrap metal shall be discarded in the clearly marked 55 gallon drums located in the work pit and truck bay. Maintenance workers will be responsible for insuring that scrap metal drums are emptied into metal recycle bin in the recycle area.
  - 5.5.6 All empty 55 gallon barrels shall be processed for cleaning and the Supervisor will be responsible for coordinating drop off at the local recycle vendor.
- 6 **Consequences**
  - 6.1 **FAILURE TO ADHERE TO THIS PROCEDURE WILL RESULT IN THE FOLLOWING:**
    - 6.1.1 A compromise of the integrity of our recycling containers, which will result in vendor refusal to pick up the containers.
    - 6.1.2 An increase in the amount of waste being sent to landfills.
    - 6.1.3 A waste of our natural resources.
- 7 **Reference**



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	09/10/2009			

EMS Procedure

**EP-4.4.6-1 Operational Control Procedure Template**

**Person responsible:** Akbar Sharifi, P.E.

**Area of application:** Miami-Dade Transit (MDT) Metromover Operations

**Document location:** MDT's Main Office and Maintenance Facilities

**Original issue date:** 06/24/2009

**Revisions**

Rev. No.	Date	Description
001	6/2/2010	

**Recurring action items**

Activity	Responsibility	Frequency
1. Identify activities needing Work Instructions (WI) under the significant aspects.	EMS Team	Annually and when developing objective, targets and programs
2. Develop WI tracking system	EMS Team	Annually and when developing objective, targets and programs
3. Evaluate and implement training needs based on new and revised WI	EMS Team	As needed
4. Monitoring and evaluating the application and effectiveness of the operational controls and WI.	Akbar Sharifi, P.E./ Steve Alvarez	Annually or more frequently as needed

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	09/10/2009			

## EMS Procedure

### EP-4.4.6-1 Operational Control Procedure Template

#### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish practices related to the development and implementation of operational controls associated with the significant environmental aspects of the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 This procedure will also describe the method by which the MDT Metromover Facility will plan and control each of the identified operations and activities.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.4.6 Operational Control, of the ISO 14001:2004 standard and covers operations of MDT.
- 2.2 The scope establishes Operational Controls for Work Instructions (WI) to manage those activities, products and services:
  - 2.2.1 That are under the control or influence of the MDT Metromover Facility;
  - 2.2.2 That are associated with the significant environmental aspects;
  - 2.2.3 Where the absence of a work instruction could lead to a deviation from the EMS.

#### 3.0 Responsibility

- 3.1 The **EMS Management Representative** and the **EMS Team** are:
  - 3.1.1 Responsible for **identifying** processes and activities of the operational control needs. Following the identification they will be responsible for coordinating the documentation of the selected processes.
  - 3.1.2 Responsible for evaluating the Operational Control, WIs on an annual basis or more frequently if physical or operational changes are made at the MDT Metromover Facility, and make any necessary revisions. The WI evaluation will be documented and attendance recorded (e.g. agendas, sign in sheets, and meeting minutes) and the **ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking** as needed.
- 3.2 **Supervisors**, with the assistance of the EMS Team, will train and update employees under their supervision about the proper execution of the Operational Control, WIs for which the employees are responsible.
- 3.3 The EMS Management Representative, with the purchasing department, will develop and maintain a process to address suppliers and contractors who will be required to follow one or more of the Operational Control, WIs.



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	09/10/2009			

## EMS Procedure

### EP-4.4.6-1 Operational Control Procedure Template

#### 4.0 Definitions

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

#### 5.0 Process

- 5.1 Operational controls will be established to provide for the proper management of significant aspects. Operational controls should be in place for situations at MDT Metromover Facility where their absence could lead to deviation from the environmental policy, or the objectives and targets.
- 5.2 Processes and activities related to significant aspects will be identified by the MDT Metromover Facility EMS Management Representative and the EMS Team. These activities will be assessed for the need of a written Work Instruction (WI) to document the process. The development and implementation of the WIs shall be monitored using **ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking**.
- 5.3 Documentation of the operational control for selected processes will be the responsibility of the EMS Management Representative and the EMS Team. This responsibility includes the drafting of WIs. The WIs should be written in sufficient detail to provide the necessary level of instruction to ensure the desired outcome. Consideration may be given to the experience, education, and / or training of the person(s) who are executing the instructions. Particular attention will be given to the potential or actual consequences of certain information not being provided.
- 5.4 All relevant employee comments, inquires and suggestions submitted to the EMS Team will be considered when proposing and preparing the WIs.
- 5.5 The EMS Management Representative and EMS Team will reassess the operational control documentation annually.
- 5.6 All documents pertaining to Operational Control for WIs will follow the document control system in **EP-4.4.5-1 Control of Documents Procedure**.
- 5.7 Electronic copies of all documentation will be accessible from (give location and access instructions).
- 5.8 Only hardcopies of those EMS documents deemed critical to the daily operation of MDT Metromover Facility's EMS will be maintained and controlled.
- 5.9 EMS documents critical to the daily operation must be accessible to personnel who rely on such documents to complete their tasks in accordance to the EMS.
- 5.10 Operational Control requirements (implementation of WIs) will occur through training as detailed in **EP-4.4.2-1 Competence, Training and Awareness Procedure**.
- 5.11 The MDT Metromover Facility will use the Audit and Nonconformance elements to ensure that the Operational Control , WIs are adhered to and provide an effective means of planning and controlling



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EMS Procedure

**EP-4.4.6-1 Operational Control Procedure Template**

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critical activities. Auditing and Nonconformance are detailed in **EP-4.5.3-1 Nonconformity, Corrective & Preventive Action Procedure** and **EP-4.5.5-1 Internal Audit Procedure**.

**6.0 References / Related Documents**

- 6.1 EP-4.4.2-1 Competence, Training and Awareness Procedure
- 6.2 ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking
- 6.3 EP-4.4.4-2 EMS Related Definitions Procedure
- 6.4 EP-4.4.5-1 Control of Documents Procedure
- 6.5 EP-4.5.3-1 Nonconformity, Corrective & Preventive Action Procedure
- 6.6 EP-4.5.5-1 Internal Audit Procedure



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Date	06/24/2009	01/29/2010		

**ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking**

	Aspect	WI – Number & Name	Description/Comments	Person Responsible	Status	Target Date	Training Needs
1	Aerosol Cans	WI-4.4.6-5.1 Aerosol Cans Management	Proper management of recycling and/or disposal of aerosol cans. <i>(Impact - air, soil, surface water and groundwater pollutant if punctured or ruptured due to extreme temperature).</i>	Steve Alvarez/ Freeman Wright	Recycling material implemented by purchasing can puncturing equipment	11/30/2009	Yes
2	Fluorescent Tube and Ballast	WI-4.4.6-5.2 Fluorescent Light Bulbs Management	Proper management of recycling and/or disposal of light bulbs <i>(Impact - soil, groundwater pollution associated with landfill).</i>	Steve Alvarez/ Freeman Wright	Recycling material implemented by purchasing bulb crushing equipment	11/30/2009	Yes
3	Used Oil	WI-4.4.6-5.3 Used Oil Management	Proper management of used oil in the maintenance shop by filling, storing, and removing used oils from the 200-gallon tank/parts washer tank <i>(Impact - soil and groundwater pollution from spills from loading /unloading &amp; catastrophic failure of the tank).</i>	Steve Alvarez	Implemented Program	12/31/2009	Yes
4	Fresh Oil	WI-4.4.6-5.4 Fresh Oil Management	Proper management of motor oil storage and pollution prevention associated with filling, storing, and removing oils from 55-gallon drums <i>(Impact - air, soil, surface water and groundwater pollutant if discharged).</i>	Steve Alvarez	Implemented Program	12/31/2009	Yes
5	Chlorofluorocarbons (CFCs) Management – (i.e., Refrigerant/Coolant/ Freon	WI-4.4.6-5.5 CFCs Management	Proper management through servicing, and documenting all CFC's that are removed from a refrigeration unit for recharging or disposal <i>(Impact – air pollution)</i>	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes



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**ED-4.4.6-5 Operational Control, Work Instruction (WI) Tracking**

6	Used Tires	WI-4.4.6-5.6 Management Used Tires	Disposal and/or recycling of used tires in the maintenance shop ( <i>Impact</i> - water, soil and groundwater pollutant).	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes
7	Industrial Wastewater (i.e., Oil/Water Separator)	WI-4.4.6-5.7 Industrial Wastewater Management	Proper management of industrial wastewater (i.e., oil/water separator) and pollution prevention. ( <i>Impact</i> – 1. Soil and groundwater pollution from discharge associated with OWS (catastrophic failure of the OWS).  2. Pollution from discharge from OWS to sanitary sewer system exceeding discharge guidelines.	Steve Alvarez/ Steve Chayt	Implemented Program	12/31/2009	Yes
8	Shop Rags and Cotton Gloves	WI-4.4.6-5.8 Used Shop Rags and Cotton Gloves Management	Proper recycling and/or disposal methods used shop rags and gloves ( <i>Impact</i> - air, soil, surface water and groundwater pollution associated with landfill).	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes
9	Used Batteries	WI-4.4.6-5.9 Management Used Batteries	Proper recycling and/or disposal methods for used shop batteries ( <i>Impact</i> - air, soil, surface water and groundwater pollution associated with landfill).	Steve Alvarez/ Freeman Wright	Implemented Program	12/31/2009	Yes
10	Shop and Office Recyclables	WI-4.4.6-5.10 Management Recyclables	Proper recycling of shop and office recyclables (i.e., card boards, papers, etc.) by designated containers in shop and office areas, and documenting recycling activities ( <i>Impact</i> - soil, groundwater pollution associated with landfill).	Steve Alvarez	Implemented Program	12/31/2009	Yes



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**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.6-2 Contractor Management Procedure**

<b>Person responsible:</b> Akbar Sharifi, P.E.		
<b>Area of application:</b> Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b> MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b> 09/10/2009		
<b>Revisions</b>		
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>
001	02/10/10	Reviewed and updated procedure
<b>Recurring action items</b>		
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>
1. Identify contractors / suppliers that can be affected by the EMS requirements.	EMS Team	Prior to and during contract execution
2. Ensure contract documentation incorporates EMS requirements.	EMS Team	During contract development /submittal
3. Monitor relevant training needs for contractors, if appropriate.	Akbar Sharifi, P.E./ Steve Alvarez	Prior to and during contract execution

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.4.6-2 Contractor Management Procedure**

**1.0 Purpose**

- 1.1 The purpose of this procedure is to ensure contractor/supplier conformance with all environmental regulations, policies and procedures of the Miami-Dade Transit (MDT) Metromover Facility prior to any work being performed.

*This procedure will remain in draft form during the development and implementation of the (Miami-Dade Transit Metromover Facility) EMS. The EMS Team met on 09/10/2009 and determined that the Contractor Management Program will begin implementation as of 05/20/2010. See meeting minutes for details. The EMS Team will review, revise and approve this procedure and other necessary documents with the required personnel from our organization prior to the implementation date of the Contractor Management Program.*

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.4.6 *Operational Control*, of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility and it's suppliers and contractors.

**3.0 Responsibility**

- 3.1 MDT's procurement will establish and maintain this procedure for contractor environmental management. Specific procedures relevant to the work being conducted on the property will be distributed by MDT Procurement.
- 3.2 (Project Manager)
  - 3.2.1 will submit a purchase requisition to the (Purchasing Department) with a completed **ED-4.4.6-3 (F) Contractor Management Environmental Checklist** attached for all projects/purchases identified as having potential environmental aspects or impacts (i.e., on-site work by contractors/suppliers, chemical purchases).
  - 3.2.2 will coordinate any activities needed to satisfy concerns relating to the **ED-4.4.6-3 (F) Contractor Management Environmental Checklist**.
  - 3.2.3 will review the **ED-4.4.6-4 (F) Contractor Management Environmental Activities Manual** and form. This approved form along with the written recommendation for award shall be sent to the (Purchasing Department.)
  - 3.2.4 will assume full responsibility for contractor conformance on contracts with contractors/suppliers which do not follow the normal requisition process (i.e. emergency purchases)



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Metromover Maintenance Facility

EMS Procedure

**EP-4.4.6-2 Contractor Management Procedure**

3.3 (Purchasing Department)

3.3.1 will employ this procedure as of 5/20/2010. All contracts in place prior to 5/20/2010 will be grandfathered until contract renewal.

3.3.2 will ensure that when a review of the environmental aspects is required by the **ED-4.4.6-3 (F) Contractor Management Environmental Checklist**, the solicitation (i.e., IFB, RFP, Request for Quotation) shall include the following documents:  
 a) **ED-4.4.6-3 (F) Contractor Management Environmental Checklist** (completed copy)  
 b) **ED-4.4.6-4 (F) Contractor Management Environmental Activities Manual** with form

3.3.3 will develop language and place in the solicitation to:  
 a) Require contractors/suppliers to include in submitted pricing any costs associated with activities to ensure environmental compliance and minimize environmental impacts per MDT Metromover Facility EMS requirements.  
 b) Require all bidding contractors/suppliers to complete the **ED-4.4.6-4 (F) Contractor Management Environmental Activities Manual** form and return with the written quotation.

3.4 **EMS Management Representative and the EMS Team**

3.4.1 will develop, implement and maintain a schedule to communicate EMS awareness to contractors, suppliers and vendors to address Contractor EMS Training. (See 5.8 below)

**4.0 Definitions**

4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

4.2 **ED-4.4.6-3 (F) Contractor Management Environmental Checklist** - a checklist completed by the MDT Metromover Facility to define the activities and evaluate the potential for environmental issues on the MDT Metromover Facility property.  
 The **ED-4.4.6-3 (F) Contractor Management Environmental Checklist** will be referred to as the "**Checklist**" in this procedure.

4.3 **ED-4.4.6-4 (F) Contractor Management Environmental Activities Manual** - a set of materials that provides an overview of the MDT Metromover Facility's EMS, including the policy and general environmental requirements. Specific procedures and work instructions relevant to the work being conducted on the property will be distributed by the (EMS Team or designee of the MDT Metromover Facility). The **ED-4.4.6-4 (F) Contractor Management Environmental Activities Manual** will be referred to as the "**Activities Manual**" in this procedure. The **Activities Manual** also outlines the requirements for submitting the form included in the back. The form is completed by a prospective contractor/supplier, upon request. The information provided will outline the work to be undertaken and the method(s) for minimizing and managing environmental impacts.



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**EP-4.4.6-2 Contractor Management Procedure**

**5.0 Process**

- 5.1 All contractors/suppliers will comply with this procedure as of 5/20/2010. All contracts in place prior to 5/20/2010 will be grandfathered until contract renewal.
- 5.2 The (Project Manager) will submit a purchase requisition to the (Purchasing Department) with a completed **Checklist** attached for all projects/purchases identified as having potential environmental aspects that may affect the facility (i.e., work by on-site contractors/suppliers, chemical purchases). The (Project Manager) should review the details of the project and coordinate any activities needed to satisfy concerns relating to the **Checklist**.
- 5.3 If the project/purchase will not have a potential environmental impact (i.e. parts purchases, office furniture), the purchase requisition will follow regular purchasing procedures and the **Checklist** does not need to be filled out. If the (Project Manager) is unsure if the project/purchase shall have an environmental impact, the **Checklist** shall be attached to the requisition requesting that an **Activities Manual** form be included with the solicitation documents.
- 5.4 The (Purchasing Department) will review the **Checklist** submitted with the solicitation (i.e., IFB, RFP, Request for Quotation) for items marked “Yes” indicating an environmental impact can occur. A request for additional information shall include the following documents:
  - a) **Checklist** (Copy)
  - b) **Activities Manual** (Form)
- 5.5 The (Purchasing Department) shall forward the submitted / completed **Activities Manual** form to the (Project Manager) for review.
- 5.6 The (Project Manager) will review the **Activities Manual** form from the prospective Contractor/Supplier to determine if all the significant environmental aspects have been addressed and if all standards set by the EMS have been fulfilled.
  - 5.6.1 If the submitted form is inadequate, the (Project Manager) will contact the prospective Contractor/Supplier to request more information to complete the **Activities Manual** form.
- 5.7 Once the **Activities Manual** form has been reviewed and approved, the (Project Manager) will forward a copy to the (EMS Management Representative or designee of the MDT Metromover Facility and to the Contractor/Supplier. The original will be maintained on file in the (Purchasing Department) office.
  - 5.7.1 The (Purchasing Department) will maintain a copy of the **Checklist** and the **Activities Manual** form as a part of the contract documents.



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Metromover Maintenance Facility

EMS Procedure

**EP-4.4.6-2 Contractor Management Procedure**

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5.8 Contractor EMS Training

- 5.8.1 In this section – briefly outline the planning and scheduling to communicate EMS awareness to contractors, suppliers and vendors. Develop, implement and maintain the Contractor EMS Training in an appropriate time frame keeping continual improvement in mind. Ask the question, what will be the documented objective evidence that this communication has occurred? For example, attendance sign-in sheets, letters, etc.
- 5.8.2 The intent of the ISO 14001 standard is to consider how contractors, suppliers and vendors might affect the ability to manage *Environmental Aspects*, achieve *Objectives, Targets and Programs*, and otherwise comply with applicable *Legal and Other Requirements*. An organization should establish *Operational Controls* that are needed, such as documented procedures or Work Instructions, contract agreements and **communicate** them to contractors and suppliers as appropriate. Consider a link to the **EP-4.4.2-1 Competence, Training and Awareness Procedure**.

**6.0 References / Related Documents**

- 6.1 ED-4.4.6-3 (F) Contractor Management Environmental Checklist
- 6.2 ED-4.4.6-4 (F) Contractor Management Environmental Activities Manual
- 6.3 EP-4.4.2-1 Competence, Training and Awareness Procedure



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Environmental Document

**ED-4.4.6-3 (F) Contractor Management Environmental Checklist**

The following information is required by the (MDT Project Manager) prior to contracted activity or service.

Will the contracted activity or service include any of the following?

<u>Combustion Sources such as:</u>	<u>Circle Yes or No to all questions</u>	
Air Heating and Supply	Yes	No
Mobile Transportation, such as forklift or carts	Yes	No
Construction Activities	Yes	No
Excavation or Grading	Yes	No
Drilling or Blasting	Yes	No
Rock Crushing	Yes	No
Demolition	Yes	No
Welding or Soldering	Yes	No
Painting	Yes	No
Asphalt Paving	Yes	No
Use or Storage of Chemicals or Fuels	Yes	No
Transfer of Bulk Materials	Yes	No
Disposal of Chemical Wastes	Yes	No
Disposal of General Wastes	Yes	No
If yes, please describe waste streams:		



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Environmental Document

**ED-4.4.6-3 (F) Contractor Management Environmental Checklist**

**Building Maintenance Activities:** **Circle Yes or No to all questions**

Architectural Paint Removal	Yes	No
Architectural Painting	Yes	No
Hydroblasting	Yes	No
Sandblasting	Yes	No
Surface Preparation / Treatments, such as floors and roof repair	Yes	No
Purging or repair of distribution lines such as those for fuel, oil, or solvents	Yes	No
Use of chemicals, solvents, caustics, acids, oils, etc.	Yes	No
Use of herbicides, pesticides, or insecticides	Yes	No

**Business or Work Related Activities:** **Circle Yes or No to all questions**

Use or receipt of chemical materials (other than janitorial or cleaning materials.)	Yes	No
Generation and disposal of chemical wastes	Yes	No
Generation of sealers, adhesives, coatings, or paints	Yes	No
Welding, soldering, brazing or similar activities	Yes	No
Use of caustics or acids	Yes	No
Use of combustion gases	Yes	No



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Environmental Document

**ED-4.4.6-3 (F) Contractor Management Environmental Checklist**

**Business or Work Related Activities:** **Circle Yes or No to all questions**

Please list fuels used:

Laboratory installation	Yes	No
Medical Waste	Yes	No
Discharge to storm drains	Yes	No

To be completed by the (MDT's - Project Manager) prior to the contracted work or service.

A review of the above activities determined:

- This **Checklist** form (ED-4.4.6-3 (F) is approved, no further action is needed.
- The **Activity Manual** form (ED-4.4.6-4 (F) must be completed by the contractor/supplier.

(Project Manager) Signature:

Date:

Refer to **EP-4.4.6-2 Contractor Management Procedure** for information regarding the use, routing and approval of this form.



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Environmental Management System (EMS)

**ED-4.4.6-4 (F) Contractor Management Environmental Manual**

**Person responsible:** Akbar Sharifi, P.E.

**Area of application:** Miami-Dade Transit (MDT) Metromover Operations

**Document location:** MDT's Main Office and Maintenance Facilities

**Original issue date:** 06/24/2009

**Revisions**

Rev. No.	Date	Description
001		
002		

**Requirements**

- 1.0 Introduction
- 2.0 General Environmental Management Procedures
- 3.0 Waste Disposal
- 4.0 Equipment Decommissioning
- 5.0 Water Discharges
- 6.0 Material Storage/Spills
- 7.0 Storm Water Management
- 8.0 PCBs
- 9.0 Asbestos
- 10.0 Lead
- 11.0 CFCs
- 12.0 Contractor Environmental Activity Review

**APP MDT's Environmental Policy (include as an Attachment)**



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## Environmental Management System (EMS)

### ED-4.4.6-4 (F) Contractor Management Environmental Manual

#### 1.0 Introduction

- 1.1 The following information is supplied to contractors and suppliers who perform work on site for Miami-Dade Transit (MDT). The information presented in these guidelines has been developed in response to the Environmental Management System (EMS). The intent of this information is to make contractors and suppliers aware of the EMS and to ensure conformance to applicable EMS procedures and work instructions.
- 1.2 An important part of the EMS relates to the control of contractors, subcontractors and persons working for or on behalf of the MDT who are required to comply with relevant environmental policies and procedures. The nature of these activities is such that their personnel have significant potential to affect environmental performance and regulatory compliance within the MDT. Contractor personnel and our personnel therefore must work together to achieve the goals of the environmental policy, objectives and targets and the protection of the environment. Contractors must be aware of the importance of compliance with relevant environmental legislation and regulations, and of the consequences of non-compliance.
- 1.3 The MDT operates an EMS that meets the requirements of the ISO 14001 standard. Conformance with the environmental policy and all requirements noted in this document is expected of all contractors, subcontractors, suppliers and their employees while working on site. Failure to follow these requirements can be grounds for termination of the on-site contract work.
- 1.4 For further information, please contact the MDT Metromover Facility, 305-375-2953 or 305-218-0855.

#### 2.0 General Environmental Management Procedures

- 2.1 Contractors will not transport hazardous chemicals on site without having prior knowledge of the associated Material Safety Data Sheets (MSDS). These materials include but are not limited to sealers, adhesives, paints, coatings, fuels, oils, acids and caustics. All sizes of containers require review and approval before their use on site.
- 2.2 Contractors will provide adequate control of fugitive dust emissions during all operations and activities.
- 2.3 Contractors will not discharge anything to drains and or sewers without the prior approval of the MDT's Site Supervisor or designee.
- 2.4 Contractors will provide adequate spill/release prevention for all bulk materials.
- 2.5 Contractors will immediately notify the MDT - Project Manager of any reportable spills, releases or other environmental incidents. Contractors will follow up by submitting a completed Tracking of Spills and Releases form.
- 2.6 Contractors will properly label, store and dispose of all waste materials.



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## Environmental Management System (EMS)

### ED-4.4.6-4 (F) Contractor Management Environmental Manual

- 2.7 Contractors will be sensitive to the effects of noise, odor, light and traffic movement to the local community.
- 2.8 All contractors shall practice good housekeeping. Removal of trash, etc. generated by the contractor's activities or the activities of its employees are the contractor's responsibility.
- 2.9 Contractors are responsible for keeping the site clean and orderly.
- 2.10 Contractors will not engage in any excavation activities on site without the prior approval of the MDT - Project Manager.

#### 3.0 Waste Disposal

- 3.1 All waste disposal (i.e. construction debris, scrap metal, non-hazardous waste, municipal solid waste, etc.) will be the responsibility of the contractor, the originator of the waste, unless otherwise pre-approved.
- 3.2 The MDT - Project Manager must be informed of all generated hazardous waste streams before a waste is generated and collected on site.
- 3.3 The MDT - Project Manager must be informed of the location of all generated hazardous waste storage areas, maximum quantities and the container type.
- 3.4 Containers must be labeled with their contents and the responsible contractor's name and contact information. NO UNLABELED CONTAINERS ARE PERMITTED ON SITE.
- 3.5 Shipping information and paperwork (MSDS, Waste Profiles, Bills of Lading and inventory) must be provided upon request.
- 3.6 Contractors will be contractually responsible for all regulated wastes.

#### 4.0 Equipment Decommissioning

- 4.1 All equipment will be thoroughly inspected by the contractor for fluids and other hazardous materials prior to removal.
- 4.2 All fluids and other hazardous materials in the equipment will be removed prior to decommissioning and disposal of any waste generated will be handled in accordance with the above instructions in 3.0.

#### 5.0 Water Discharges

- 5.1 Discharge of materials to ANY sewer system, other than sanitary sewage, is prohibited without the prior consent of the MDT – Site Supervisor.
- 5.2 Discharges of ANY material to outside drains other than storm water are prohibited under the established guidelines of the CLEAN WATER ACT.



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## Environmental Management System (EMS)

### ED-4.4.6-4 (F) Contractor Management Environmental Manual

- 5.3 In the event that the MDT's site supervisor approves discharges to sewers, the wastewater treatment plant must still be notified prior to discharges of any significant volume or any discharges that could affect the operations of the wastewater treatment plant.

#### 6.0 Material Storage / Spills

- 6.1 There will be no outside storage of any materials without the consent of the MDT - Project Manager.
- 6.2 Approved outside storage areas for chemical materials must be equipped with **non-earthen** secondary containment equal to 150% of the capacity of the largest container by the contractor.
- 6.3 The contractor will ensure that all material containers owned or managed by the contractor will be properly labeled in accordance with the OSHA HAZARD COMMUNICATION STANDARD (i.e., contents, primary hazard).
- 6.4 The contractor will have available the material safety data sheets (MSDS) for all chemical products in use at all times that their employees are working on site. MSDS's will be made available to personnel, medical personnel, environmental personnel or their representatives upon request.
- 6.5 The contractor will ensure that chemical containers are closed except when in use.
- 6.6 Contractors will maintain spill kits to contain and clean up small spills generated by their employees or from their materials. Spill kits will be kept on site and will be easily accessible during an emergency.
- 6.7 THE CONTRACTOR WILL IMMEDIATELY REPORT ALL SPILLS OR RELEASES OF MATERIALS OTHER THAN INCIDENTAL SPILLS to the MDT Metromover Facility, 305-375-2953 or 305-218-0855. Contractors will follow up by submitting a completed Tracking of Spills and Releases form.

#### 7.0 Storm Water Management

- 7.1 No process materials or any other sources of water pollutant shall be co-mingled with storm water.
- 7.2 Solids must be prevented from entering sewer drains. Roadways and outside areas must be kept clean.
- 7.3 It is the contractor's responsibility to install storm water control measures such as silt fences, straw bales, etc. to control the solids entering storm drains from erosion or other processes if necessary.
- 7.4 All dirt piles must be covered to prevent solids from entering storm drains unless otherwise directed.
- 7.5 Vehicle maintenance shall not be performed near storm drains unless provisions have been made to contain any spills of vehicle fluids, including oil, gasoline and antifreeze.
- 7.6 In the event that a stormwater management plan is required (i.e. greater than 1 acre of land is disturbed), the plan will be submitted to the MDT - Project Manager for approval.



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## Environmental Management System (EMS)

### ED-4.4.6-4 (F) Contractor Management Environmental Manual

#### 8.0 PCBs

- 8.1 If a material is suspected to have PCB contamination, the MDT - Project Manager is to be notified.
- 8.2 All PCB removals shall be coordinated by the MDT - Project Manager.
- 8.3 Any lighting ballast that does not state that it is a non-PCB containing ballast must be disposed of as PCB containing.

#### 9.0 Asbestos

- 9.1 Contractors will contact the MDT - Project Manager prior to any construction or demolition work that could disturb existing structures or equipment.
- 9.2 All asbestos removal and disposal activities will be conducted in accordance with procedures approved by the MDT - Project Manager.

#### 10.0 Lead

- 10.1 Contractors are responsible for testing for the presence of lead-based paints when grinding or welding on building or building structural steel. Testing will be done by an approved lab as directed by the MDT - Project Manager.
- 10.2 All lead removal and disposal activities will be conducted in accordance with procedures approved by the MDT - Project Manager.

#### 11.0 CFCs

- 11.1 Contractors will provide copies of employee training certificates to the MDT - Project Manager upon request.
- 11.2 Intentional venting of CFCs to the atmosphere is prohibited.

#### 12.0 Contractor / Supplier Environmental Review

- 12.1 Upon request, contractors are to submit the following form which contains written information outlining their activities and procedures for minimizing and managing the actual or potential environmental impacts of their operations. This must include an assessment of the potential risks to the environment, contractors, employees and other personnel associated with on-site activities and proposed measures for minimizing these risks.



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Date	9/10/2009			

Environmental Management System (EMS)

**ED-4.4.6-4 (F) Contractor Management Environmental Manual**

This form must be completed, signed and returned before the contracted work commences.

The following information is to be filled out by the Contractor/Supplier (Please Print)

Contact Person: \_\_\_\_\_ Date: \_\_\_\_\_

Company Name: \_\_\_\_\_

**Activities or Work Description:**

(Organization Name) site: \_\_\_\_\_

Briefly describe the activities or work to be undertaken by your company at the (Organization Name) site.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Air Emissions:**

Will the activities or work you perform produce or cause the release of any air emissions? YES or NO

If YES, list the air emissions and the method for preventing impact to the environment.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Water Discharges:**

Will the activities or work you perform produce or cause the release of any wastewater? YES or NO

If YES, how will the wastewater be handled?

\_\_\_\_\_

\_\_\_\_\_



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	9/10/2009			

## Environmental Management System (EMS)

### ED-4.4.6-4 (F) Contractor Management Environmental Manual

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#### Materials:

What materials (chemicals, oils, etc.) and/or equipment will you be handling or bringing on site to perform the contracted work?

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#### Training:

Your employees should be trained on the proper handling of materials and equipment, and the proper response to incidents involving these materials. Describe the training that your employees receive.

---

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#### Waste Generation:

Will the activities or work you perform result in the generation of any wastes? YES or NO

If YES, list the amounts and the types of wastes expected and the proposed disposal method.

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Are any waste generated to be recycled? YES or NO

If YES, list the recyclables, where and how they will be recycled.

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Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	9/10/2009			

Environmental Management System (EMS)

**ED-4.4.6-4 (F) Contractor Management Environmental Manual**

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**Energy:**

Will the activities or work consume energy? YES or NO  
 (electricity, compressed air, natural gas, steam, etc.)

If YES, explain what type of energy will be consumed, and how you will minimize consumption.

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**Other:**

Are there any other ways in which your activities will affect or protect the environment? YES or NO

If YES, please describe below.

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**Information:**

Company Name: \_\_\_\_\_

Contact: First Name: \_\_\_\_\_ Last Name: \_\_\_\_\_ Title: \_\_\_\_\_

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

Secondary Contact: \_\_\_\_\_ Sec. Phone: \_\_\_\_\_

**Environmental Agreement**

My company and subcontractors that I may bring to the site will abide by all environmental regulations and policies whenever on the property. My company will train all personnel contracting on the property. Sign-in sheets will be maintained as evidence that environmental training has been conducted and will be made available upon request. The (Organization Name - Project Manager) will communicate applicable changes of the Environmental Management System to my company. Retraining of affected individuals will be conducted, as appropriate.



Verification	Originator	Revised	Approved	Issued
Initials	AS			
Date	9/10/2009			

## Environmental Management System (EMS)

### **ED-4.4.6-4 (F) Contractor Management Environmental Manual**

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*For questions or additional information contact the (Organization Name, Office and Phone)*

Print Name: \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

#### **(Project Manager) Review and Approval**

A review of the above-submitted document has been found to be:

COMPLETE – approved, no further action is needed.

INCOMPLETE – a response must be received by: \_\_\_\_\_

(Project Manager) Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Attachment K**  
Emergency Preparedness and Response Procedure,  
Plan Review, Best Management Practices, and  
Inspection Checklist

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

**Metromover Maintenance Facility**

**EMS Procedure**

**EP-4.4.7-1 Emergency Preparedness and Response**

**Person responsible:** Akbar Sharifi, P.E.

**Area of application:** Miami-Dade Transit (MDT) Metromover Operations

**Document location:** MDT's Main Office and Maintenance Facilities

**Original issue date:** June 24, 2009

**Revisions**

Rev. No.	Date	Description
001	02/10/10	Reviewed and updated procedure

**Recurring action items**

Activity	Responsibility	Frequency
1. Review existing emergency plans and revise as necessary to account for changes in operating or construction of new processes.	Steve Alvarez	Within 6 months of program launch and upon development of additional documents or revisions and annually thereafter.
2. Review adequacy of response actions after each reportable spill or other environmental emergency.	Steve Alvarez	Following environmental emergencies
3. Create / revise the relevant response protocols and documentation as necessary and incorporate into EMS Training.	Steve Alvarez	Whenever it is determined that the existing response actions either do not address or are inappropriate.
4. Perform follow up review.	Steve Alvarez	Within 3 days of environmental emergency
5. Implement periodic tests of emergency plans and procedures.	Steve Alvarez	Within 6 months of implementation and annually thereafter.

Print date:  
02/10/2010

**WARNING!** This document is uncontrolled when printed.

**Page 1 of 4**

*Previous versions or printed copies may be obsolete. Verify current revisions using the EMS web site.*



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

Metromover Maintenance Facility

EMS Procedure

**EP-4.4.7-1 Emergency Preparedness and Response**

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents

**1.0 Purpose**

- 1.1 The purpose of this procedure is to establish, implement and maintain practices that relate to the preparation and response for environmental emergency situations at the Miami-Dade Transit (MDT) Metromover Facility.

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.4.7 Emergency Preparedness and Response, of the ISO 14001:2004 standard, and covers operations of MDT Metromover Facility.
- 2.2 The scope of establishing emergency preparedness and response guidelines is limited to managing those potential emergency situations and potential accidents that can impact the environment and how the MDT Metromover Facility will respond to them.

**3.0 Responsibility**

- 3.1 The **EMS Management Representative** and the **Facility Emergency Coordinator** will be responsible for accessing, maintaining and reviewing all of the **Emergency Response Plans** for the proper personnel training and locations. This includes coordinating the training of employees with the **Human Resources (HR) Department** and the **Supervisors**. This also includes coordinating an annual review of the EMS requirements for emergency preparedness and response with the EMS Team.
- 3.2 The **EMS Team** will participate in the **identification** of potential emergency and accidents as well as assist with an annual review of the EMS requirements for emergency preparedness and response. The EMS Team will also coordinate the review and revision of the **Emergency Response Plans** following the occurrence of a reportable spill or emergency situation, as needed.



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

Metromover Maintenance Facility

EMS Procedure

**EP-4.4.7-1 Emergency Preparedness and Response**

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**4.0 Definitions**

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure** (Workshop participants may need to update the existing list to include facility specific definitions from this procedure or the existing emergency plans.)

**5.0 Process**

- 5.1 A potential emergency and accident plan review will be conducted annually by the EMS Management Representative and the EMS Team. This review will be documented on **ED-4.4.7-2 Emergency Preparedness Plan Review**.
- 5.2 The MDT Metromover Facility **Emergency Response Plans** (including Hazardous Waste, Hazardous Materials, and Spill Response Contingency Plans) will be linked to the EMS and are accessible and located in the following areas:
  - 5.2.1 EMS Management Representative - Hard Copy & Electronic
  - 5.2.2 Security Station - Hard Copy
  - 5.2.3 Facility Emergency Coordinator - Hard Copy & Electronic
  - 5.2.4 The **Emergency Response Plans** are accessible electronically to all MDT Metromover Facility supervisors through links established in (list electronic location and means of access already established.)
- 5.3 All MDT Metromover Facility employees are made aware of the **Emergency Response Plans** and are trained to the specifics by their supervisors.
- 5.4 Emergencies and spills will be reported to the proper authorities as required by the federal, state and local regulations.
- 5.5 The EMS Management Representative and the Facility Emergency Coordinator will ensure the **Emergency Response Plans** are documented, properly reviewed and updated as appropriate. The **Emergency Response Plans** should be reviewed for their ability to identify the potential for and response to accidents and emergency situations, and for preventing mitigating environmental impacts that may be associated with them. Consideration should also include: accidental discharges to air, water, land and other specific environmental affects from accidental releases.
- 5.6 The **Emergency Response Plans** will undergo a review after the occurrence of a reportable spill or emergency situation.
- 5.7 Emergency preparedness drills shall be carried out when feasible and documented as such for



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Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

Metromover Maintenance Facility

EMS Procedure

**EP-4.4.7-1 Emergency Preparedness and Response**

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permanent records.

5.8 Emergency situations will be responded to as prescribed by the **Emergency Response Plans**.

**6.0 References / Related Documents**

- 6.1 Meeting Minutes and Records from the Emergency Plan review.
- 6.2 ED-4.4.7-2 Emergency Preparedness Plan Review
- 6.3 Detailed list of the **Emergency Response Plans** include identification numbers and or relevant section numbers of the plans.
- 6.4 EP-4.4.4-2 EMS Related Definitions Procedure

# Miami-Dade Transit



EMS Document

Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

## ED-4.4.7-2 Emergency Preparedness Plan Review

<p><b>Document Name:</b> <a href="#">Metromover Facility Emergency and Accident Plan Review</a></p> <p><b>Document No:</b> 1</p> <p><b>Review start Date:</b> 06/24/2009</p> <p><b>Date Fully Completed:</b> On Going</p>	<p><b>Facility/Department:</b> Maintenance</p> <p><b>Personnel participating in the review:</b> <a href="#">EMS Team Members</a></p>
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1.0 Identify Potential Emergency and Potential Accidents that can have an impact on the environment and how to respond to them.

Operation, Activity or Equipment	Potential Accident or Emergency Situation	Environmental Impacts	Potential Prevention and Mitigation Measures
Fresh / Used Oil Transfer	Fuel release	Impact to adjacent drains and underlying soil and personnel in the area.	Secondary containment, routine inspections, integrity tests, maintain spill kit close by, training refueling personnel, not refueling in the rain, annual spill response drill, and Best Management Practices.
Hazardous Material Handling	Fire and subsequent release	Substantial release to the air, soil and surface water in addition to impacts to emergency responders and adjacent communities.	Proper storage and labeling, adhere to EPCRA requirements, coordinated fire response drills with Fire Department, annual fire extinguisher/response training, and Best Management Practices.
Oil/Water Separator	Fuel/Oil release	Substantial release to the air, soil and surface water in addition to impacts to emergency responders and adjacent communities.	Secondary containment, routine inspections, integrity tests, maintain spill kit close by, training refueling personnel, annual spill response drill, and Best Management Practices.

# Miami-Dade Transit



EMS Document

Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

## ED-4.4.7-2 Emergency Preparedness Plan Review

### 2.0 Identify existing emergency preparedness plans

Plan Name	Location of Plan	Date of Plan	Person Responsible for the Plan
Spill Prevention, Control and Countermeasures Plan	Miami-Dade Transit (MDT) Main Office and Maintenance Facilities	07/01/2009	Mr. Akbar Sharifi, P.E.
Hurricane Manual	Miami-Dade Transit (MDT) Main Office and Maintenance Facilities	05/19/2009	Office of Safety and Security
System Safety Plan	Miami-Dade Transit (MDT) Main Office and Maintenance Facilities	04/2003 (Revision #9)	Mr. Steve Alvarez

# Miami-Dade Transit



EMS Document

Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	06/24/2009	02/10/2010		

## ED-4.4.7-2 Emergency Preparedness Plan Review

### 3.0 Review the Emergency Preparedness and Response Checklist items.

Emergency Preparedness and Response Checklist		Conformance/Comments/and Actions
3.1	Ensure that emergency response personnel are trained on the procedures and competent to respond to emergency events or accidents.	Yes, once a year.
3.2	Ensure that appropriate public agencies and/or first responders have been made aware of our emergency response plans and the location of chemicals or other environmental hazards that may be encountered.	Yes.
3.3	Is there a schedule to conduct emergency drills on a periodic basis (i.e. spills, fire, chemical releases)	Yes.
3.4	In the event of a reportable spill or emergency event, procedures are required to be reviewed, modified if necessary and documented what corrective actions are taken.	Yes, as required in the procedure.
3.5	Emergency phone numbers should be posted in relevant locations and kept up to date.	Yes.
3.6	Is there additional training needed for persons working for or on behalf of the organization?	Yes, SPCC Plan.
3.7	Have the existing emergency response plans identified above in section 2.0 been kept up to date?	Yes.

### 4.0 Revision Table

Rev. No.	Date	Revised by	Description
1	02/10/2010	Akbar Sharifi, P.E.	Updated emergency preparedness plan review table

# Best Management Practices (BMPs)

## I. Oil Transfer BMPs

**Table 1** presents BMPs for minimizing the potential for accidental releases of petroleum products during oil transfer activities.

<b>Table 1 –Oil Transfer BMPs (Waste Oil Disposal Vendor)</b>	
<b>Stage</b>	<b>Tasks</b>
Prior to loading/unloading	<ul style="list-style-type: none"> <li>• Visually check all hoses for leaks.</li> <li>• Lock all drainage valves of secondary containment structures.</li> <li>• Ensure fuel delivery vehicle is secure with wheel chocks and interlocks and parking brake is engaged.</li> <li>• Ensure lowermost drain outlet(s) are tightened, adjusted, or replaced to prevent a liquid discharge while in transit.</li> <li>• Check that all valves are properly aligned and the pumping system is functioning properly.</li> <li>• Ensure all cellular phones in the immediate vicinity of the fuel loading/unloading are not in use.</li> </ul>
During loading/unloading	<ul style="list-style-type: none"> <li>• Ensure that the driver of the fuel delivery vehicle stays with the vehicle at all times during loading/unloading activities, and monitors the process.</li> <li>• Inspect all systems, hoses and connections periodically during the loading/unloading process.</li> <li>• Keep external and internal valves on the receiving tank open along with pressure relief valves.</li> <li>• Monitor the liquid level in the receiving tank to prevent overflow.</li> <li>• Monitor flow meters to determine the rate of flow.</li> <li>• Reduce flow rate to prevent overflow when approaching the fill capacity of the tank.</li> </ul>
After loading/unloading	<ul style="list-style-type: none"> <li>• Close all tank and loading valves before disconnecting.</li> <li>• Ensure all vehicle internal, external, and dome cover valves are securely closed before disconnecting.</li> <li>• Secure all hatches.</li> <li>• Check that all hoses are completely drained of fuel before moving them away from the connection. Use a drip pan.</li> <li>• Cap the end of the hose and other connecting devices prior to moving them.</li> <li>• Remove any wheel chock and interlocks.</li> <li>• Inspect lowermost drain and all outlets on fuel delivery vehicle prior to departure. If necessary, ensure caps, valves and other equipment are tightened or replaced to prevent fuel leakage while in transit.</li> </ul>

## II. Housekeeping BMPs

Best Management Practices which address housekeeping issues should be followed daily by all MMF employees. It is essential to maintain clean and orderly oil storage and usage areas to reduce pollutants, especially those areas exposed to precipitation. **Table 2** presents housekeeping checks which help to minimize sudden or unplanned releases of petroleum products.

<b>Table 2 – Housekeeping BMPs</b>	
<b>Stage</b>	<b>Tasks</b>
Oil Transfer Activities	<ul style="list-style-type: none"> <li>• Check dispensers for leaks in valves, pumps and flanges.</li> <li>• Use absorbent materials on small spills and for general cleaning.</li> <li>• Ensure proper storage and disposal of used absorbent materials.</li> <li>• Keep ample supplies of spill cleanup materials in readily accessible locations, and replenish spill kits as necessary.</li> </ul>
Materials Storage	<ul style="list-style-type: none"> <li>• Store harmful materials and chemicals in covered areas, away from rain and accumulated stormwater.</li> <li>• Ensure chemicals and drums are not directly stored on the ground.</li> <li>• Ensure all drums and containers are properly labeled and maintained closed at all times when not in use.</li> <li>• Comply with local fire codes when storing reactive, ignitable, or flammable liquids.</li> <li>• Maintain an accurate and current inventory of all materials delivered and stored onsite.</li> <li>• Train employees and subcontractors in the proper handling of wastes and materials onsite.</li> </ul>
Solid Waste Management	<ul style="list-style-type: none"> <li>• Institute waste minimization procedures and practices.</li> <li>• Ensure all solid waste is properly disposed.</li> <li>• Check that no spent harmful chemicals, hazardous wastes or petroleum products are disposed with regular solid waste.</li> <li>• Institute a recycling program were possible.</li> </ul>
General Procedures	<ul style="list-style-type: none"> <li>• Check the general condition of all tanks, containments, and piping for appearance and cleanliness. Report any condition requiring immediate attention (e.g., plugged drainage and poor housekeeping).</li> <li>• Immediately investigate any evidence of a recent fuel spill.</li> <li>• Ensure all gates and access doors are kept locked when these areas are unattended. All broken fences and gates should be repaired or replaced immediately.</li> <li>• Check that all tank openings, valves, sump drains, fill caps, loading/unloading hoses, master electrical switches, and other accessible fittings are kept locked when not in use.</li> <li>• Verify that fire extinguishers, spill kits, and other response equipment are properly located with unobstructed access for immediate use.</li> <li>• Ensure that access roads are kept free of debris and obstructions to permit free movement of emergency response vehicles.</li> </ul>

### **III. Inspections and Maintenance**

MDT conducts periodic visual inspections of all petroleum handling equipment. The purpose is to visually detect discharges and to repair faulty tank/piping equipment and appurtenances which could lead to a discharge of oil. The following monthly and annual checks of the facility's petroleum storage systems and associated piping are performed:

- **Monthly Checks**

- Check tanks, piping, valves, hoses, meters, filters, and other fuel handling equipment for leaks and proper operation.
- Immediately report any visible leaks, and repair/replace defective items as necessary.
- Monitor the interstitial space of Tank 1.
- Visually inspect exterior of each tank, drum, and secondary containment structures.
- Check spill containment devices, liners, dispensers, and piping sumps for proper operation.

- **Annual Checks**

- Test the operation of all automated and mechanical liquid/leak level sensing systems.

# **Spill Response, Supplies and Deployment Procedures**

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## **I. Spill Response**

Minor discharges of oil occurring at the facility are to be quickly addressed by MDT personnel. In general, minor discharges are those that pose no significant threat to human health and safety or to the environment. Minor discharges are generally characterized by the following:

- Discharge quantity is small (i.e. less than 25 gallons).
- The discharge is easily stopped and controlled at the time of discharge.
- The discharge is localized near the source.
- The discharge is unlikely to reach surface or ground water(s).
- Little risk exists for fire or explosion.
- Little risk exists to human health and safety.

Minor discharges fitting the above-referenced criteria, can be cleaned up by trained MDT personnel. The following procedures must be followed:

- Immediately notify the Metromover Maintenance General Superintendent and the Environmental Department Senior Engineer.
- Eliminate potential spark sources.
- Identify and shut down the source of the discharge to stop flow, if possible and safe to do so.
- Contain the discharge with sorbents, berms, and other basic response materials.
- Place all affected debris and cleanup materials in properly labeled containers for disposal according to applicable regulations.
- Follow the applicable spill notification procedures listed in **the Spill Prevention, Control and Countermeasure (SPCC) plan.**

Major discharges are those that cannot be safely controlled or cleaned up by MDT personnel. Major discharges may fit any of the following criteria:

- The discharge is large enough to spread beyond the immediate discharge area.

- The discharged material enters surface or ground water(s).
- The discharged material requires special equipment or training to clean up.
- A danger for fire or explosion exists.
- The discharge material poses a hazard to human health and safety.

MDT facility personnel should not attempt to stop or clean up major discharges, must observe applicable Department emergency and evacuation policies, and follow the directions of local authorities responding to the scene. In the event of major discharges of oil, MDT's Environmental Department will contact a state-certified and licensed cleanup contractor to mobilize to the site to respond to the spill.

## **II. Supplies**

At the time of inspection, absorbent pads and heat-treated absorbent (dry sweep) were stocked inside the Storeroom, and occasionally around maintenance personnel workstations. These materials are to be deployed and used to address minor discharges, or applied to major discharges until additional help arrives.



Operation and Maintenance (O&M)  
Inspection Checklists –  
*Annual*

**Miami-Dade Transit  
Metromover Maintenance Facility**

---

(year)

**STORAGE TANK SYSTEM  
ANNUAL INSPECTION CHECKLIST**

Inspection performed by: \_\_\_\_\_  
(Print Name)

Date: \_\_\_\_\_

**Devices to pass testing procedure(s) specified by manufacturer:**

Loading dock Tank No. <u>  1  </u>	Yes	No	Comments
Krueger Sentry gauge (level).			

Note to table: All inspections and tests must be conducted in accordance with Steel Tank Institute Practice SP-001.



Operation and Maintenance (O&M)  
Inspection Checklists –  
*Monthly*

**Miami-Dade Transit  
Metromover Maintenance Facility**

---

(month/year)

# I. Loading dock

## A. Tank 1: 200-gallon double-walled waste oil AST

- 1. ( ) Inspected fill port and spill bucket for corrosion, leaks, obstructions, etc.
- ( ) Removed product from fill port and spill bucket.

TANK 1 \_\_\_\_\_  
\_\_\_\_\_

- 2. Inspected
  - ( ) Primary emergency vent cap
  - ( ) Secondary emergency vent cap

TANK 1 \_\_\_\_\_  
\_\_\_\_\_

- 3. Inspected exterior of tank for damage to glassflake paint system, leaks, corrosion, etc.

TANK 1 \_\_\_\_\_  
\_\_\_\_\_

- 4. Inspected interstitial space (bung adjacent to level gauge) – dry/no liquid/oil?

TANK 1 \_\_\_\_\_  
\_\_\_\_\_

- 5. Inspected mechanical level gauge. (*Indicate level reading*)

TANK 1 \_\_\_\_\_  
\_\_\_\_\_

- 6. ( ) Inspected OWS for level condition \_\_\_\_\_
- ( ) Inspected OWS for appearance of retained oil/water \_\_\_\_\_
- ( ) Discharge from OWS? (If so, indicate appearance/odor/amount below)
- ( ) Sample collected from OWS? (If so, indicate date/time/analytical parameters below)
- ( ) Recent cleaning of OWS? (If so, attach cleaning service manifests)

OWS \_\_\_\_\_  
\_\_\_\_\_

- 7. ( ) Storm drain 40 feet south of Tank 1 (Figure 3c) –water w/ oily sheen present? (y/n)
- ( ) Inspected oil-retaining baffles – clear/clogged/no staining?

Storm drain \_\_\_\_\_  
\_\_\_\_\_



**Attachment L**  
Monitoring and Measurement Procedure, and  
Monitoring and Measurement of Objectives, Targets,  
& Programs

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	10/21/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.5.1-1 Monitoring and Measurement Procedure**

<b>Person responsible:</b> Akbar Sharifi, P.E., MDT		
<b>Area of application:</b> Miami-Dade Transit (MDT) Metromover Operations		
<b>Document location:</b> MDT's Main Office and Maintenance Facilities		
<b>Original issue date:</b> October 21, 2009		
<b>Revisions</b>		
<b>Rev. No.</b>	<b>Date</b>	<b>Description</b>
001	02/10/10	Reviewed and updated procedure
<b>Recurring action items</b>		
<b>Activity</b>	<b>Responsibility</b>	<b>Frequency</b>
1. Review the overall EMS performance, and specifically the Objective, Targets and Programs	Akbar Sharifi, P.E.	Quarterly
2. Review compliance with environmental regulations and policies.	Akbar Sharifi, P.E.	Annually
3. Identify and review those Work Instructions which address activities and operations associated with monitoring and measurement. Modify existing or develop new Work Instructions as required.	Akbar Sharifi, P.E., Freeman Wright and Steel Alvarez	Annually
4. Document calibration records.	Steve Alvarez	As needed

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	10/21/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.5.1-1 Monitoring and Measurement Procedure**

**1.0 Purpose**

- 1.1 **Objectives, Targets and Programs** - This procedure describes the method for establishing, reviewing, and maintaining documents to *Monitor and Measure* the progress towards meeting the *Objectives, Targets and Programs* of the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 **Operational Control** - This procedure addresses the requirements for *Monitoring and Measurement* to record information for tracking conformance with *Operational Controls*, (Work Instructions).
- 1.3 **Calibration** – This procedure addresses the requirements that monitoring equipment must be calibrated and records of this maintained.
- 1.4 **EMS Performance Tracking** - This procedure ensures that the necessary information for making informed decisions regarding the environmental performance tracking of the MDT Metromover Facility is collected and recorded.

**2.0 Scope**

- 2.1 This procedure is responsive to element 4.5.1, *Monitoring and Measurement*, of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 The scope of establishing and documenting the *Monitoring and Measurement* requirements of the MDT Metromover Facility are directly related to the significant environmental aspects, operations and activities which have the potential to impact the environment. The identified significant aspects are documented and controlled in **EP-4.3.1-1 Environmental Aspects Procedure** and **ED-4.3.1-2 Evaluation of Aspects & Impacts Matrix**.
- 2.3 The *Operational Controls*, (Work Instructions) will document the instructions related to *Monitoring and Measurement* tasks as needed. Further details regarding *Operational Controls* are defined in **EP-4.4.6-1 Operational Controls Procedure**.

**3.0 Responsibility**

- 3.1 The **EMS Management Representative** is responsible for evaluating compliance with relevant environmental legislation and regulations periodically as defined in the **EP-4.5.2-1 Evaluation of Compliance Procedure**. This evaluation will be conducted in accordance with the **EP-4.5.5-1 Internal Audit Procedure** and the **EP-4.3.2-1 Legal & Other Requirements Procedure**.
- 3.2 The **EMS Management Representative** will coordinate and maintain the procedures and work product related to *Monitoring and Measurement* of the MDT Metromover Facility by gathering the necessary information and use of the following:  
**ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets and Programs;**  
**ED-4.5.1-3 Monitoring & Measurement Calibration Log;**



Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	10/21/2009	02/10/2010		

**Metromover Maintenance Facility**

EMS Procedure

**EP-4.5.1-1 Monitoring and Measurement Procedure**

**ED-4.5.1-4 Monitoring & Measurement Annual Evaluation; and EP-4.5.2-1 Evaluation of Compliance Procedure.**

- 3.3 The **EMS Team** will identify the activities and operations that are associated with monitoring and measurement of the significant aspects. They will also conduct the annual evaluation of the overall performance of the EMS.
- 3.4 **Assigned personnel** are responsible for collecting the *Monitoring and Measurement* data, and coordinating the **calibration of equipment** in their respective areas. The monthly, weekly, and daily **inspections** will continue to be conducted routinely by personnel who possess the required skills. Such skills may exist or be acquired through training.

**4.0 Definitions**

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

**5.0 Process**

**5.1 Objectives, Targets and Programs:**

- 5.1.1 Performance monitoring will be coordinated to track the progress toward meeting the set *Objectives, Targets and Programs*.
- 5.1.2 Performance indicators within the **ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets and Programs** summary will provide relevant, practical, cost effective and technologically feasible indicators to measure and track progress toward meeting the objectives and targets. Gathering sufficient and accurate information that is qualitative and quantitative will allow the MDT Metromover Facility to make informed decisions regarding the progress toward meeting the *Objectives, Targets and Programs*.
- 5.1.3 Progress and corrective action toward achieving the set *Objectives, Targets and Programs* (tasks of the action plans) will be communicated to Senior Management quarterly during the first two years of EMS implementation.
- 5.1.4 The **EMS Management Representative** completes the **ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets and Programs** summary and communicates the information to Senior Management in the most effective method (electronic review, verbal review, or hard copy correspondences) and documents Senior Management interaction as a Management Review.

**5.2 Operational Control:**

- 5.2.1 The EMS Team will identify and review those activities and operations that are associated with *Monitoring and Measurement* of the significant aspects at the MDT Metromover Facility.



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.5.1-1 Monitoring and Measurement Procedure**

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5.2.2 *Operational Controls* will be *Monitored and Measured* as indicated in applicable EMS programs, procedures, and supporting Work Product. The methods, frequencies and responsible personnel for completing the *Monitoring and Measurement* activities will be specified in these documents.

5.2.3 Specific activities or tasks associated with *Monitoring and Measurement* will typically be included within the related *Operational Controls* (Work Instructions.)

**5.3 Calibration:**

5.3.1 Each Department of MDT Metromover Facility will maintain a calibration log of equipment requiring calibration and the corresponding calibration frequency. Calibration of measurement equipment, testing equipment and instruments associated with the identified operations will be maintained on the **ED-4.5.1-3 Monitoring & Measurement Calibration Log**.

5.3.2 The calibration log will include: **location** of the equipment, equipment **information**, and **calibration frequency**.

5.3.3 Relevant Departments of MDT Metromover Facility will ensure that environmental monitoring equipment is used, calibrated and maintained at a frequency consistent with manufacturers' recommendations, **or at least every year** if those recommendations are unknown. Relevant Departments will **maintain calibration records** as necessary to prove conformance with this procedure.

**5.4 Evaluation of Environmental Compliance:**

5.4.1 The ISO 14001:2004 standard addresses *Evaluation of Compliance* in section 4.5.2 and requires the organization to establish and maintain a procedure for periodically evaluating compliance with relevant environmental legislation and regulations. The MDT Metromover Facility addresses this requirement in **EP-4.5.2-1 Evaluation of Compliance Procedure**.

**5.5 EMS Performance Tracking:**

5.5.1 The **EMS Team** will evaluate of the EMS performance **annually**. This evaluation will become the basis for the next years planning and for documenting continuous improvement. It is easier for Senior Management and the EMS Team to understand how things are progressing if they have documented benchmarks as guidelines.

5.5.2 The questions and answers for the EMS performance evaluation will be documented on **ED-4.5.1-4 Monitoring & Measurement Annual Evaluation**. Pollution prevention activities and results will also be documented during this evaluation and controlled as EMS records.



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**Metromover Maintenance Facility**

EMS Procedure

**EP-4.5.1-1 Monitoring and Measurement Procedure**

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**6.0 References / Related Documents**

- 6.1 EP-4.3.1-1 Environmental Aspects Procedure
- 6.2 ED-4.3.1-2 Evaluation of Aspects & Impacts Matrix
- 6.3 EP-4.4.6-1 Operational Controls Procedure
- 6.4 EP-4.5.2-1 Evaluation of Compliance Procedure
- 6.5 EP-4.5.5-1 Internal Audit Procedure
- 6.6 EP-4.3.2-1 Legal & Other Requirements Procedure
- 6.7 ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets and Programs
- 6.8 ED-4.5.1-3 Monitoring & Measurement Calibration Log
- 6.9 ED-4.5.1-4 Monitoring & Measurement Annual Evaluation



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**ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets & Programs**

Summary					
Aspect	Objective	Target	Performance Indicator	Projected Complete Date	Progress Status Corrective Action
1. Aerosol Cans	1.Reduce waste generation 2.Document handling and recycling of waste	1.Establish process control to reduce waste by 5% 2. Implement Standard Operating Procedures (SOPs).	Receipts and Benchmarking	September 30, 2009	Purchased and installed aerosol can crusher equipment.
2. Fluorescent Tube and Ballast	1.Reduce waste generation 2.Document handling and recycling of waste	1.Establish process control to reduce waste by 5% 2. Implement Standard Operating Procedures (SOPs).	Receipts and Benchmarking	September 30, 2009	Purchased and installed fluorescent lamps can crusher equipment (i.e., E-Lampniator).
3. Used Oil (i.e., filling, storing, transferring and removal of used oil from the 200-gallon aboveground storage tank)	-Reduce and/or prevent any oil spill -Document handling and recycling of used oil	1.Update Spill Prevention, Control & Countermeasure (SPCC) Plan 2.Implement Standard Operating Procedures (SOPs) for Used Oil Management 3.Provide training to facility personnel	Monitor/document any spill events	1.August 31, 2009  2.August 31, 2009  <b>3. April 15, 2010</b>	1.Completed the SPCC Plan  2. Completed SOPs for Used Oil Management  3. Training material in the process of being prepared and will be completed by 04/15/2010.



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**ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets & Programs**

Summary					
Aspect	Objective	Target	Performance Indicator	Projected Complete Date	Progress Status Corrective Action
4. Fresh Oil	-Reduce and/or prevent any oil spill  -Document handling and recycling of used oil	1.Update Spill Prevention, Control & Countermeasure (SPCC) Plan  2.Implement Standard Operating Procedures (SOPs) for Fresh Oil Management  3.Provide training to facility personnel	1.Monitor/document any spill events  2.Documented records of inspections and testing	1.August 31, 2009  2.August 31, 2009  <b>3. April 15, 2010</b>	1.Completed the SPCC Plan  2. Secondarily contained berm has been set up for the 55-gallon drums  3. Completed SOPs for Fresh Oil Management  4. Training material in the process of being prepared and will be completed by <b>04/15/2010.</b>
5.Chlorofluorocarbons (CFCs) Management (i.e., refrigerant, coolant or freon)	Reduce CFC emission into the air	Train technicians to properly manage, service, and document all CFC's that are removed from a refrigeration unit for recharging or equipment disposal	Training records	April 15, 2010	1. Training material in the process of being prepared and will be completed by <b>04/15/2010.</b>
6. Used Tires	1.Reduce waste generation  2.Document handling and recycling of waste	1.Establish process control to reduce waste by 5%  2. Implement Standard Operating Procedures (SOPs).	Receipts and Benchmarking	December 31, 2009	Implemented SOPs and established recycling methods



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**ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets & Programs**

Summary					
Aspect	Objective	Target	Performance Indicator	Projected Complete Date	Progress Status Corrective Action
7. Industrial Wastewater Treatment (i.e., Oil/Water Separator)	Reduce and/or prevent industrial wastewater discharges	1. Establish baseline for facility industrial wastewater discharge system. 2. Complete evaluation of effectiveness existing system. 3. Document and implement operational controls. 4. Document Best Management Practices (BMPs)	Monitor/document any discharges	September 30, 2009	1. Established baseline document. 2. Completed evaluation of effectiveness of existing system. 3. Documented and implemented operational controls. 4. Documented BMPs as part of the Spill Prevention, Control and Countermeasure (SPCC) plan.
8. Used Rags and Cotton Gloves	Properly dispose of contaminated rags and absorbents	Eliminate disposal of contaminated rags and absorbent pads in the landfill	Number of drums picked up by contractors and invoice records	December 31, 2009	Implemented used rag recycling program.
9. Used Batteries	Reduce amount of batteries used	Reduce usage by 5%	Monitor the amount of batteries used and train employees	December 31, 2009	Battery recycling program has started and recycling container has been set up in front of the stock room.
10. Office and Shop Recycling	Recycle plastic, aluminum, cardboard, paper, scrap metal, printer & copier cartridges	Provide recycling bins and containers in offices and shop areas	Receipts, recycling vendor sign-in sheets, and employee training	December 31, 2009	Recycling bins for paper and cardboard have been set up in front of the manager's office



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**ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets & Programs**

Summary					
Aspect	Objective	Target	Performance Indicator	Projected Complete Date	Progress Status Corrective Action
11.Facility Electricity Reduction	To reduce the amount of electricity used at the Maintenance Shop and Mover Stations	Install new lighting fixtures in shop & office areas that are 25% to 30% more efficient. In addition, reduce overall electricity 5% by 2014 and 20% by 2025	Electrical Bills, train employees, facility assessment	December 31, 2010	Some lighting being updated, facility assessment has not been done.

Benchmarking - comparing the business processes and performance metrics

EMS Performance Tracking for Senior Management Reporting - Demonstrates Continual Improvement <i>(select 3 to 6 relevant items and continue to improve)</i>	
1.0	Number of significant aspects in the EMS: 4
2.0	Number of objectives and targets met: 10
3.0	Number of EMS Team meetings: 14
4.0	Percentage of employees completing EMS training: N/A
5.0	Estimated cost savings associated with EMS:
6.0	Number of complaints from community and/or number of responses to complaints: N/A
7.0	Number of pollution prevention ideas generated by employees: N/A



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**ED-4.5.1-2 Monitoring & Measurement of Objectives, Targets & Programs**

8.0	Number of EMS documents created: 17
9.0	Number of corrective action requests (CARs) written: 0
10.0	Average time for resolving corrective actions: N/A
11.0	Number of <u>EMS Audits</u> conducted: 3
12.0	Number of Environmental <u>Compliance Audits</u> conducted: 1



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**ED-4.5.1-3 Monitoring & Measurement Calibration Log**

Equipment Calibration Log					
Location of Equipment	Equipment Name	Brand Name or Make	Model or Serial #	Calibration Frequency	Calibration Responsibility
1.					
2.					
3.					
4.					
5.					
6.					



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**ED-4.5.1-3 Monitoring & Measurement Calibration Log**

Process flow for calibration of equipment, responsibilities and record keeping.		
Maintenance Superintendent	1.0	Using the Preventive Maintenance Program (PMP), which addresses all calibration requirements at the Miami-Dade Transit (MDT) Metromover facility <b>schedule</b> calibration for the environmental monitoring equipment.
	2.0	Provide the schedule to the Maintenance Supervisor.
Maintenance Supervisor	3.0	Delegate calibration to outside vendors or in-house personnel, as described in the PMP.
	4.0	For calibration by outside vendor: <ul style="list-style-type: none"> <li>• Submit requisition for calibration to the <b>Purchasing Department</b>.</li> <li>• Coordinate the release of the device to the <b>vendor</b>.</li> <li>• Upon eventual return of the calibration device and associated paper work, <b>go to step 8</b> of this outline.</li> </ul>
	5.0	For in-house calibration: <b>assign</b> calibration job to an instrument mechanic.
Instrument Mechanic	6.0	<b>Calibrate device.</b> Fill in requested information of the calibration record form. (Organization and equipment specific form)
	7.0	Return calibrated device and completed form to the Maintenance Supervisor.
Maintenance Supervisor	8.0	<b>Review</b> the calibration record form and other documents, as appropriate, and then <b>sign approval</b> on the form. If calibration was not achieved or was not adequate, suspend reinstallation or reuse of the device until the situation is resolved.
	9.0	If a piece of test equipment is found to be <b>out of calibration</b> , review the calibration records. Schedule <b>recalibration</b> of any instruments calibrated using the test unit in question.
Maintenance Secretary	10.0	<b>File and maintain calibration record forms.</b> Retain records in accordance with <b>EP-4.5.4-1 Control of Records Procedure</b> .



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**ED-4.5.1-4 Monitoring & Measurement Annual Evaluation**

Monitoring & Measurement Annual Evaluation Questions	Response
1. Have we <b>identified operations and activities</b> associated with: <ul style="list-style-type: none"> <li>• Significant Aspects;</li> <li>• Legal Requirements; and</li> <li>• Objectives, Targets and Programs?</li> </ul> If not, how will this be accomplished?	Yes
2. What type(s) of monitoring and measurement do we need to ensure that <b>Operational Controls</b> (Work Instructions) are being implemented correctly?	Implementing Standard Operating Procedures (SOPs) and Work Instructions (WIs)
3. What type(s) of monitoring and measurement do we need to ensure that we are <b>complying</b> with <b>applicable legal requirements</b> ?	-
4. What type(s) of monitoring and measurement do we need to ensure that we are <b>achieving</b> our environmental <b>Objectives and Targets</b> ?	-
5. How do we identify the <b>equipment</b> used for any of the monitoring or measurement listed above?	-
6. How will we ensure that monitoring and measurement equipment is properly <b>calibrated and maintained</b> ?	By conducting frequent inspections
7. What process do we have to periodically <b>evaluate compliance with legal requirements</b> ? How effective is this process?	<i>(covered at 4<sup>th</sup> workshop)</i>
8. <i>Our next step on monitoring and measurement is to...</i>	



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**ED-4.5.1-4 Monitoring & Measurement Annual Evaluation**

Monitoring & Measurement Annual Evaluation Questions		Response
<b>EMS Performance Tracking for Senior Management Reporting - Demonstrates Continual Improvement (select 3 to 6 relevant items)</b>		
1.0	Number of significant aspects in the EMS: 4	
2.0	Number of objectives and targets met: 4	
3.0	Number of EMS Team meetings: 9	
4.0	Percentage of employees completing EMS training: N/A	
5.0	Estimated cost savings associated with EMS:	
6.0	Number of complaints from community and/or number of responses to complaints: N/A	
7.0	Number of pollution prevention ideas generated by employees: N/A	
8.0	Number of EMS documents created: 15	
9.0	Number of corrective action requests (CARs) written: 8	
10.0	Average time for resolving corrective actions: 10 to 20	
11.0	Number of <u>EMS</u> Audits conducted: 2	
12.0	Number of Environmental <u>Compliance</u> Audits conducted: 2	



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**ED-4.5.1-4 Monitoring & Measurement Annual Evaluation**

Pollution Prevention Tracking for Senior Management Reporting - Submit for DEQ - E3 Program					
Area or Dept.	Pollution Prevention Activity	Date Started	Results	Measurement Method	Person Responsible

**Attachment M**  
Evaluation of Compliance Procedure and Self-Audit  
Environmental Compliance Evaluation  
Checklist/Report

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Person Resp.	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.	EMS Team	

**Metromover Maintenance Facility**

EMS Procedure

**EP 4.5.2-1 Evaluation of Compliance**

This is a printed copy of the original and will not be kept up-to-date. Earlier versions of this document may be obsolete and should be removed from points of use.

<b>Persons responsible:</b>	Akbar Sharifi, P.E.
<b>Areas of application:</b>	Miami-Dade Transit (MDT) Metromover Operations
<b>Document Location:</b>	MDT's Main Office and Maintenance Facilities
<b>Revision Number:</b>	1

**Procedure Index:**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents
- 7.0 Revision Table



Person Resp.	Prepared by	Reviewed by	Approved by
Akbar Sharifi, P.E.	Akbar Sharifi, P.E.	EMS Team	

## Metromover Maintenance Facility

### EMS Procedure

## EP 4.5.2-1 Evaluation of Compliance

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### 1.0 Purpose

- 1.1 The purpose of this procedure is to ensure that compliance with relevant environmental legislation and regulations is being evaluated on a periodic basis for the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 This procedure describes the method used by the MDT during the implementation of its **Self-Audit Environmental Compliance Evaluation** including planning self-audits, conducting self-audits, and posting the self-audit reports and follow up of nonconformance's using corrective and/or preventive actions.
- 1.3 The process of **compliance** evaluation (or auditing) is clearly different than *Internal EMS Auditing* or management system audits. Refer to **EP 4.5.5-1 Internal EMS Auditing** procedure for further details.

### 2.0 Scope

- 2.1 This procedure is responsive to element 4.5.2 *Evaluation of Compliance*, of the ISO 14001:2004 standard, and covers the operations of the MDT Metromover Facility.
- 2.2 This procedure is intended to evaluate environmental **compliance** for the MDT Metromover Facility and track **compliance** through corrective action implementation.

### 3.0 Responsibility

- 3.1 The **EMS Management Representative** is responsible for:
  - 3.1.1 Maintaining this procedure;
  - 3.1.2 Implementing, planning, scheduling and maintaining *Self-Audit Environmental Compliance Evaluations* as defined by this procedure;
  - 3.1.3 Issuing and reviewing *Environmental Compliance Evaluation* reports to the appropriate departments and senior management;
  - 3.1.4 Providing education and training to employees that assist in conducting *Environmental Compliance Evaluations*;
  - 3.1.5 Selecting the Environmental Compliance Audit Leader and Team members;
  - 3.1.6 Ensuring that corrective actions are documented;
  - 3.1.7 Providing assistance to departments in identifying solutions to problems identified during *Environmental Compliance Evaluations*;
  - 3.1.8 Following up on findings and nonconformance's to ensure that corrective action is being taken;
  - 3.1.9 Ensuring final (or closed) nonconformance and corrective actions are documented and maintained as objective evidence.



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## Metromover Maintenance Facility

### EMS Procedure

#### EP 4.5.2-1 Evaluation of Compliance

- 3.2 The **Environmental Compliance Audit Team Leader** is responsible for:
- 3.2.1 Assisting the *EMS Management Representative* with the selection and designation of the *Environmental Compliance Audit Teams*;
  - 3.2.2 Notifying and confirming the scheduled date for the *Environmental Compliance Evaluation* with affected department personnel and the *Compliance Audit Team* members;
  - 3.2.3 Leading the *Environmental Compliance Audit Team* decisions and ensuring the documentation is complete and correct for the *Environmental Compliance Evaluation*;
  - 3.2.4 Conducting a briefing or opening meeting with facility personnel to;
    - 3.2.4.1 Inform the facility personnel of the purpose of the *Environmental Compliance Evaluation*;
    - 3.2.4.2 Inform facility personnel of their environmental compliance responsibilities and required participation in the evaluation process;
    - 3.2.4.3 Answer any preliminary questions regarding the *Environmental Compliance Evaluation*.
  - 3.2.5 Submitting the results of the *Environmental Compliance Evaluation* findings and nonconformance's to the EMS Management Representative and Senior Management.
- 3.3 The **Environmental Compliance Audit Team** is responsible for:
- 3.3.1 Conducting and actively participating in the *Environmental Compliance Evaluation*;
  - 3.3.2 Documenting the findings and nonconformance's on the checklist and CAR forms **EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist** and **EP 4.5.3-1FA Corrective Action Request**.
- 3.4 The **Department Manager** is responsible for:
- 3.4.1 Cooperating with the *Environmental Compliance Audit Team Leader* to ensure that the evaluation is accomplished when scheduled;
  - 3.4.2 Ensuring that the department is prepared for the *Environmental Compliance Evaluation*;
  - 3.4.3 Accommodating the evaluation team to optimize the efficiency of the evaluation;
  - 3.4.4 Promptly correcting findings identified during the evaluation; and
  - 3.4.5 Documenting corrective action taken and reporting to the team leader;
  - 3.4.6 Ensuring that required internal (daily, weekly, or monthly) inspections are conducted and that identified deficiencies are addressed promptly.



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## Metromover Maintenance Facility

### EMS Procedure

#### EP 4.5.2-1 Evaluation of Compliance

3.5 The **Senior Management** is responsible for:

3.5.1 Keeping informed of the *Environmental Compliance Evaluation* findings and non-conformance's and following up on the corrective actions. Senior Management should be receiving the necessary information and recommendations from the EMS Management Representative to determine the success of the *Environmental Compliance Evaluation*. (Senior Management should be asking the question, "What can we do to assist and improve the environmental compliance for our organization?")

#### 4.0 Definitions

4.1 Refer to 4.1.60 EMS Related Definitions

#### 5.0 Process

5.1 The *Environmental Compliance Audit Team Leader* must be from a department other than the one being audited. The *Environmental Compliance Audit Team* members must have no responsibility for the area or activity being evaluated.

5.2 The *Environmental Compliance Evaluation* of MDT Metromover Facility is conducted once every calendar year. No more than 15 months will elapse between evaluations. To conduct the evaluation, the *Environmental Compliance Audit Team Leader* and team members must do the following:

- 5.2.1 Establish a process, which includes protocols, for the upcoming year's evaluation;
- 5.2.2 Communicate the date(s) of the evaluation to each affected department;
- 5.2.3 Conduct briefing or opening meeting with facility personnel;
- 5.2.4 Conduct the evaluation;
- 5.2.5 During the evaluation also perform a record review of applicable compliance documents, such as manifests and environmental permits;
- 5.2.6 Findings that can be immediately corrected should be completed during the walkthrough and documented on the checklist;
- 5.2.7 Conduct a debriefing or closing meeting with appropriate facility personnel;
- 5.2.8 Prepare a report listing the evaluation findings, including a priority for addressing the issues to proper management personnel. All participants of the evaluation will follow **EP 4.5.3-1 Nonconformity, Corrective and Preventive Action** procedure;
- 5.2.9 Set a schedule for following up on evaluation findings to ensure their resolution;
- 5.2.10 Document all evaluation findings either in report form or using the EMS documentation **EP 4.5.2-1FA Self-Audit Environmental Compliance**



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Akbar Sharifi, P.E.	Akbar Sharifi, P.E.	EMS Team	

**Metromover Maintenance Facility**

EMS Procedure

**EP 4.5.2-1 Evaluation of Compliance**

Evaluation, or EP 4.5.3-1FA Corrective Action Request form;

- 5.2.11 The participating Department Manager will receive an evaluation summary or copies of the completed checklist and CAR's to begin the corrective and / or preventive actions;
- 5.2.12 Periodic evaluation of compliance with relevant environmental legislation and regulations is a requirement of the ISO 14001 standard. Additional requirements for compliance may be further addressed in **EP 4.3.22-1 Identifying and Accessing Legal & Other Requirements** and **EP 4.5.12-1 Monitoring and Measurement**;
- 5.2.13 All documentation pertaining to the *Environmental Compliance Evaluation* will conform to the documentation and record requirements of the EMS as defined in **EP 4.4.52-1 Control of Documents** and **EP 4.5.4-1 Control of Records**.
- 5.2.14 Another requirement of the ISO 14001 standard is to periodically evaluate compliance with "other" requirements to which the organization subscribes. Establish a separate process for this or combine these evaluations into the *Environmental Compliance Evaluation*;
- 5.2.15 Ensure the results of the *Environmental Compliance Evaluation* are communicated to Senior Management.

**6.0 References / Related Documents**

- 6.1 EP 4.5.3-1 Nonconformity, Corrective and Preventive Action procedure
- 6.2 EP 4.3.22-1 Identifying and Accessing Legal & Other Requirements procedure
- 6.3 EP 4.5.12-1 Monitoring and Measurement procedure
- 6.4 EP 4.4.52-1 Control of Documents procedure
- 6.5 EP 4.5.4-1 Control of Records procedure
- 6.6 EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report
- 6.7 EP 4.5.3-1FA Corrective Action Request form

**7.0 Revision Table**

Rev. No.	Date	Revised by	Description



Person Resp.	Prepared by	Reviewed by	Approved by
Akbar Sharifi	Akbar Sharifi	EMS Team	

Work Product for EMS Evaluation of Compliance 4.5.2

EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

## Self-Audit Environmental Compliance Evaluation

Facility Information	
Facility Name: _____ Address: _____ City, State, Zip: _____ Type of Facility: _____	Facility Representative: _____ Title: _____ Telephone: _____ Fax: _____

Environmental Compliance Evaluation Information	Facility Operations / Environmental Aspects
Date of Environmental Compliance Evaluation: _____ EMS Management Representative: _____ Environmental Compliance Audit Team Leader: _____ Environmental Compliance Audit Team: _____ _____ Persons Interviewed: _____ _____ Inaccessible Areas: _____ _____ General Comments: _____ _____	<input type="checkbox"/> Train/Equipment Maintenance <input type="checkbox"/> Train Washing <input type="checkbox"/> Waste Oil Generation <input type="checkbox"/> Universal Waste Generation <input type="checkbox"/> Hazardous Materials Use/Storage <input type="checkbox"/> Solid Waste Accumulation <input type="checkbox"/> USTs <input type="checkbox"/> ASTs <input type="checkbox"/> Other: _____

**Regulatory Areas and Compliance Checklist**  
 Note: If a check mark is placed in a shaded box, a corrective action may be required (prepare Corrective Action Request on form EP 4.5.3-1FA).

YES	NO	N/A	Universal & Special Waste: (310 CMR 30.1000)
			<i>Universal Waste Batteries</i> (skip subsection if not generated)
			Are batteries stored indoors in a container suitable for containing possible leakage?
			Is battery container labeled with "Universal Waste – Batteries"
			Is battery container labeled with accumulation start date?
			Is the accumulation date less than one year old?



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**Work Product for EMS Evaluation of Compliance 4.5.2**

**EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report**

YES	NO	N/A	<i>Universal Waste Mercury Containing Lamps and/or Devices</i> (skip subsection if not generated)
			Are devices stored indoors in a container suitable for containing possible breakage?
			Is storage container labeled with "Universal Waste-Mercury Containing Devices" or "Universal Waste-Mercury Containing Lamps" for fluorescent bulbs?
			Are containers labeled with the start date of accumulation?
			Is the accumulation date less than one year old?
<b>Lead Acid Batteries: (40 CFR 266 Subpart G)</b>			
			Are used lead acid batteries appropriately containerized / stored and returned to the Stockroom?
<b>Gasoline &amp; Oil Filters</b>			
			Are oil/gasoline filters punctured and hot drained for 12 hours before disposal as a scrap metal or non hazardous waste?
			Does the facility mix gasoline filter drainage with its waste oil?

**HAZARDOUS MATERIALS**

YES	NO	N/A	<b>Hazardous Materials Management: (454 CMR 21.00)</b>
			Are hazardous material containers labeled with the name of their contents?
			Are containers having capacities greater than 5 gallons labeled with an NFPA label?
			Are hazardous materials stored in a contained area?
			Are hazardous material containers closed when not in use?
			Are compressed gas cylinders labeled?

YES	NO	N/A	<b>Hazardous Materials Management: (454 CMR 21.00)</b>
			Are compressed gas cylinders capped?
			Are compressed gas cylinders stored in a secured cylinder storage rack?
			Does the facility maintain an active MSDS file?
			Is the MSDS file currently located in its designated location?
			Does the facility have a MSDS on file for each product at the facility containing a hazardous material? (spot check MSDS file for random products observed during the walkthrough)
			Has the facility submitted annual EPCRA Tier II Reports to the LEPC, SERC, and local Fire Department?

**SOLID WASTE**

YES	NO	N/A	<b>Solid Waste Management: (310 CMR 16.00 &amp; 19.000)</b>
			Are the solid wastes generated at the facility segregated and stored in designated accumulation areas?
			Are street sweepings bermed and stored on pavement?
			Are solid wastes properly stored / containerized for offsite disposal? (trash stored in a covered dumpster)?
			Is there evidence of improper disposal in the trash dumpster (batteries, lamps, waste oil, etc.)?





Person Resp.	Prepared by	Reviewed by	Approved by
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Work Product for EMS Evaluation of Compliance 4.5.2

EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

		Are Calcium Chloride ASTs locked or otherwise secured to prevent accidental discharge?
<i>Underground Storage Tanks: (527 CMR 9.00)</i>		
		Are the USTs equipped with secondary containment, spill and overflow protection, and leak detection?
		Are steel USTs/underground piping equipped with cathodic protection?
		Is the UST tank monitoring system functioning properly?
		Are electronic daily inventory checks conducted on Facility USTs?
		Are inventory/reconciliation records completed and kept at the Facility?
		Does a District representative monitor the electronic inventory checks?
		Are leak detection systems and cathodic protection systems tested and calibrated annually (records/logs kept for 3 years)?
<i>If the UST electronic system is inoperable:</i>		
		Does the facility conduct daily stick tests?
		Does the facility conduct daily water level tests?
		Does the facility submit testing records?
<i>If the Facility Dispenses Gasoline: (310 CMR 7.24)</i>		
		Is the gasoline dispensing operation equipped with a Stage II vapor recovery system?
		Is the Stage II system registered with DEP and tested annually (Annual In-Use Compliance Certification submittal)?
		Are records of Stage II system weekly inspections and periodic maintenance kept at the Facility?
<i>All Tanks: (527 CMR 9.07)</i>		
		Have tanks been appropriately registered /permitted with the local fire department and the State Fire Marshal?
		Are tank registration/permit certificates posted in a prominent location?
<i>Spill Prevention: (40 CFR 112)</i>		
		Does the facility store oil in aboveground tanks or drums in quantities equal to or greater than 1,320 gallons?
		If Yes, does the facility have and up-to-date and P.E.-certified SPCC Plan?

WATER QUALITY			
YES	NO	N/A	Drinking Water Supply: (310 CMR 22.22)
			What is the Facility's water supply source? <input type="checkbox"/> Private Well <input type="checkbox"/> Municipal Public Water Supply <input type="checkbox"/> Other:
			Does the facility have backflow prevention devices for the boiler feedwater system?
			Does the facility have backflow prevention devices on its fire water/sprinkler system?
			Does the facility have backflow prevention devices on threaded hose connections?



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Work Product for EMS Evaluation of Compliance 4.5.2

EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

YES	NO	N/A	Wastewater Discharge: (314 CMR 7.00; 360 CMR 10.00; 40 CFR 122)
			Does the facility have a wastewater discharge permit to a POTW or an NPDES permit for discharge to a surface water?
			If Yes, is the facility complying with the permit conditions?
			List Permits:
			Does the facility discharge un-permitted process wastewater?
			If Yes, describe discharge(s):

YES	NO	N/A	Drainage Systems: (310 CMR 1-15; 248 CMR 2.00; SOP 19)
			Where do floor drains discharge to: <input type="checkbox"/> POTW <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground <input type="checkbox"/> Other, describe:
			Are floor drains clean and free of debris and stains?
			Does the facility have spill equipment to divert and contain spills from entering the floor drain system?
			If floor drains are located in an area of hazardous material storage or maintenance areas, do the drains discharge to a sanitary sewer (non-septic or non-stormwater system or to a holding tank)?
			If floor drains are located in an area of hazardous material storage and discharge to a municipal sewer system, has the facility notified the POTW of the industrial waste discharge?
			If floor drains have been sealed, did the facility file a WS-1 form with the state plumbing inspector?
			Are there any oil/water separators on-site?
			If yes, how many?
			If present, are oil/water separators inspected periodically?
			If present, when was the oil/water separator last inspected/serviced?

YES	NO	N/A	Stormwater Discharges: (40 CFR 122; 314 CMR 3.00 & 5.00; 310 CMR 27.00)
			Does the Facility discharge stormwater via a "point source" (trench, ditch, storm drain, etc.) to a wetland, stream or surface water?
			If Yes, and the Facility conducts equipment/vehicle maintenance and/or fueling, has the Facility submitted an NOI to register under Phase II of EPA's Stormwater Discharge Program (due March 10, 2003)?
			If Yes, has the Facility completed an Stormwater Pollution Prevention Plan (SWPPP)?
			If Yes, has the Facility implemented the SWPPP (BMPs, inspections, etc.)
			If applicable and the Facility has not submitted NOI/SWPPP, has the Facility submitted a No Exposure Certification to EPA?



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Work Product for EMS Evaluation of Compliance 4.5.2

EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

			Are there stormwater catchbasins on the property?
			If Yes, Where do the catch basins discharge? <input type="checkbox"/> POTW <input type="checkbox"/> Surface Water <input type="checkbox"/> Ground <input type="checkbox"/> Other, describe:
			If present, have leaching catch basins been registered with the DEP (Class V Injection Well Registration or in NOI for EPA Phase II Stormwater Program)?
			If a leaching catch basin was registered with DEP, does the Facility maintain a map/plan showing the catch basin location?
			If present, are storm drains clean and free of excess sediments, debris, and stains?

YES	NO	N/A	Preventative Measures:
			Does the facility periodically inspect areas for equipment leakage?
			Are hazardous materials stored in areas protected from the elements?

YES	NO	N/A	Train Washing: (310 CMR 1-15; 40 CFR 12)
			<i>If facility is a Designated Train Washing Facility:</i>
			Are trains washed indoors?
			Is the facility equipped with floor drains connected to either the municipal sewer or wash water recycling system, or Is the facility equipped with an approved holding tank?
			Are contractors forbidden to wash trains at the facility?
			<i>If facility is NOT a Designated Train Washing Facility:</i>
			Are trains washed offsite?
			Are trains only rinsed onsite (no detergents or heated water/steam)?
			<i>If the facility has an Industrial Wastewater Holding Tank: (Existing Permits; 314 CMR 18.00)</i>
			Does the facility have a DEP Industrial Wastewater Holding Tank Permit?
			If Yes, is the Facility in compliance with permit conditions?
			For applicable holding tanks, has the Facility submitted a one-time compliance certification to DEP (due by February 15, 2003, or within 60 days for new tanks)? (Not required if the Facility has a DEP-issued plan approval for the holding tank.)
			Does the Facility maintain copies of installation plans (until tank is decommissioned) and records on pumping and wastewater shipments/disposal (three years)?
			If an existing holding tank was not installed in accordance with PE Certified Plans, has the holding tank undergone an integrity assessment (due by November 15, 2003)?
			Is the Holding Tank labeled as "Non-Hazardous Industrial Wastewater?" (required for underground and aboveground tanks)
			Is the Holding Tank equipped with a high level alarm?
			Is the holding tank gauged/inspected for leakage at least weekly? (required for new underground tanks)
			Is the alarm system tested by an electrician on a semi-annual basis?
			Is the holding tank pumped cleaned and inspected for structural integrity every five years?



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Work Product for EMS Evaluation of Compliance 4.5.2

EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

POLLUTION PREVENTION			
YES	NO	N/A	Spills/Releases: (310 CMR 40.0000; 40 CFR 300; 40 CFR 355)
			Have there been any reportable releases of oil and/or hazardous materials at the facility since the last audit?
			If yes, describe event(s) and actions taken, including notifications made.

YES	NO	N/A	Asbestos: (310 CMR 7.09; 7.15; 453 CMR 6.00)
			Has the facility conducted any building renovations/demolitions or asbestos abatement projects?
			If yes, was an asbestos survey conducted prior to renovation/demolition?
			Prior to renovation/demolition, was DEP notified?
			If asbestos abatement was conducted, were licensed contractors used?

YES	NO	N/A	House & Grounds-keeping:
			Are equipment and material storage areas neat and orderly?
			Is there excessive staining, waste materials, or other evidence of improper practices?
			Is there excessive staining around fueling areas?

AIR QUALITY			
YES	NO	N/A	Air Emissions, Permits & Recordkeeping: (310 CMR 7.00)
			Does any single heating unit at the facility have a heat input over 10 MMBtu/hr?
			If Yes, has the Facility obtained a Plan Approval permit from DEP?
			Do the heating units at the facility have a combined heat input over 10 MMBtu/hr?
			If Yes, has the facility submitted Source Registration emission statements to the DEP?



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EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

YES	NO	N/A	<i>Emergency Generators</i>
			Does the facility operate an Emergency Generator having a heat input (>3 MMBtu/hr)? (>10 MMBtu/hr = permit required)
			If yes, is a 12-month rolling log kept on the generator hours of operation to document permit exemption?

YES	NO	N/A	<i>Parts Cleaners</i>
			Is a solvent parts cleaner used?
			If yes, is the unit equipped with a drain to a remote reservoir?
			If present, is the unit equipped with a functioning cover?
			If present, is the unit cover kept closed when not in use and are instructions on the proper operation posted on the unit?

YES	NO	N/A	<i>Painting Operations</i>
			Is painting/coating performed on-site (other than minor architectural or touch up painting)?
			Does the facility maintain a 12-month rolling log to document coating rates and associated emissions?
			Does the equipment meet DEP standards? (HVLV, filters, stack, etc.)

YES	NO	N/A	<i>Noise &amp; Visible Emissions</i>
			Has the facility received any noise complaints, or is facility under any noise restrictions?
			If yes, describe:
			Do any facility operations have visible emissions?
			If Yes, describe:

YES	NO	N/A	<i>Refrigerant Management</i>
			Does the facility conduct vehicle or building refrigeration maintenance?
			If yes, are personnel who perform refrigerant work certified by EPA?
			Is refrigerant recovery equipment EPA-certified?
			Has the facility submitted a Notification Form with EPA for use of the refrigeration equipment?



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EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

ENVIRONMENTAL COMPLIANCE MANAGEMENT			
YES	NO	N/A	Compliance Training Records
			Does the facility have the following training records on file, where applicable:
			Universal Waste Management Training?
			Spill Prevention, Control, and Countermeasure Plan training?
			Other (list)?

YES	NO	N/A	Clean State Program Management
			Are there any Pre-Existing Clean State Matters or Programs for the facility?
			If Yes, List and Describe Status:

YES	NO	N/A	Facility Environmental Documents
			Are the EMS Procedures up-to-date?
			Is a copy of the Emergency Spill Response Plan for <i>Organization</i> located at the facility?
			Is the <i>Emergency Call Contact List</i> up-to-date and posted at the facility?

**Additional Notes/Comments/Observations:** \_\_\_\_\_

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EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

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EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

Supplementary Form (make additional copies as needed)

Date:

**Manifest Checklist**

Manifest Checklist	State/Uniform Manifest No.				
<b>Manifest Date</b>					
<b>Generator Name/Address</b>					
<b>Generator EPA I.D.#</b>					
<b>Phone Number</b>					
<b>Transporter</b>					
<b>Transporter EPA I.D. #</b>					
<b>TSDF</b>					
<b>TSDF EPA I.D. #</b>					
<b>DOT Waste Description</b>					
<b>Waste Code(s)</b>					
<b>General Waste Description</b>					
<b>Quantity</b>					
<b>LDR Form</b>					
<b>Generator Cert.</b>					



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**EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report**

**Supplementary Form (make additional copies as needed)**

**Date:**

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<b>Transporter Cert.</b>					
<b>TSDF Cert.</b>					
<b>Return Copy of Manifest</b>					



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Work Product for EMS Evaluation of Compliance 4.5.2

EP 4.5.2-1FA Self-Audit Environmental Compliance Evaluation Checklist / Report

Supplementary Form (make additional copies as needed) Date:

**Solid Waste Disposal**

Material (check if generated)	Segregated and Recycled (Y/N)	Domestic Trash (Y/N)	Other* Disposal (Y/N)
Paper			
Cardboard			
Scrap Wood			
Wood Pallets			
Scrap Metal			
Plastic Scrap			
ABC Waste			
C & D Waste			
Glass			
Industrial Rags			
Fluorescent Lamps			
Lighting Ballasts			
Air Filters			
Off-spec. products			
Waste Coolant			
Vehicle Batteries			
Other Batteries			
Waste Oil			
Waste Oil Filters			
Empty Drums			
Used Tires			
Other:			

\* "Other" disposal methods include but are not limited to solid waste landfilling and incineration



**Attachment N**  
Nonconformity, Corrective Action, and Preventive  
Action Procedure, Corrective Action Request Form,  
Corrective Action Log, and Preventive Action  
Proposal

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## EMS Procedure

### EP 4.5.3-1 Nonconformity, Corrective Action and Preventive Action

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<b>Persons responsible:</b>	Akbar Sharifi, P.E.
<b>Areas of application:</b>	Miami-Dade Transit (MDT) Metromover Operations
<b>Document Location:</b>	MDT's Main Office and Maintenance Facilities
<b>Revision Number:</b>	1

#### Procedure Index:

##### 1.0 Purpose

##### 2.0 Scope

##### 3.0 Responsibility

##### 4.0 Definitions

##### 5.0 Process

##### 6.0 References / Related Documents

##### 7.0 Revision Table

#### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish practices related to the identification, implementation and tracking of corrective and preventive actions for the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 This procedure describes the process to **investigate** nonconformities, to determine their causes, to **mitigate** the environmental impact that nonconformities can have, and to **record** the results achieved.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.5.3, Nonconformity, Corrective Action and Preventive Action, of the ISO 14001:2004 standard and covers operations of MDT Metromover Facility.
- 2.2 The corrective action process includes two types of **preventive action** – one to prevent re-occurrence and one to prevent potential nonconformities.



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## EMS Procedure

### EP 4.5.3-1 Nonconformity, Corrective Action and Preventive Action

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#### 3.0 Responsibility

- 3.1 The **EMS Management Representative** will coordinate the *Corrective and Preventive Action Program* by:
- 3.1.1 Maintaining documentation of Corrective Action Requests (CARs), Preventive Action Proposals (PAPs) and other related documents obtained during Internal EMS Audits, Environmental Compliance Evaluations, Inspections or any other environmental issue;
  - 3.1.2 Reviewing and signing all CARs and PAPs;
  - 3.1.3 Selecting and scheduling the appropriate EMS Audit Team members to conduct the internal EMS audits and to document the results effectively; and,
  - 3.1.4 Distributing any changes to procedures or documents resulting from the CARs or PAPs.
- 3.2 The **EMS Audit Team** members will initiate the Corrective Action Requests (CARs) and Preventive Action Proposals (PAPs) based upon audit findings. EMS Audit Teams are also responsible for:
- 3.2.1 Recording any nonconformance findings during an audit on the proper forms described in this procedure; and,
  - 3.2.2 **Verifying** the effectiveness and completion of the CARs or PAPs with the EMS Management Representative.
- 3.3 The **Department Manager** is responsible for:
- 3.3.1 Promptly correcting findings and nonconformance's identified;
  - 3.3.2 Documenting corrective action and preventive action results on the proper forms and communicating progress to the EMS Management Representative; and,
  - 3.3.3 Assisting the EMS Management Representative with the evaluation of **training needs** when corrective or preventive action requires a process change.
- 3.4 The **Senior Management** is responsible for:
- 3.4.1 Keeping informed of the *Internal EMS Audit* findings and nonconformances and following up on the corrective actions.

#### 4.0 Definitions

- 4.1 Refer to 4.1.60 EMS Related Definitions
- 4.1.1 **Internal EMS Audit** – refer to EMS document **EP 4.5.5-1 Internal EMS Auditing** procedure; and,
  - 4.1.2 **Environmental Compliance Evaluation** – refer to EMS document **EP 4.5.2-1 Evaluation of Compliance** procedure.

#### 5.0 Process



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## EMS Procedure

### EP 4.5.3-1 Nonconformity, Corrective Action and Preventive Action

- 5.1 The EMS Audit Team will record any nonconformance findings identified during an *Internal EMS Audit* on **EP 4.5.3-1FA Corrective Action Request (CAR)** form. The element within the ISO 14001 Standard associated with the nonconformance finding should also be recorded if applicable. For example, 4.6 Management Review.
- 5.2 The EMS Audit Team will keep a listing of all Corrective Action Requests (CARs) issued during the audit and record them on **EP 4.5.3-1FB Corrective Action Request Log** form.
- 5.3 The EMS Audit Team member discovering the findings will describe the nature of the nonconformance on a CAR form and forward it to the Department Manager responsible for the area being audited. The EMS Audit Team member will keep a copy of the CAR form and forward it to the EMS Management Representative along with the Log sheet and other relevant documentation at the end of the EMS audit.
- 5.4 The Department Manager responsible for the area being audited will complete the CAR form by identifying the root cause, developing short and long term corrective actions, and preventive actions, as appropriate.
  - 5.4.1 The Department Managers that receive the CARs are responsible for returning them to the EMS Management Representative within **ten working days**.
- 5.5 All steps taken in the corrective action are documented on the CAR. Additional information can be attained to provide supporting documentation.
- 5.6 Upon receiving a response to the CAR the EMS Management Representative will contact the relevant EMS Audit Team members to verify the completion and effectiveness of the long term action. Verification will be documented on the original CAR then returned and maintained by the EMS Management Representative or designated personnel.
- 5.7 The **EP 4.5.3-1FC Preventive Action Proposal (PAP)** form will be used to document observations, employee concerns or suggestions for an area to **prevent** a nonconformance from occurring. The PAP form will be issued to and completed by the Supervisor of the area where the preventive action is needed. The Supervisor will forward the PAP response to the EMS Management Representative.
- 5.8 The Preventive Action Proposal (PAP) will be review by the EMS Management Representative or the core EMS Team as appropriate, to determine if the preventive action is feasible.
- 5.9 The EMS Management Representative must review and sign all issued CARs and PAPs.
- 5.10 *Internal EMS Auditing, Environmental Compliance Evaluations*, and third party (outside) auditing will be incorporated in the MDT Metromover Facility EMS Corrective and Preventive Action Program, as appropriate.
- 5.11 Nonconformance findings and CARs from *Internal EMS Audits, Environmental Compliance Evaluations*, inspections, accidents, and other observations must receive timely corrective action. CARs requiring **more than 90 days** completing must have senior management approval.
- 5.12 The EMS Management Representative is responsible for recording and distributing any changes to documented procedures resulting from corrective and preventive action. This



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EMS Procedure

**EP 4.5.3-1 Nonconformity, Corrective Action and Preventive Action**

will be done in accordance with **EP 4.4.22-1 Competence, Training and Awareness** procedure if additional training is needed.

- 5.13 Documents relating to regulatory and compliance nonconformance are distributed to responsible management as appropriate. Appropriate distribution is the responsibility of the EMS Management Representative.
- 5.14 Senior Management has an awareness of the outstanding corrective and preventive actions and understands importance of tracking the progress and results. Refer to **EP 4.5.5-1 Internal EMS Auditing** procedure and **EP 4.6.12-1 Management Review** procedure.

**6.0 References / Related Documents**

- 6.1 EP 4.5.5-1 Internal EMS Auditing procedure
- 6.2 EP 4.5.3-1FA Corrective Action Request (CAR) form
- 6.3 EP 4.5.3-1FB Corrective Action Request Log form
- 6.4 EP 4.5.3-1FC Preventive Action Proposal (PAP) form
- 6.5 EP 4.4.22-1 Competence, Training and Awareness procedure
- 6.6 EP 4.6.12-1 Management Review procedure
- 6.7 EP 4.5.2-1 Evaluation of Compliance procedure

**7.0 Revision Table**

Rev. No.	Date	Revised by	Description



Person Resp.	Prepared by	Reviewed by	Approved by
Akbar Sharifi	Akbar Sharifi	EMS Team	

**EMS - Nonconformity, Corrective and Preventive Action**

**EP 4.5.3-1FA Corrective Action Request (CAR)**

<b>DEPARTMENT:</b>	<i>Metromover - Maintenance</i>	<b>CAR REPORT #:</b>	
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*(Section A. - B. to be completed by Originator)*

<b>A. Audit Area Location:</b>	<i>Miami-Dade Transit Metro Mover Maintenance Facility</i>		
<b>B. Description of Issue:</b>	Nonconformance: <input type="checkbox"/>	Opportunity for Improvement: <input type="checkbox"/>	
ISO Element Reference:			
Issued to Area Rep.:		Originator:	
Date:		Date:	

*(Section C. - E. to be completed by EMS Team or Area Representative)*

<b>C. Root Cause Description:</b>			
<b>D. Short Term Corrective Action:</b>			
Target Date:		Project Manager:	
<b>E. Long Term Preventive Action:</b>			
Target Date:		Project Manager:	

*(Section F. to be completed and signed by the EMS Management Representative and the core EMS Team)*

<b>F. Verification:</b>			
Date of Completion:			
EMS Team Member:		EMS Man. Rep.	
<i>Signature:</i>		<i>Signature:</i>	
<i>Date:</i>		<i>Date:</i>	



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EMS – Nonconformity, Corrective and Preventive Action

EP 4.5.3-1FB Corrective Action Log / Report

<p>Auditor(s):</p> <p>Date of Audit:</p>
--

CAR or PAP	CAR or PAP Report No.	Location of Issue	Description of Issue	Responsible Representative Issued to	Follow-up Date(s)

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**EMS - Nonconformity, Corrective and Preventive Action**

**EP 4.5.3-1FC Preventive Action Proposal (PAP)**

*(Section A. - B. to be completed by EMS Auditor)*

<b>A. Area Location: <i>Miami-Dade Transit Metro Mover Maintenance Facility</i></b>	
<b>B. Description of Issue:</b>	
<i>Issued to Area Rep:</i>	<i>Auditor(s) Signature:</i>
<i>Date:</i>	<i>Date:</i>

*(Section C. - D. to be completed and signed by Area Representative)*

<b>C. Root Cause Description:</b>
<b>D. Preventive Maintenance Proposed:</b>
<i>Area Representative Signature:</i>
<i>Date:</i>

*(Section E. - G. to be completed and signed by the EMS Management Representative)*

<b>E. Reviewed by: EMS Management Representative and / or core EMS Team <i>(circle appropriate)</i></b>
<b>Decision:</b>
<b>F. Agreed Long Term Action</b>
<i>Agreed Timeline for Implementation:</i>
<b>G. Implementation Responsibility:</b>
<i>EMS Management Representative Signature:</i>
<i>Date:</i>

# **Attachment O**

## **Control of Records Procedure and Matrix**

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## EMS Procedure

### EP 4.5.4-1 Control of Records

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<b>Persons responsible:</b>	<b>Akbar Sharifi</b>
<b>Areas of application:</b>	Miami-Dade Transit (MDT) Metromover Operations
<b>Document Location:</b>	MDT's Main Office and Maintenance Facilities
<b>Revision Number:</b>	1

#### Procedure Index:

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents
- 7.0 Revision Table



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## EMS Procedure

### EP 4.5.4-1 Control of Records

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#### 1.0 Purpose

- 1.1 The purpose of this procedure is to establish practices related to the identification, maintenance and disposition of environmental records for the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 To ensure records are accurate, complete and provide suitable information for assessing the operations of the MDT Metromover Facility's EMS. This procedure will describe how the MDT will create, maintain and store legible, identifiable and traceable environmental records.
- 1.3 The environmental records **demonstrate or prove** that the EMS requirements are being met and comply with the ISO 14001:2004 standard. They also provide documented evidence of progress toward achieving environmental goals.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.5.4, Control of Records of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 The scope of this procedure addresses records associated with the operations of MDT's EMS and environmental compliance.
- 2.3 This procedure does not specifically address training, audit or management review records, as these specific types of records are addressed within the related procedures.

#### 3.0 Responsibility

- 3.1 The responsibility for the identification and creation of records is defined by the elements of the EMS and is documented within each specific procedure.
- 3.2 The **EMS Management Representative** is responsible for:
  - 3.2.1 Maintenance and disposition of the environmental records;
  - 3.2.2 Maintaining this procedure and **EP 4.5.4-1FA Control of Records Matrix**; and,
  - 3.2.3 Retrieval and purging of environmental records.

#### 4.0 Definitions

- 4.1 Refer to 4.1.60 EMS Related Definitions

#### 5.0 Process

- 5.1 This procedure considers activities, products and services pertinent to environmental management and addresses the identification, maintenance and disposition of records needed for the EMS which provide documented evidence that the MDT Metromover Facility is progressing toward achieving its objectives and targets.
- 5.2 Environmental records shall be legible, identifiable, and traceable to the activity, product or service involved. The **date** the information was obtained must be included.



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Akbar Sharifi	Akbar Sharifi	EMS Team	

## EMS Procedure

### EP 4.5.4-1 Control of Records

- 5.3 Records will contain the necessary information to allow the EMS Management Representative, the core EMS Team, and Senior Management to make well informed decisions and determine the continuing progress toward achieving the objectives and targets.
  - 5.3.1 The EMS Management Representative, the core EMS Team, and Senior Management who rely on various environmental records to make EMS (or business) decisions will have easy access to the required records.
- 5.4 The MDT Metromover Facility will create environmental records for the following EMS elements:
  - 5.4.1 Environmental Aspects;
  - 5.4.2 Legal and Other Requirements;
  - 5.4.3 Objectives, Targets and Programs;
  - 5.4.4 Resources, Roles, Responsibility and Authority;
  - 5.4.5 Competence, Training and Awareness;
  - 5.4.6 Communication;
  - 5.4.7 Emergency Preparedness and Response;
  - 5.4.8 Monitoring and Measurement;
  - 5.4.9 Evaluation of Compliance
  - 5.4.10 Nonconformity, Corrective and Preventive Action;
  - 5.4.11 Control of Records;
  - 5.4.12 Internal EMS Audit; and,
  - 5.4.13 Management Review.
- 5.5 Whenever possible activities and information generating environmental records will be captured within the forms and worksheets found in the EMS. Where forms and worksheets do not exist, standard forms will be created, whenever possible. For example, communication logs will be used as a means to ensure that adequate communication records of verbal conversations between the MDT Metromover Facility and the interested parties are captured and retained.
- 5.6 Hard Copies - a record will only be stored in hard copy if:
  - 5.6.1 Access to the record can not be achieved electronically;
  - 5.6.2 The record was originally generated in hard copy and it is not feasible to generate an electronic copy;
  - 5.6.3 A legal or other requirement requires a hard copy of the record be retained;
  - 5.6.4 An extra backup copy is deemed necessary because the MDT Metromover Facility is conforming to its legal and other requirements; and,



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## EMS Procedure

### EP 4.5.4-1 Control of Records

- 5.6.5 The MDT Metromover Facility management determines that maintaining a hard copy facilitates better access.
- 5.7 To ensure hard copy records are properly dispositional or purged as required, the retention time of the records will be input into **EP 4.5.4-1FA Control of Records Matrix**.
- 5.8 Hard copy environmental records will be stored and/or maintained in a file cabinet or other suitable record retention manner to protect the records from deterioration or loss and to organize them in such a manner that they are easily retrievable.
- 5.9 Hard copies of permits issued by regulatory agencies will be kept at the MDT Metromover Facility.
- 5.10 Electronic Copies - records are to be stored, whenever practical, in an electronic form which will be accessible and organized within the MDT's software structure.
- 5.11 An electronic file folder, representing each element of the EMS is located within the EMS file folder. When a record is created of an electronic document, the original document is to be copied and pasted in the corresponding file folder labeled "**RECORDS**".
- 5.12 Electronic records are not to be deleted prior to the records expiration date.
- 5.13 When an expiration date passes, the EMS Management Representative will purge the electronic record within a time frame defined by the MDT's management on a case-by-case basis. At a minimum all records will be maintained at least 3 years.
- 5.14 If an electronic record is deemed inaccurate or misleading because of an error in the documented information or data, a new record will be created. The old record will not be deleted. A footnote or comment will be added to the newly created record stating the reason for its creation and an explanation describing the error.
- 5.15 Electronic records will be backed up. Back ups must be saved onto a different computer or server from where the original record is saved. Records will be backed up to computers or servers that are periodically backed up by the MDT's IT department. The MDT's IT department stores back up tapes in a secure environment, safe from theft, fire, or other threats. Alternatively, records may be backed up onto a CD ROM with the CD ROM being stored in a secure environment safe from theft, fire, or other threats.
- 5.16 Confidential records will be stored, maintained and purged in a manner that is consistent with the MDT's existing confidentiality policies and guidelines.
- 5.17 Requests by external parties to review records will be handled on a case-by-case basis, with the EMS Mgmt. Representative and Senior Management responding to each request.
- 5.18 The legal counsel for the MDT will provide guidance / direction to the EMS Management Representative for appropriate retention times of environmental records generated at the MDT Metromover Facility.
- 5.19 The MDT Metromover Facility will use its existing procedures: **EP 4.5.5-1 Internal EMS Auditing**, **EP 4.5.2-1 Evaluation of Compliance** and **EP 4.5.3-1 Nonconformity, Corrective and Preventive Action** to ensure this *Control of Records* procedure is adhered to.



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## EMS Procedure

### EP 4.5.4-1 Control of Records

#### 6.0 References / Related Documents

- 6.1 EP 4.5.4-1FA Control of Records Matrix form
- 6.2 EP 4.5.5-1 Internal EMS Auditing
- 6.3 EP 4.5.2-1 Evaluation of Compliance
- 6.4 EP 4.5.3-1 Nonconformity, Corrective and Preventive Action

#### 7.0 Revision Table

Rev. No.	Date	Revised by	Description



EMS - Control of Records

EP 4.5.5.4-1FA Control of Records Matrix

Date: 01/21/2010

Revision Number and Date: Revision #1, 02/10/2010

Person Resp.	Prepared by	Reviewed by	Approved by
Akbar Sharifi	Akbar Sharifi	EMS Team	

EMS Section	Records	Responsibility	Location	Type of Record	Review Period	Retention Time	Last Updated	Comments
4.3.1 Environmental Aspects	Evaluation of aspects and impacts	A. Sharifi	MDT's Main Office	Paper	Annually	Permanent	02/10/2010	
4.3.2 Legal and Other Requirements	1. Industrial Waste Permit Fee	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	2. Legal and Other Requirements Matrix	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	3. MSDS Books	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	4. Fire Extinguisher Inspection Log	S. Chayt	Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
4.3.3 Objectives, Targets and Programs	1. Purchase of Hazardous Materials	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	2. Paper and Cardboard Management	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	3. Aerosol Cans Management	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	4. Light Bulbs/Ballast Management	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	5. Work Instruction (WI) Standard Operating Procedures (SOPs)	S. Alvarez and F. Wright	Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	



EMS - Control of Records

EP 4.5.5.4-1FA Control of Records Matrix

Date: 01/21/2010

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Revision Number and Date: Revision #1, 02/10/2010

EMS Section	Records	Responsibility	Location	Type of Record	Review Period	Retention Time	Last Updated	Comments
	6. Electricity Use	S. Chayt	Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	7. Used Tire Management	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	8. Used Batteries Management	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	9. Used Shop Rags and Cotton Gloves Management	F. Wright	Materials Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	10. Used Oil Management	S. Alvarez	Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
	11. Fresh Oil Management	S. Alvarez	Maintenance Manager's Office	Paper	Annually	Ongoing	02/10/2010	
4.4.1 Resources, Roles, Responsibility and Authority	Structure and Responsibility Matrix	A. Sharifi	EM's Office	Paper	Annually	Permanent	02/10/2010	
4.4.2 Competence, Training and Awareness	1. Completed Training Sign Up Sheets	V. Urchdorf	Training Manager's Office	Paper	Annually	Permanent	02/10/2010	
	2. Training Materials	V. Urchdorf	Training Manager's Office	Paper	Annually	Permanent	02/10/2010	



EMS - Control of Records

EP 4.5.5.4-1FA Control of Records Matrix

Date: 01/21/2010

Person Resp.	Prepared by	Reviewed by	Approved by
Akbar Sharifi	Akbar Sharifi	EMS Team	

Revision Number and Date: Revision #1, 02/10/2010

EMS Section	Records	Responsibility	Location	Type of Record	Review Period	Retention Time	Last Updated	Comments
4.4.3 Communication	Internal and External Communication Log	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
4.4.7 Emergency Preparedness and Response	1. System Security and Emergency Preparedness Plan	E. Muntan	MDT's Main Office	Paper	Annually	Permanent	02/10/2010	
	2. Drill and Incident Records	E. Muntan	MDT's Main Office	Paper	Annually	Permanent	02/10/2010	
	3. Incident Log	E. Muntan	MDT's Main Office	Paper	Annually	Permanent	02/10/2010	
4.5.1 Monitoring and Measurement	Annual Environmental Facility Compliance Audit	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
4.5.2 Evaluation of Compliance	Self-Audit Environmental Compliance Evaluation	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	



EMS - Control of Records

EP 4.5.5.4-1FA Control of Records Matrix

Date: 01/21/2010

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Revision Number and Date: Revision #1, 02/10/2010

EMS Section	Records	Responsibility	Location	Type of Record	Review Period	Retention Time	Last Updated	Comments
4.5.3 Nonconformity, Corrective and Preventive Action	1. Corrective Action Log	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
	2. Preventive Action Proposal	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
	3. Correction Action Request	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
	4. Completed Corrective Action Form	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	



EMS - Control of Records

EP 4.5.5.4-1FA Control of Records Matrix

Date: 01/21/2010

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Revision Number and Date: Revision #1, 02/10/2010

EMS Section	Records	Responsibility	Location	Type of Record	Review Period	Retention Time	Last Updated	Comments
4.5.4 Control of Records	1. Record Management Matrix	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
4.5.5 Internal EMS Audit	1. Internal Environmental Audit Checklist	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
	2. Preventive Action Proposal	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
	3. Correction Action Request	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
	4. Corrective Action Log	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	
4.6 Management Review	Senior Staff Meeting Minutes and Sign-Up Sheets	A. Sharifi	MDT's Main Office and Maintenance Manager's Office	Paper	Annually	Permanent	02/10/2010	

**Attachment P**  
Internal Audit Procedure, Checklist/Report, and  
Notification and Schedule

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EMS Procedure

**EP 4.5.5-1 Internal Audit**

This is a printed copy of the original and will not be kept up-to-date.  
 Earlier versions of this document may be obsolete and should be removed from points of use.

<b>Persons responsible:</b>	<b>Akbar Sharifi, P.E.</b>
<b>Areas of application:</b>	Miami-Dade Transit (MDT) Metromover Operations
<b>Document Location:</b>	MDT's Main Office and Maintenance Facilities
<b>Revision Number:</b>	1

**Procedure Index:**

- 1.0 Purpose**
- 2.0 Scope**
- 3.0 Responsibility**
- 4.0 Definitions**
- 5.0 Process**
- 6.0 References / Related Documents**
- 7.0 Revision Table**



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## EMS Procedure

### EP 4.5.5-1 Internal Audit

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#### 1.0 Purpose

- 1.1 The purpose of this procedure is to define the planning and implementation of internal EMS audits and the follow up of nonconformance's using corrective and / or preventive actions for the Miami-Dade Transit (MDT) Metromover Facility.
- 1.2 To determine whether the EMS and operations of MDT Metromover Facility. other requirements.
- 1.3 **Internal EMS Auditing** or management system audits are clearly different than **Environmental Compliance Evaluations** (or Compliance Auditing.) Refer to **EP 4.5.5.2-1 Evaluation of Compliance** procedure for further details.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.5.5, Internal Audit, of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 The scope of this procedure addresses setting EMS audit criteria and establishing a process to obtain, evaluate and communicate objective evidence required to determine conformance to the ISO 14001 standard.

#### 3.0 Responsibility

- 3.1 The **EMS Management Representative** will coordinate the implementation of an *Internal EMS Audit* on an **annual** basis, at a minimum. All elements of the EMS (or ISO 14001 standard) will be included in the audit scope. The audit schedule will be based on the environmental importance of the activity concerned and the results of previous audits.
- 3.2 The **EMS Management Representative** is responsible for appointing the EMS Audit Team members, and providing the appropriate training necessary for *Internal EMS Auditing*.
- 3.3 The **EMS Audit Team** upon completion of the audit, will review any findings with the MDT's management personnel from the area being audited, if warranted. They will document corrective and preventive actions on the appropriate forms and develop the necessary implementation schedules.
- 3.4 The EMS Audit Team members conducting the audits will have no responsibility for the area or activity being audited.
- 3.5 All documentation from the *Internal EMS Audit* will be maintained as records by the EMS Management Representative or designated personnel.

#### 4.0 Definitions

- 4.1 Refer to 4.1.60 EMS Related Definitions

#### 5.0 Process

- 5.1 The EMS Audit Team will be appointed by the EMS Management Representative and can



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## EMS Procedure

### EP 4.5.5-1 Internal Audit

be comprised of any of the following: core EMS Team members, individuals from other department areas, members appointed by Senior Management, and / or, third parties.

- 5.1.1 The EMS Audit Team members will have received Internal EMS Auditor training. The EMS Audit Team members will carry out audits and report the results to the MDT's management personnel responsible for the area being audited.
- 5.2 The intention or notification to perform an Internal EMS Audit is coordinated and communicated by the EMS Management Representative to the MDT's affected departments. This may be accomplished by use of **EP 4.5.5-1FA Internal EMS Audit Notification and Schedule** form and can be sent electronically as an e-mail attachment.
- 5.3 The MDT Metromover Facility area audited against the EMS requirements will include but is not limited to, the following:
  - 5.3.1 MDT Metromover Facility
- 5.4 Based on environmental importance, an audit of the EMS will be conducted at least once per year. Areas of concern from previous audits (e.g. major nonconformance findings) will be documented and routinely audited.
  - 5.4.1 If nonconformance continues to occur in specific areas, then the frequency of auditing will be increased for those areas, as determined by the EMS Management Representative.
- 5.5 Prior to the initiation of the *Internal EMS Audit*, the EMS Audit Team will offer to conduct a brief opening meeting with individuals from the affected MDT Metromover Facility's areas. The agenda may include:
  - 5.5.1 Introduction of the EMS Audit Team;
  - 5.5.2 Review of audit purpose, objectives and scope;
  - 5.5.3 Review of audit frequency;
  - 5.5.4 Confirm time and location of evening debriefing(s);
  - 5.5.5 Discussion of final audit report submittal and corrective action process; and,
  - 5.5.6 Questions and answers.
- 5.6 The EMS Audit Team is provided a checklist, **EP 4.5.5-1FB Internal EMS Auditing Checklist**, which will assist in the basis of the audit. These checklists will be relevant to the MDT Metromover Facility's operations. The EMS Audit Team may review and amend the audit questions as necessary. The EMS Audit Team may also use other types of appropriate auditing documentation.
- 5.7 During the *Internal EMS Audit*, the EMS Audit Team will record audit observations on the checklists and other designated working papers only. These documents will be returned at the end of the audit and become records of the audit observations. This objective evidence will provide enough information to document the essence of the activities products or services reviewed.
- 5.8 Nonconformance findings requiring corrective action are documented on **EP 4.5.3-1FA**



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## EMS Procedure

### EP 4.5.5-1 Internal Audit

**Corrective Action Request (CAR)** forms. The CARs will be compiled into a list and documented on **EP 4.5.3-1FB Corrective Action Log / Report** form. These forms will be used, as appropriate, and follow the **EP 4.5.3-1 Nonconformity, Corrective and Preventive Action** procedure.

- 5.8.1 The EMS Audit Team will evaluate Corrective Actions Requests (CARs) for completion and effectiveness. The timing of the evaluation will reflect the significance of the issue.
- 5.9 All **observations** and recommendations for improvement are documented on checklists, CARs and / or other appropriate documentation.
- 5.9.1 **EP 4.5.3-1FC Preventive Action Proposal (PAP)** form, may be issued to the area in order to prevent a nonconformance from occurring.
- 5.10 The EMS Audit Team will present the relevant Corrective Action Requests (CARs) and Preventive Action Proposals (PAPs) to the MDT management personnel responsible for the area of the nonconformance. A copy of the documents will be kept and forwarded to the EMS Management Representative with the checklists and other appropriate documentation at the end of the audit.
- 5.10.1 All nonconformance items documented by the EMS Audit Team during the *Internal EMS Audit* are to receive timely and thorough corrective and preventive actions, as appropriate by the management of the area responsible, per the **EP 4.5.3-1 Nonconformity, Corrective and Preventive Action** procedure.
- 5.11 Upon the close of the audit, a member of the EMS Audit Team will conduct a closing conference to present a verbal summary of the *Internal EMS Audit* findings to the relevant personnel. This meeting's agenda may include:
- 5.11.1 Brief review of audit objective and scope;
- 5.11.2 Summary of nonconformance findings;
- 5.11.3 Discussion of the program to address nonconformance;
- 5.11.4 Confirm milestone dates for corrective action;
- 5.11.5 Discussion of final audit report submittal; and,
- 5.11.6 Questions and answers.
- 5.12 Results of the *Internal EMS Audits* are formally communicated to the MDT Metromover Facility's Senior Management on an annual basis during the Management Review Meeting as per the **EP 4.6.12-1 Management Review** procedure.

#### 6.0 References / Related Documents

- 6.1 EP 4.5.5-1FA Internal EMS Audit Notification and Schedule form
- 6.2 EP 4.5.5-1FB Internal EMS Audit Checklist form
- 6.3 EP 4.5.3-1FA Corrective Action Request (CAR) form
- 6.4 EP 4.5.3-1FB Corrective Action Log form



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EMS Procedure

**EP 4.5.5-1 Internal Audit**

- 6.5 EP 4.5.3-1FC Preventive Action Proposal (PAP) form
- 6.6 EP 4.5.3-1 Nonconformity, Corrective and Preventive Action procedure
- 6.7 EP 4.6.12-1 Management Review procedure

**7.0 Revision Table**

Rev. No.	Date	Revised by	Description

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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General Requirements					
4.1	1) Has the scope been documented to define the fence line to which the EMS applies?	Verify that activities, products and services are addressed within the scope.			
Environmental Policy					
4.2	1) Has top management defined the Environmental Policy?	View the Environmental Policy and verify it is signed by top mgt.			
4.2	2) Is the Environmental Policy appropriate to the nature scale, and environmental impacts of its activities, products, or services?	Verify that the Environmental Policy includes a description of the appropriate activities, products and services.			
4.2	3) Does the Environmental Policy include a commitment to continual improvement & pollution prevention?	Confirm that the Environmental Policy includes a written commitment to continual improvement and prevention of pollution.			
4.2	4) Does the Environmental Policy include a commitment to comply with appropriate environmental laws & other requirements?	Confirm that the Environmental Policy includes a written commitment to meeting or exceeding all appropriate legal and other requirements.			
4.2	5) Does the Environmental Policy provide a framework of setting & reviewing environmental objectives & targets?	Confirm that the facility objectives are identified. (e.g., reduce energy, reduce waste.)			
4.2	6) Is the Environmental Policy documented, implemented, maintained and communicated to all employees? How are temporary or part-time employees covered? Do employees know how their job relates to the Environmental Policy?	Confirm that the Environmental Policy is given to employees and that the employees are given Environmental Policy awareness training.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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**Environmental Policy (continued)**

4.2	7) Is the Environmental Policy available to the public? Have vendors and suppliers been made aware of the Environmental Policy?	Verify that the facility has a procedure to receive and respond to inquires on the Environmental Policy, and records the responses on the external communication log.			
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**Environmental Aspects**

4.3.1	1) Has a procedure for environmental aspects been developed? Does the procedure include the evaluation of non-routine conditions?	Confirm that a procedure exists for Environmental Aspects.			
4.3.1	2) Have the environmental aspects been identified? Was the procedure for environmental aspects followed? Have management controls been considered in determining those that are significant?	Review the environmental aspects. Verify that there are meeting minutes from the EMS Team identifying the environmental aspects. Determine the process for aspects identification, the grading and ranking of significant aspects. Verify that significant aspects are managed			
4.3.1	3) Have significant environmental aspects been communicated to employees?	Determine how aspects are communicated to employees. Interview (sample) employees for awareness of the organization's aspects.			
4.3.1	4) Have objectives and targets been established for each significant aspect?	Verify that objectives and targets are linked to significant aspects			
4.3.1	5) Are aspects kept current?	Confirm the review of aspects at regular intervals. Verify the aspects are up to date. Check for any new or modified process changes that require aspects review.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:		Department Audited:			
		Date of Audit:			
Criteria	Audit Question	Required Evidence	Audit Observations	C	N

Legal and Other Requirements					
4.3.2	1) Has a procedure been developed to identify and have access to legal and other requirements?	Confirm that a procedure exists for Legal and Other Requirements.			
4.3.2	2) If the information relative to the legal requirements kept up to date?	Verify legal requirements are reviewed periodically and changes documented.			
Objectives, Targets and Programs					
4.3.3	1) The Facility has established and maintained a program for achieving its objectives and targets. Have objectives and targets been established for the organization?	Confirm the objectives & targets have been identified for significant aspects. Have the department explain the process.			
4.3.3	2) Did the department utilize the following when it established its objectives and targets: legal and other requirements; significant environmental aspects; prevention pollution; views of interested parties?	Evaluate objectives and targets.			
4.3.3	3) Are objectives and targets consistent with the Environmental Policy and include a commitment to prevention of pollution?	Confirm objectives in the Environmental Policy are included within the facilities objectives.			
4.3.3	4) Are the objectives specific? Are they measurable?	Have the organization demonstrate this.			
4.3.3	5) Verify the individual roles and responsibilities on objectives and targets are defined.	Interview appropriate employees.			
4.3.3	6) Identify how progress toward the objectives and targets are tracked and communicated to upper management.	Ensure that monthly operating reports (or similar method) include status of objectives and targets.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Objectives, Targets and Programs (continued)					
4.3.3	7) Have Environmental Programs or action plans been developed to manage significant aspects?	Review the Programs. Are they linked to significant aspects?			
4.3.3	8) Have the responsibilities and timeframes for completion been defined for who will complete activities and actions?	Review the Environmental Management Programs (EMPs).			
4.3.3	9) Have programs been modified or new programs been developed for any new activities?	Verify that new projects or modifications are subject to the EMS requirements. Have the department explain the process.			
Resources, Roles, Responsibility and Authority					
4.4.1	1) Have the roles, responsibilities, and authorities been defined, documented and communicated?	Review Organizational charts, roles, responsibilities and authorities of personnel for the environmental management system.			
4.4.1	2) Are adequate resources committed for implementation?	Confirm the EMS Team is still active in implementing the EMS.			
4.4.1	3) Has a Management Representative (EMR) been identified with responsibilities for maintaining the system and reporting results to management?	Confirm the Environmental Management Representative (EMR) has been appointed, is knowledgeable about the system and report results to senior management.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Competence, Training and Awareness					
4.4.2	1) Have training needs been identified? Subject matter should include the environmental training required by law, procedures, and work instructions. Verify the organization has identified the job functions that may have significant environmental impact.	Review the training needs to ensure that individuals working with significant aspects have been trained. Review written training subject matter, level of understanding, and identification of the groups or job functions.			
4.4.2	2) Have procedures been developed that address: a) the importance of the EMS; b) significant aspects; c) roles and responsibilities; d) consequences of departure from specified operating procedures?	Verify that employees whose work may impact the environment have been appropriately trained on the <u>consequences</u> of deviating from procedures. Verify that employees have been made aware of the aspects and significant aspects of their department and the <u>benefits</u> of following approved EMS procedures			
4.4.2	3) Does the organization require and provide training with respect to emergency preparedness and response?	Review training documents.			
4.4.2	4) Are personnel working with significant aspects competent based on education, training, or experience?	Interview personnel who work with significant aspects, to assure they have the proper understanding and are competent to do their job (if significant aspect involved) based upon criteria such as. (Licenses, experience, work instruction training, supervisor signoff, etc.)			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Communication					
4.4.3	1) Have the internal communications procedures been developed for the EMS?	Verify by sampling the process of how EMS information is communicated between the various levels and functions within the organization or various departments.			
4.4.3	2) Does a process exist to receive, document, and respond to relevant external communications?	Verify by sampling, the process for receiving, documenting and responding to external communications from interested parties. (Customers, regulator, etc.)			
Documentation					
4.4.4	1) Has the facility developed program materials in either paper or electronic form?	View EMS Procedures, either hardcopy or electronic version.			
4.4.4	2) Are the core elements of the management system and their interaction described?	Verify the core EMS documents include all 17 elements.			
4.4.4	3) Does the EMS program provide direction to related documentation?	Verify the cross references to related programs and documentation that provide more detail. (e.g., procedures, work instructions, plans.)			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:		Department Audited:			
		Date of Audit:			
<b>Criteria</b>	<b>Audit Question</b>	<b>Required Evidence</b>	<b>Audit Observations</b>	<b>C</b>	<b>N</b>

<b>Control of Documents</b>					
4.4.5	1) Are there document control procedures and systems in place for controlling documents required by the ISO 14001 standard?	Review the document control procedure.			
4.4.5	2) Can controlled documents be located?	Verify the documents are available.			
4.4.5	3) Are documents periodically reviewed, revised as necessary and approved for adequacy by authorized personnel?	Ensure that the documents have been approved for use by an appropriate level of management.			
4.4.5	4) Are current versions available?	Ensure that documents (procedures /work instructions) are accessible to those with significant aspects associated with their jobs.			
4.4.5	5) Are obsolete documents promptly removed from all points of issue or otherwise against unintended use?	Check for outdated documents; confirm that no superceded hard copies exist.			
4.4.5	6) Are obsolete documents retained for legal and/or knowledge preservation purposes suitably identified?	Review procedure to insure that obsolete documents are removed from use.			
4.4.5	7) Is documentation legible, dated with dates of revision, and maintained in an orderly manner?	View the EMS documents; confirm it is legible, includes revision dates, and is organized.			
4.4.5	8) Is EMS documentation retained for a specified period?	Verify that the facility follows the record retention procedures.			
4.4.5	9) Have responsibilities been defined for the creation and revision of documents and included within a procedure?	Confirm that the authority for initiating the EMS documents and revising them is defined. (e.g., in the document control procedure.)			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Operational Control					
4.4.6	1) Have operational controls (e.g., procedures, work instructions and equipment) been identified for how all significant aspects will be managed?	Review the significant aspect list and the list of procedures/work instructions to determine if all the significant aspects have some type of operational control to manage them.			
4.4.6	2) Are the operating criteria specified in the procedure (work instruction)?	Review the procedures (work instructions) for operational detail, to include forms and records to complete, specific settings, data to collect, etc.			
4.4.6	3) Do the procedures exist to control contractor activity?	Review the Contractor Management Procedure.			

Emergency Preparedness & Response					
4.4.7	1) Have procedures been developed and maintained to cover emergency situations?	Review all the emergency plans and procedures to ensure that they are referenced in related documents.			
4.4.7	2) Are these procedures modified in instances when emergency situations or accidents occur?	Review the procedures for possible changes after an emergency or accident; Check the emergency response procedures.			
4.4.7	3) Have periodic tests of the emergency system been conducted?	Review records for desk top reviews or mock drills.			
4.4.7	4) Verify that employees have received appropriate emergency response training.	Review training records for emergency response.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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<b>Monitoring &amp; Measurement</b>					
4.5.1	1) Do procedures include monitoring & measurement requirements?	Review procedures.			
4.5.1	2) Does the organization have documented procedures to monitor and measure on a set frequency the key characteristics of its operations that are related to the significant environmental aspects?	Verify that the person responsible submits a worksheet (on an established frequency) that provides data on its operations and the status of its objectives and targets and performance indicators.			
4.5.1	3) Is measuring and testing equipment retained according to procedures for proper calibration?	Review equipment requirements for calibration.			
<b>Evaluation of Compliance</b>					
4.5.2	4) Are environmental compliance audits being completed on a regular frequency and documented?	Review completed compliance audits and review the procedure.			
<b>Nonconformity, Corrective, &amp; Preventive Action</b>					
4.5.3	1) Are procedures in place for nonconformance, corrective, and preventive actions?	Review procedure for Corrective Action. Verify the procedure (process) addresses means for identifying the root cause and implementing effective corrective and preventive actions.			
4.5.3	2) Have revisions to procedures been completed as a result of corrective and preventive actions?	Review CAR log for changes of procedures as a result of CARs.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Control of Records					
4.5.4	1) Are procedures in place for records management, to include identification, maintenance, and disposition of environmental records? (EMS records include legal and other requirements, environmental aspects, training, monitoring data, nonconformance information, environmental audits, management reviews, emergency preparedness, etc.)	Review records management procedure.			
4.5.4	2) Are audit records and training records maintained, along with other records?	Ensure that audit records and training records are maintained as a minimum; Review other environmental records for conformance to the procedure.			
4.5.4	3) Are environmental records legible, identifiable, and traceable to the activity, product or service involved?	Review the procedures to ensure that appropriate records are being generated with requisite information.			
4.5.4	4) Are records readily retrievable in suitable conditions?	Confirm records are maintained within filing cabinets or electronic records are readily retrievable.			
4.5.4	5) The organization has ensured that the retention times for its environmental records are established and recorded.	Review records retention Environmental Policy. Ensure records management is consistent with these guidelines.			
4.5.4	6) Are adequate records identified in the procedures and are they being generated, as appropriate?	Confirm that records identified in the EMS procedures are being archived.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited: Date of Audit:
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Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Internal Audits					
4.5.5	1) Are procedures in place for periodic audits of environmental management system?	Review Internal Audit Procedures.			
4.5.5	2) Does the audit checklist cover the elements of ISO 14001? Does the audit cover conformance to the EMS?	Confirm all elements of ISO 14001 are addressed by answering the questions included on this checklist.			
4.5.5	3) Have the results of audits been reported to management?	Confirm that audit results are reviewed by management. (e.g., included on distribution and management review.)			
4.5.5	4) Do audit procedures address audit scope, frequency, methodology, responsibilities, and requirements for conducting and reporting audits?	Review the audit procedure.			
Management Review					
4.6	1) Does top management routinely review the EMS for its suitability, adequacy, and effectiveness?	Verify the Management Review Procedure. Ensure that the management review records have been completed and documented.			
4.6	2) The Management Review Agenda should include the following items: status of objectives and targets, corrective and preventive actions, audit reports, interested party issues, and regulatory compliance.	Review Management review meeting minutes.			
4.6	3) Has the management review process considered possible changes to Environmental Policy, objectives and other EMS elements?	Review possible program changes as a result of the management review process.			

EMS Internal Audit  
 EP 4.5.5-1FB Internal EMS Audit Checklist / Report

EMS Audit Team:	Department Audited:
	Date of Audit:

Criteria	Audit Question	Required Evidence	Audit Observations	C	N
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Audit Criteria	Audit Question	Required Evidence	Audit Observations	C	N
Procedure, ISO Element					
	Question				
	Question				
	Question				
Procedure, ISO Element					
	Question				
	Question				
	Question				

*Additional Auditor Notes:*

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**Attachment Q**  
Management Review Procedure, Attendance Sign-in  
Sheet, and Annual Evaluation Form

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Verification	Originator	Revised	Approved	Issued
Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	10/21/2009	02/15/2010		

EMS Procedure

**EP-4.6-1 Management Review Procedure**

**Person responsible:** Akbar Sharifi, P.E.

**Area of application:** Miami-Dade Transit (MDT) Metromover Operations

**Document location:** MDT's Main Office and Maintenance Facilities

**Original issue date:** 10/21/2009

**Revisions**

Rev. No.	Date	Description
001	02/15/10	Reviewed and updated procedure

**Recurring action items**

Activity	Responsibility	Frequency
1. Schedule management review meetings with Senior Management on a regular basis.	Akbar Sharifi, P.E.	Quarterly, Semi-annually or within 30 days of any audit
2. Document management reviews	Akbar Sharifi, P.E.	Each management review
3. Obtain input from Senior Management	Akbar Sharifi, P.E.	As necessary
4. Develop/revise procedures as appropriate based on feedback.	Akbar Sharifi, P.E.	As necessary

**Procedure Index**

- 1.0 Purpose
- 2.0 Scope
- 3.0 Responsibility
- 4.0 Definitions
- 5.0 Process
- 6.0 References / Related Documents



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Initials	Akbar Sharifi, P.E.	Akbar Sharifi, P.E.		
Date	10/21/2009	02/15/2010		

## EMS Procedure

### EP-4.6-1 Management Review Procedure

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#### 1.0 Purpose

- 1.1 This procedure defines the methods and documents used for the Miami-Dade Transit (MDT) Metromover Facility Senior Management to review the results of **Internal Audits** and progress reporting on the set **Objectives, Targets and Programs**.

#### 2.0 Scope

- 2.1 This procedure is responsive to element 4.6 Management Review, of the ISO 14001:2004 standard and covers operations of the MDT Metromover Facility.
- 2.2 The scope of the *Management Review* includes addressing the possible need for change to the *Environmental Policy; Objectives, Targets and Programs*; and other elements of the EMS.
- 2.3 EMS audit results, changing circumstances and the commitment to continual improvement will be reviewed, discussed and considered during the *Management Review*.
- 2.4 The following personnel will participate in the *Management Review* meeting:
  - a) EMS Management Representative;
  - b) EMS Team members;
  - c) Senior Management as defined by the EMS Team (Responsible for assigning the necessary resources to ensure the implementation and control of the EMS; reviewing and approving the procedure; and, assigning a specific EMS management representative(s) with sufficient authority)

#### 3.0 Responsibility

- 3.1 **EMS Management Representative** is responsible for:
  - 3.1.1 Scheduling and organizing *Management Review* meetings on a regularly-scheduled basis. (frequency is recommended quarterly during the first two years of the EMS implementation)
  - 3.1.2 Providing the agenda and sign-in sheet for the *Management Review* meetings, as well as informing and inviting the required representatives.
  - 3.1.3 Addressing inquires and requests in regards to issues and information to be discussed during the *Management Review* meetings.
  - 3.1.4 Preparing, circulating, and maintaining the *Management Review* meeting minutes and summary. The EMS Management Representative may designate an individual to gather the necessary information prior to the meeting and to take the *Management Review* meeting minutes.
- 3.2 **EMS Team** members will attend the *Management Review* meetings and assist the EMS Management Representative with recommendations to Senior Management. The EMS Team plays a key role in reviewing and evaluating critical performance indicators of the EMS. For example, the



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## EMS Procedure

### EP-4.6-1 Management Review Procedure

EMS Team would annually present the **ED-4.5-4 Monitoring and Measurement Annual Evaluation**. This evaluation will become the basis for the next years planning and for documenting continuous improvement.

- 3.3 **Senior Management** will attend regularly scheduled *Management Review* meetings to stay informed on the progress, implementation and maintenance of the EMS. Senior Management of the EMS shall be defined as top management in key positions involved in:
  - a) receiving the right information and knowledge about the EMS;
  - b) making decisions about the organization and its resources.
- 3.4 **Department Managers** will present departmental summaries of their EMS activities and projects at *Management Review* meetings to Senior Management.

#### 4.0 Definitions

- 4.1 Refer to **EP-4.4.4-2 EMS Related Definitions Procedure**

#### 5.0 Process

- 5.1 **Planning and Preparation for *Management Review* meetings**
  - 5.1.1 MDT Metromover Facility will hold a *Management Review* meeting at least annually. The frequency of *Management Review* is recommended quarterly during the first two years of the EMS implementation so Senior Management stays current regarding progress of the set *Objectives, Targets and Programs* and results of *Audits*.
  - 5.1.2 Two weeks prior to the scheduled *Management Review* meeting, the EMS Team will provide the necessary information to the EMS Management Representative and the Department Managers using **ED-4.5.1-2 Monitoring and Measurement of Objectives, Targets and Programs**.
  - 5.1.3 One week prior to the *Management Review* meeting, the agenda will be circulated. To ensure participants are prepared for the meeting, the agenda will contain the following information and items:
    - a) the current state of MDT Metromover Facility's EMS
    - b) the status of objectives and targets
    - c) corrective and preventive actions
    - d) audit reports
    - e) interested party issues
    - f) regulatory compliance
    - g) need for any changes



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EMS Procedure

**EP-4.6-1 Management Review Procedure**

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5.2 **Management Review Meetings**

- 5.2.1 The *Management Review* meetings, shall be scheduled and conducted by the EMS Management Representative, and attended by Senior Management and the EMS Team. This meeting shall be documented with meeting minutes and attendance recorded on **ED-4.6-3 (F) Attendance Sign-in Sheet**.
- 5.2.2 During the *Management Review* meetings, the current state of the EMS shall be reviewed as well as an update (progress and/or corrective actions) on the set *Objectives, Targets and Programs*. In addition, the possible need for changes to the *Environmental Policy; Objectives, Targets and Programs*; and other elements of the EMS will be discussed.
- 5.2.3 Results of the *Environmental Audits* and appropriate modifications shall also be discussed at the *Management Review* meetings. Changes to circumstances and the commitment to continual improvement should also be considered in this discussion.
- 5.2.4 Recommended changes must be viable and not cause a significant disruption to the MDT Metromover Facility's current or planned operations.
- 5.2.5 *Management Review* meetings and the resulting changes will ensure that the EMS:
  - a) continues to be suitable, adequate and effective in light of the nature and scale of the MDT Metromover Facility's environmental impacts and operations;
  - b) conforms to the imposed planned arrangements of MDT Metromover Facility's EMS and is properly implemented and maintained;
  - c) is in compliance with MDT Metromover Facility's legal and other obligations; and
  - d) will satisfy the MDT Metromover Facility's commitment to continual improvement during the coming year.

5.3 **Documentation and Distribution**

- 5.3.1 Detailed meeting minutes of the *Management Review* will be taken. The meeting minutes will include:
  - a) discussions undertaken and conclusions met for each of the topics and items included in the agenda;
  - b) action items;
  - c) assigned responsibilities;
  - d) a list of all participants; and
  - e) a tentative date or range of dates for the next *Management Review* meeting.
- 5.3.2 After the completion of a *Management Review* meeting, draft-meeting minutes will be circulated to all participants within two weeks. Participants are to review the minutes for accuracy, ensuring their comments, ideas and contributions were accurately documented



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## EMS Procedure

### EP-4.6-1 Management Review Procedure

and presented. Participants are to complete their review within one week. If no comments are received, it is assumed the participant has no concerns.

5.3.3 Internal and external inquiries about a *Management Review* meeting will be handled in accordance with **EP-4.4.3-1 Communication Procedure**.

5.3.4 The *Management Review* agenda, meeting minutes, attendance sign-in sheets and departmental summaries will be maintained as EMS records MDT's Environmental Department Office. *Management Review* meeting dates will be recorded in the log on **ED-4.6-2 Management Review Annual Evaluation**.

#### 5.4 Audits and Evaluations

5.4.1 MDT Metromover Facility will follow existing procedures for **EP-4.5.5-1 Internal Audit Procedure** and **EP-4.5.3-1 Nonconformity, Corrective and Preventive Action Procedure** to ensure an effective *Management Review* and the continuing suitability, adequacy and effectiveness of the EMS.

5.4.2 The **Senior Management**, **EMS Management Representative** and the **EMS Team** will evaluate the effectiveness of *Management Review* **annually**. This evaluation will become the basis for the next years planning and for documenting continuous improvement.

5.4.3 The *Management Review* evaluation will be documented on **ED-4.6-2 Management Review Annual Evaluation**, and controlled as EMS records.

### 6.0 References / Related Documents

- 6.1 Agendas, Meeting Minutes
- 6.2 EP-4.4.3-1 Communication Procedure
- 6.3 ED-4.5.1-2 Monitoring and Measurement of Objectives, Targets and Programs
- 6.4 ED-4.6-3 (F) Attendance Sign-in Sheet
- 6.5 ED-4.5-4 Monitoring and Measurement Annual Evaluation
- 6.6 ED-4.6-2 Management Review Annual Evaluation
- 6.7 EP-4.5.5-1 Internal Audit Procedure
- 6.8 EP-4.5.3-1 Nonconformity, Corrective and Preventive Action Procedure



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Date	10/21/2009			

Environmental Document

**ED-4.6-3 (F) Attendance Sign-in Sheet**

EMS Management Review Meeting				
<b>Meeting Subject:</b>				
<b>Meeting Chaired by:</b>				
<b>Date and Time:</b>				
	Print Name	Initials	Department	Signature
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
Completed forms and related attachments are records maintained in the EMS; route to the EMS Management Representative.				



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**ED-4.6-2 Management Review Annual Evaluation**

Management Review Annual Evaluation Questions	Responses
1. Do we have an <b>existing process</b> for conducting Management Reviews?  If yes, does that process need to be revised? In what way?	
2. <b>Who needs to be involved</b> in this process within our organization?	
3. When is the <b>best time</b> for us to implement this process? Can this effort be <b>linked</b> to an existing organizational process (such as our budget, annual planning, employee performance appraisals or auditing cycles)?	
4. How <b>frequent</b> are Management Reviews? What is the basis for this frequency?  Should we conduct Management Reviews more or less frequently?	
5. Who is responsible for <b>gathering the information</b> needed to conduct Management Reviews? Who is responsible for <b>presenting</b> this information?	
6. How do we ensure that <b>changing circumstances</b> (both internal and external to the organization) are considered in this process?	



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**ED-4.6-2 Management Review Annual Evaluation**

Management Review Annual Evaluation Questions	Responses
7. How do we ensure that the <b>recommendations</b> from Management Reviews are <b>tracked and acted upon</b> ?	
8. <i>Our next step on Management Review is to...</i>	

The key question a *Management Review* seeks to answer is; “Is the system working (i.e., is it suitable, adequate, and effective, given our needs)?”

(This demonstrates continual improvement.)

Questions for Senior Management to consider:	
1.0	Is our <i>Environmental Policy</i> still relevant to what we do?
2.0	Are roles and responsibilities clear and do they make sense?
3.0	Are we applying resources appropriately?
4.0	Are we meeting our regulatory obligations?
5.0	Are the procedures clear and adequate? Do we need others? Should we eliminate some?
6.0	What effects have changes in material, products or services had on our EMS and its effectiveness?



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**ED-4.6-2 Management Review Annual Evaluation**

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7.0	How effective are our measurement and assessment systems?
8.0	Can we set new measurable performance objectives?
9.0	Do changes in laws or regulations require us to change some of our approaches?
10.0	What stakeholder concerns have been raised since our last Management Review Evaluation?
11.0	Is there a better way? What else can we do to improve?



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**ED-4.6-2 Management Review Annual Evaluation**

Management Review Meeting Log				
Date	Time	Location	Meeting Chaired By	# Attending



**Metro Mover Facility ISO 14001 Certification  
Quarterly Management Review Meeting Agenda  
Thursday October 22, 2009 – 11:00 a.m.**

**Agenda/Discussion Items**

**II. Discussion Topics:**

- 1) S. Alvarez indicated that signs for the following equipment will be made and installed at a designated location near the stock room.
  - a. Universal lamp compression machine (E-Lampinator by CEA Environmental, Inc.).
  - b. Aerosol can puncturing machine (Grainger Aerosol Compliant System, Model #1YNC7).

The signs will be made as follows:

**Main Sign** – “WASTE COLLECTION AREA”

**Smaller Signs for:** a) Light Bulb Recycling; b) Aerosol Can Recycling; c) Battery Recycling; d) Used Rags Recycling; and, e) Gloves Recycling

- 2) The EMS Team discussed the audit findings with the EMS team members. In addition, the following summarizes additional findings documented during a follow up audit conducted on September 24, 2009. It was agreed that the following actions will be taken:
  - S. Chayt indicated that the shaving machine (i.e. Lathe) will be moved to William Lehman Center (WLC). Also M. Rodriguez indicated that both blasting machines will be transferred to Central Bus Facility and not WLC. *S. Chayt reiterated that the work will be completed by mid November 2009.*
  - The "Paint Storage Room" will be designated and labeled as "Janitorial Storage Room". *S. Alvarez indicated that the work will be completed by mid November 2009.*
  - S. Alvarez indicated that all materials/chemicals will be moved to the stock room and therefore eliminating the storage cabinets. *Only a number of approved flammable cabinets (probably no more than 2 or 3) will be placed inside the maintenance area to be used to store 3 of each of the required aerosol cans and/or chemicals. As discussed before, F. Wright and S. Alvarez will determine the number and type of chemicals/aerosol cans that are being used at the facility, and prepare a Standard Operating Procedure (SOP) for management these chemicals. It was also determined*

that there are no more than 3 or 4 types of chemicals currently being used at the facility. The work will be completed by mid November 2009.

- S. Alvarez stated that the 55 gallon oil drums have been placed on a secondary containment pallet. A. Sharifi and A. Worku did verify the placement of the 55-gallon drums on a pallet. However, there was a wood pallet between the drums and secondary containment plastic pallet. A. Sharifi pointed out to S. Alvarez to remove the wood pallet and clean up the sludge and/or petroleum stain around the plastic secondary containment pallet. In addition, a sign should be placed in the area designating it as "oil drum storage area". It was pointed out to S. Alvarez to remove one (1) red 55-gallon synthetic oil drum (mostly empty) that was located underneath the ramp, in front of the paint storage room. The work will be completed by mid November 2009.
- S. Chayt indicated that all new and old paint containers have been transferred out of the Mover shop to other facilities and no paint containers are stored on site anymore. A. Sharifi and A. Worku did verify the removal of old paint containers during the second audit conducted on September 24, 2009. However, one or two paint containers were left on site to paint over graffiti signs at the facility.
- It has been decided that the Oil/Water Separator (OWS) will be kept on-site and operation/maintenance of the OWS will be addressed in the Spill Prevention, Control and Countermeasure (SPCC) plan. The draft SPCC plan was submitted to MDT on September 24, 2009. SPCC training will be tentatively scheduled for end of December 2009.
- S. Alvarez stated that there was a battery room at the facility in the past but MDT no longer uses it since the new batteries are the gel type and don't require any acid neutralization. Mario indicated that the acid neutralization tank might be in ground located in the old battery room. S. Alvarez indicated that the initial investigation work will be completed by the middle of November 2009. The plan is to identify and properly abandon the floor drains and the neutralization tank.
- S. Alvarez indicated that a contractor and disposal method for the old tires have been identified and will be implemented soon. F. Wright will prepare an SOP for management of used tires along with chemicals, light bulbs, batteries, and rags.

The following is the schedule for completion of the remaining homework:

- Communications – August 27, 2009 (Completed)
- Contractor Management (Operational Control) – September 10, 2009 (Completed)
- Competence, Training, and Awareness – September 24, 2009 (Completed)
- Management Review – October 8, 2009 (Completed)
- Monitoring and Measurement – October 22, 2009 (Completed)

