Guide to the City of Dallas
Environmental Management System

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<th>Document Number:</th>
<th>OEQ-EMS-018</th>
<th>Reviewed By:</th>
<th>EMS Core Team</th>
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<tr>
<td>Issue Date/Effective Date:</td>
<td>11-07-11/12-07-11</td>
<td>Approved By:</td>
<td>Kris Sweckard</td>
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<td>Revision Number:</td>
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Guide to the City of Dallas
Environmental Management System

Plan -> Do -> Act -> Check
1. Scope

The City of Dallas Environmental Management System (EMS) is described in this EMS Guide. The EMS has been designed to meet the requirements of the ISO 14001:2004 EMS standard and the August 28, 2006 EPA Consent Decree.

The EMS is used: (1) to conduct City’s operations and services in line with the Environmental Policy; (2) to minimize adverse environmental impacts; (3) to meet or exceed environmental regulatory compliance requirements, and (4) to organize and advance the City in environmental stewardship.

The fence line of the EMS includes all facilities in the following Departments: City Hall, Aviation, Dallas Water Utilities, Fire-Rescue, Police, Public Works (including Storm Water Management), Code Compliance, Sanitation Services, Equipment and Building Services, Park and Recreation, Street Services (including Flood Control), and Convention and Event Services. The EMS also includes single
facilities from two additional departments operating at City Service Centers (as required by the Consent Decree): CIS Radio Shop at the Central Service Center and the Court and Detention Services City Marshal's Office at the Central Service Center. Also included in the fenceline are activities that departments conduct on properties other than City facilities.

The success of the EMS has been a result of the efforts of all City staff involved especially Environmental Management Representatives (EMRs) from the following departments: Aviation, Dallas Water Utilities, Fire-Rescue, Police, Public Works, Code Compliance, Sanitation Services, Equipment and Building Services, Park and Recreation, Street Services, Convention and Event Services, CIS Radio Shop, and the Court and Detention Services City Marshal's Office.
2. PURPOSE

The EMS Environmental Policy requires continual improvement. Therefore, the City's EMS strives to improve the environmental performance for those operations causing the greatest environmental impacts. The purpose of the EMS Guide is to provide information related to the development and implementation of the City's EMS, to facilitate the understanding and relationship of key components, and to document the EMS. Each element of the ISO 14001:2004 standard and how the City implemented those requirements are described in detail.

The figure below illustrates the City's path for EMS implementation:

ISO 14001 Framework
3. Definitions

**Continual Improvement:** The ongoing process of achieving improvements in overall environmental performance in line with the Environmental Policy.

**Contractor:** Any firm or individual who contracts work or provides services on City of Dallas property or for City of Dallas benefit.

**Corrective Action:** Action to eliminate the cause of a detected nonconformity.

**Document:** Information and its supporting medium that describes how a part of the EMS operates – what happens, how to do it. A “living” document may be revised or updated as necessary.

**Environment:** Surroundings in which the City of Dallas operates, including air, water, land, natural resources, flora, fauna, humans, and their interrelation.

**Environmental Aspect:** Element of City of Dallas’ activities, products or services that can interact with the environment. The cause of an impact.

**Environmental Impact:** Any change to the environment, whether adverse or beneficial, wholly or partially resulting from City of Dallas’ environmental aspects. The effect of an aspect.

**Environmental Management System (EMS):** The part of City of Dallas’ management system used to develop and implement its Environmental Policy and manage its environmental aspects.

**Environmental Objective:** Overall environmental goal, consistent with the Environmental Policy, that the City of Dallas sets for itself to achieve.

**Environmental Performance:** Measurable results of City of Dallas’ management of its environmental aspects. Environmental performance can be measured against the organization’s Environmental Policy, objectives, targets and other environmental performance requirements.

**Environmental Policy:** Overall intentions and direction of City of Dallas related to its environmental performance as formally expressed by top management.

**Environmental Target:** Detailed performance requirement applicable to City of Dallas or parts thereof, that arises from the environmental objectives, and that needs to be set and met in order to achieve those objectives.

**Internal Audit:** A systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the City of Dallas EMS audit criteria set by the organization are fulfilled. Independence of auditor can be demonstrated by the freedom from responsibility for the activity being audited.
**Interested Party:** Individual or group concerned with or affected by the environmental performance of the City of Dallas.

**Noncompliance:** Deviations from federal, state, and local environmental regulations.

**Nonconformance:** Non-fulfillment of a regulatory or ISO 14001:2004 requirement.

**Supplier:** Any firm or individual that supplies work, supplies, or services to a City of Dallas site.

**Preventive Action:** Action to eliminate the cause of a potential nonconformance.

**Prevention of Pollution:** Use of processes, practices, techniques, materials, products, services or energy to avoid, reduce or control (separately or in combination) the creation, emission, or discharge of any type of pollutant or waste in order to reduce adverse environmental impacts.

**Procedure:** The specified way to carry out an activity or process. Procedures may or may not be documented.

**Record:** Document stating results achieved or providing evidence of activities performed.

**Vendor:** Same as supplier.
4. EMS REQUIREMENTS

4.1 GENERAL REQUIREMENTS

To meet the “General Requirements” element of ISO 14001:2004 (Section 4.1), an organization must implement and continually improve an EMS per the requirements of the standard and determine how it will fulfill these requirements. Also, the organization shall define and document the scope of its EMS.

The City established, maintains, and continually improves a documented EMS that conforms to the requirements of the ISO 14001:2004 standard and the August 28, 2006 EPA Consent Decree. The City of Dallas EMS is designed to provide effective environmental management that continually improves the environment around us by reducing the impacts of our operations.

The City of Dallas EMS operates under the management policies and responsibilities summarized in this EMS Guide. The Guide describes the core elements of the EMS, explains their interaction, and provides references to related documentation. The effectiveness and suitability of the EMS is monitored through environmental management plans, internal and external audits, and management reviews.

Implementation of the EMS was lead by the Office of Environmental Quality (OEQ) whose director serves as the City wide Environmental Management Representative (EMR). Each affected Department Director appointed an EMR to lead the individual Department efforts on implementing and maintaining the EMS. The EMS development and implementation resulted from the collaboration of the City wide EMR and Departmental EMRs and months of participation in City wide EMS Core Team meetings. Additionally, each individual Department has a cross functional EMS Core Team to assist with the EMS implementation and maintenance.

Tracking of the EMS documentation is conducted through a web based software system called Intelex. This system helps consolidate the EMS data and documents from 14 individual Departments into one City wide EMS. Information on the EMS is also posted on the OEQ’s Intranet and Internet sites.

Applicable Documentation

- None

Reference

- ISO 14001:2004
- EPA Consent Decree, August 28, 2006
- Administrative Directive (AD) 2-49, Environmental Management System
4.2 ENVIRONMENTAL POLICY

An Environmental Policy serves as a driver for implementing and improving the environmental management system, and ultimately for improving environmental performance. The Environmental Policy was defined and adopted by the Dallas City Council and includes commitments of continual improvement, prevention of pollution, and environmental regulatory compliance. The Environmental Policy applies to all City of Dallas employees within the EMS fenceline.

This policy is documented, implemented, maintained and available to all personnel, including people working on behalf of City of Dallas and to the public. It can be found on both the City of Dallas' Intranet and Internet websites. Additionally, many City Departments have posters of the policy displayed in common areas and have distributed cards to workers with important EMS information.

While the City of Dallas has a contractor website which includes the Environmental Policy, and while the policy is included in bid documents, the City doesn’t expect employees of Contractors to know intimate details of the EMS or the Environmental Policy. However, the City of Dallas does expect Contractors to incorporate environmental regulatory compliance and stewardship into their daily work practices while working for the City of Dallas.

Employees operating in the fenceline of the EMS are generally expected to be able to answer the following questions about the EMS.

- Does the City have an Environmental Policy?
- What does it say?
- How does your job affect the environment?
- What are you doing to minimize impacts?
- Who do you call if you have an environmental question?
- What actions would you take in the event of an emergency?

Applicable Documentation

- Environmental Policy
- Internal Communication Procedure (OEQ-EMS-007)
- External Communication Procedure (OEQ-EMS-019)
4.3 PLANNING

4.3.1 Environmental Aspects and Impacts

An environmental aspect is defined as an element of a City activity, product, or service that has an interaction with the environment. Environmental impacts are changes to the environment, either positive or negative, that result from aspects. Therefore, aspects cause impacts, and impacts represent the effects of aspects. For example, a common City activity is driving vehicles. An aspect of driving vehicles is air emissions. The resulting environmental impact of that aspect is degradation of air quality. The City of Dallas EMS is organized and implemented around identified environmental aspects and impacts. The evaluation of environmental aspects and impacts is critical because all other EMS elements are related to this evaluation. A significant environmental aspect is an aspect with environmental impacts that are self-identified as a higher priority to the City of Dallas than lesser impacts.

The City determined its aspects by holding City wide activity workshops, which were available for participation by affected Departments. This was extremely beneficial since many Departments conduct the same or similar activities. These workshops had an added benefit of identifying best practices and sharing information among employees.

For those activities not covered during the City wide activity workshops, each individual Department developed its list of aspects by coordinating with those employees having specific responsibility for conducting the activity. This coordination was carried out through group meetings and flow charting of activities. For example, the Sanitation Department developed its activity and aspect list by reviewing job titles and descriptions.

Additionally, each Department reviewed each aspect under three separate operating conditions: normal, emergency, and abnormal. An example of an emergency condition is a spill that poses risk of adverse impact to human health or to the environment. An example of an abnormal condition is a piece of equipment malfunctioning. Because identifying all possible abnormal and emergency conditions could be an endless exercise, Departments were asked to consider their past experiences and/or catastrophic occurrences related to their operations. In other words, what expected emergency and/or abnormal condition would lead to a significant environmental impact? While fire and other natural disasters may be included as part of this review, these types of events are well outside the control of the City and are considered as separate events from controllable City operations.
In order to keep track of the thousands of aspects identified, the activities, aspects and impacts are entered into Intelex using common activity names and a standardized list of aspects and impacts.

After identification of aspects and impacts, the City needed a way to prioritize aspects and impacts and determine which aspects are significant. Prioritization was accomplished by scoring each aspect. Scores from one (low impact) to five (high impact) were assigned to each of seven criteria. The seven criteria are as follows:

- Is it regulated?
- Are there impacts to human health?
- Are there impacts to natural resources?
- Do negative impacts occur frequently?
- Are there impacts to budget?
- Is there media interest?
- Is there impact to the community and/or community interest?

The scores were totaled in Intelex, and aspects were sorted by total score in descending order. Each Department determined the score representing the significance threshold, i.e., the score above which aspects were considered significant. It is the significant aspects that Departments felt they could positively impact over the next three to five years. Some examples of the significant aspects across the City are as follows: energy usage, water usage, and waste generation.

The City maintains a documented procedure to identify the environmental aspects of its activities within the scope of the EMS in order to determine which aspects have the most significant impacts on the environment. The results of the aspects analysis are documented, and a formal review of significant aspects and impacts is conducted at least annually.

**Applicable Procedures**

- Environmental Aspects, Impacts & Significance Criteria Procedure (OEQ-EMS-001)

**Applicable Documentation**

- Aspects/Impacts in Intelex

**4.3.2 Legal and Other Requirements**

City operations are affected by a multitude of environmental regulatory requirements. Accordingly, local, state and federal environmental regulatory requirements are an important element of the City's EMS. The City also has
voluntary commitments to which it subscribes such as EPA and/or TCEQ environmental leadership programs and/or City administrative directives. These commitments are also vital considerations in an effective EMS. All of these legal and other requirements are taken into account in establishing, implementing, and maintaining the EMS. Additionally, when City facilities change or add operations, legal requirements are reviewed in advance to determine if there will be any additional environmental regulatory requirements for the facility.

It is important to note this legal review includes other regulations besides TCEQ and EPA rules, if these other regulations have an associated environmental requirement. However, the legal review is limited in scope to only those portions of the regulations that are applicable to the environmental aspects.

The City of Dallas has established a procedure to identify and document applicable legal requirements. In order to ensure that all applicable legal requirements were identified, the City first reviewed the activities conducted at the facility and then focused on the associated environmental aspects that may have legal requirements. OEQ provided a checklist for Departments to use as a guide which included most of the common legal requirements among City operations. Additionally, Departments used OEQ-conducted internal compliance assessments to assist with this effort. OEQ's Intranet site also has a variety of legal regulatory information posted to assist Departments with the multitude of environmental requirements. It is important to note that while OEQ is a resource to Departments on environmental legal requirements, each Department is responsible individually for compliance at their facilities.

Another source of environmental other requirements information is City Administrative Directives (ADs). Requirements in ADs which relate to environmental impacts within the EMS fenceline must be referenced in a Department's legal and other requirements list.

As another important component in an effective legal and other requirements program within the EMS, the City has subscribed to several environmental requirements monitoring services to keep abreast of changing environmental regulations. These services notify the City on a daily basis as to any changes in the state and/or federal regulations as well as issues of interest across the United States. The City also receives free environmental monitoring newsletters from various consultants and law firms. In addition, the City employs a service that monitors changes in TCEQ regulations and provides regular updates.

Legal and other requirements are entered into Intelex using standardized terminology in order to sort by facility and/or environmental regulations. Intelex also allows for general categorization of legal requirements to further assist in sorting, such as for “Right-to-Know” and “Waste Management” requirements.
Applicable Procedure

- Legal and Other Requirements Procedure (OEQ-EMS-002)
- Legal and Other Requirements Procedure Regulatory Matrix (OEQ-EMS-002.01)
- Management of Change Procedure (OEQ-EMS-020)

Applicable Documentation

- Legal and Other Requirements Matrix
- Legal listing in Intelex
- Various Administrative Directives

4.3.3 Objectives, Targets and Programs

Objectives and targets are the cornerstone of the City’s EMS and drive continual improvement. The objectives and targets are established and maintained within the EMS at relevant functions and levels of City of Dallas. The City of Dallas has established a procedure to document environmental objectives and targets that are consistent with the Environmental Policy.

When the City’s environmental objectives and targets are established or reviewed, the following factors are considered:

- Significant environmental aspects
- Legal and other requirements
- City of Dallas management objectives
- Technological options
- Financial and operational requirements
- Views of interested parties

The initial objective and target list was generated during several City wide EMR meetings. The objectives and targets were originally developed at three levels: City wide, multi-departmental, and individual department/facility. The objectives and targets were presented to the City Council Transportation and Environment Committee and the City Manager’s Office for review and comment. Department Directors were required to submit a letter to OEQ approving their respective objectives and targets. Objectives and targets have since been reduced to a single level: individual department/facility. Department Directors continue to notify OEQ annually of their objective and target commitments for the upcoming fiscal year. Objectives and targets may be added, deleted, or revised as necessary at any time.
City of Dallas' environmental objectives and targets are reviewed during annual EMS Senior Management Review, or as necessary when activities change.

In order to achieve the established objective and targets, responsibilities and resources must be designated, and timeframes must be set. The City of Dallas has established a procedure to establish and maintain Environmental Management Programs (EMPs) to accomplish their environmental objectives and targets. Each EMP states an overall objective and more specific targets, assigns responsibility, describes the planning steps, and assigns a target completion date.

Progress on objectives and targets and associated EMPs are tracked in Intelex as Intelex is the official repository for objectives and targets. In Intelex, the data related to objective and target progress and associated EMPs are captured as they are entered. (See the monitoring and measurement procedure for additional information.) Objective and target progress reports were originally prepared on forms provided by OEQ. However, in order to minimize duplication of data entry and maximize the use of Intelex, progress report data are now entered directly into Intelex.

**Applicable Procedure**

- Objectives, Targets and Environmental Management Programs Procedure (OEQ-EMS-003)

**Applicable Documentation**

- Initial Objectives and Targets List
- Intelex Objectives and Targets List
- Intelex Objectives and Targets Progress Reports

**4.4 IMPLEMENTATION AND OPERATION**

The City of Dallas uses the EMS to clarify environmental roles and responsibilities, conduct and track training and communication, and to control and organize its environmental actions and incident reactions.

The City of Dallas implements and maintains the EMS by:

1. Identifying the resources, roles, responsibilities, and authorities within the system
2. Training personnel on their roles in the EMS
3. Maintaining EMS communication
4. Maintaining EMS documentation
5. Maintaining EMS document control
6. Identifying and maintaining operational control
7. Specifying emergency preparedness and response procedures

4.4.1. EMS Roles and Responsibilities

Effective establishment, implementation, operation and maintenance of an EMS require commitment and dedication from every employee throughout each level of the organization. The City of Dallas EMS roles and responsibilities have been established, documented, and communicated and resources have been allocated to assure clear support and ownership of EMS elements, and to facilitate effective environmental management.

OEQ developed an example City wide roles and responsibilities chart, and then each individual Department tailored the chart to the specific management of the EMS within their organization. These charts were disseminated to affected personnel, and some Departments developed a list of the responsibilities with a brief description. This ensures that each job title or position identified on the table understands all of their responsibilities associated with the EMS.

Applicable Documentation

- OEQ Structure and Responsibility Table Example (OEQ-EMS-005)
- Individual Departmental Roles and Responsibility Chart

4.4.2. Competence, Training and Awareness

City of Dallas staff whose work activities have the potential to affect the environment must be: made aware of the EMS, properly qualified, and adequately trained. However, not all personnel are engaged in activities that have potentially significant environmental impacts. Therefore, City of Dallas has established two levels of training for the EMS:

1. All personnel are expected to have a general awareness of the EMS
2. Personnel engaged in activities that may have a potential significant environmental impact may require more job-specific training. They also must be competent to perform these tasks; competence is based on training, education, and/or experience.

Environmental training at the City of Dallas is assigned by job title based on specific job duties. These training classes are tracked by the Departments through their own programs and/or systems.

Training provided within the City has been divided into three main categories: EMS, regulatory, and environmental stewardship. OEQ has responsibility for providing training on a City wide basis and has developed a monthly training calendar which is disseminated to the EMRs. Each Departmental EMR may offer
training classes specifically tailored to their department's needs. OEQ Training notices are sent out City wide through the announcement system to let all City staff know of the environmental training classes being offered. Additionally, OEQ has frequently hosted monthly environmental brown bag seminars intended for environmental staff (as well as others who have interest) at the City. These brown bag seminars address both basic and advanced environmental topics and are typically provided by outside consultants and attorneys.

While each Department is responsible for providing regulatory training to its employees, another service provided by OEQ is individualized training programs. A City Department can request that OEQ develop, in coordination with the Department, a training program tailored to the Department's specific activities or needs. This is scheduled as OEQ staff is available.

In order to assist with training on the EMS, OEQ discusses the EMS at each new employee orientation session. Examples are provided of how the EMS results in improved environmental performance across the City, and the history of the EPA Consent Decree also is summarized.

The City of Dallas has established a procedure to describe its training program, identify the classes offered by OEQ with an associated description, and to require documentation of training requirements by job title. Additionally, all training programs offered by OEQ are listed and described on OEQ's Intranet site. Many of the listed OEQ training classes are linked to the associated training slides.

Another function of the EMS is to train contractors and verify their competency. Accordingly, the City of Dallas implemented the following measures for contractors:

- Contractor Environmental website
- Contractor Affidavit
- Contractor Environmental Best Management Practices (BMP) Document
- Contractor Video
- Specific Language related to EMS and regulatory issues within Bid Specifications

**Applicable Procedure**

- Training, Awareness and Competency Procedure (OEQ-EMS-006)
- EMS Training Matrix Example

**Applicable Documentation**

- Individual Departmental Training Matrix
4.4.3. Communication

As part of an effective EMS, the City of Dallas has established a procedure to allow for clear internal and external communication of its environmental program.

Internal communication requirements are focused on keeping personnel informed about the EMS, environmental aspects and impacts, and regulatory requirements. External communication requirements detail how to receive, document, and respond to external interested party questions related to the EMS. The City has a separate external communication tracking system through 311. This is for general environmental concerns for the public, not necessarily related to the EMS. Additionally, Departments may have their own tracking system for environmental questions such as noise and odor. Because of this, the City has decided the EMS External Communication Procedure to be solely focused on EMS related questions.

The City of Dallas implemented a variety of measures to keep personnel informed of the EMS including the following:

- EMS training classes
- OEQ Intranet and Internet sites
- Stall talk posters developed by some EMRs on a monthly basis
- Environmental posters throughout City buildings

The City has also developed an internal environmental awards program. Semiannually, an environmental award will be given to an individual and a team for commendable environmental initiatives. These awards will be determined based on award submissions that are judged by a team of environmental professionals from the City.

External questions concerning the EMS are handled by OEQ and EMRs. These requests are tracked through Intelex or some other suitable program such as Microsoft Access. Additionally, the City publishes an Annual Environmental Report for each fiscal year.

Applicable Procedure

- Internal Communication Procedure (OEQ-EMS-007)
- External Communication Procedure (OEQ-EMS-019)

Applicable Documentation

- Report of communications at annual Senior Management Review meeting
- Communication records in Intelex
4.4.4. Documentation

This EMS Guide exists to describe the core elements of the EMS and their interaction, the City’s EMS fenceline, and to detail the associated procedures and documentation. Documentation for the EMS includes, but is not limited to:

- Environmental Policy
- Environmental Objectives and Targets
- EMS Procedures
- Compliance related Procedures and Documents
- Administrative Directives (ADs)
- Records of EMS activities, required by ISO 14001:2004
- Documents or records that are necessary to ensure the effective planning, operation and control of processes related to the significant environmental aspects, such as operating manuals, equipment operating specifications, etc.

Applicable Documentation

- City of Dallas Guide to the EMS (i.e., this document)
- Environmental Policy
- Administrative Directive (AD) 2-49, Environmental Management System

4.4.5. Control of Documents

Control of EMS documents is a critical part of an effective EMS. It is important to organize environmental documents and verify that personnel are always using the correct version of documents. The City of Dallas has established a procedure to control EMS documents to ensure:

- They are approved for adequacy prior to issue.
- They are legible and readily identifiable.
- They are reviewed, revised as necessary, and re-approved for adequacy.
- Changes and current revision status of documents are identified.
- Current versions of relevant documents are available at points of use.
- Documents of external origin that are necessary for planning and operation of the EMS are identified and their distribution controlled.
- Obsolete documents are controlled to prevent their unintended use, and any retained obsolete documents are clearly identified as records, not current documents.
EMS documents may include a variety of legal environmental documents. EMS documents that are controlled documents are tracked in Intelex. EMS departments shall maintain a master list of controlled documents.

**Applicable Procedure**

- Documents and Records Management Procedure (OEQ-EMS-008)

**Applicable Documentation**

- Master List of Controlled Documents

### 4.4.6. Operational Control

In order to operate within the EMS, operations and activities that are associated with the identified significant environmental aspects or other important environmental aspects as determined by the Department, must be controlled.

The City of Dallas has established and implemented operational controls to address control of environmental aspects (at least those that are significant), and comply with applicable legal requirements. The operational controls include:

- Documented procedures
- Work Instructions with operating criteria to cover situations where their absence could lead to deviations from the Environmental Policy and/or legal requirements.
- A listing of operational Controls by facility, if applicable, and their inspection/maintenance schedule.
- Operating and/or manufacturers' directions on operating equipment.
- Standard Operating Guidelines (SOGs)
- Standard Operating Procedures (SOPs)

Suppliers and/or contractors that are determined to have a significant environmental impact are also informed of required operational controls to address site significant environmental aspects associated with their work activities.

**Applicable Procedures**

Procedure for Operational Controls (OEQ-EMS-009)

**Applicable Documentation**

Operational Controls table by Facility

Work Instructions
4.4.7. Emergency Preparedness and Response

Departments within the EMS fenceline identified potential accidents and emergencies associated with their operations in the course of creating their aspects lists. The City of Dallas EMS departments have procedures in place to identify the potential for accidents and emergency situations, to respond to them, and to prevent or mitigate their associated environmental impacts. The procedures are reviewed and revised at least annually, and whenever necessary after accidents or emergency situations. The procedures are tested regularly through table tops offered by the Departments and/or by the Office of Emergency Management (OEM). Various training classes are offered to employees who may be first responders or assist in the clean up of non-hazardous spills. Employees responding to hazardous spills, and all technical members of OEQ, are 40-hour Hazwoper trained.

Emergency response teams have been established at the City of Dallas to respond to events such as chemical spills and releases, and medical emergencies. If a spill is non-hazardous, OEQ responds to these spills with assistance from the Storm Water Management Section. The Dallas Fire Department has lead responsibility on responses to all incidents involving hazardous substances. The Fire Department may request incident response assistance from other departments.

Fire and natural disaster response are not included in this EMS procedure as they are handled by a separate function in the City of Dallas.

As spills have been a significant issue for the City in terms of appropriate clean up and costs, the City Manager's Office formed the Environmental Compliance Committee. This Committee has five members from various City Departments and meets monthly to review spills from across the City. If it is determined that the spill was preventable and an employee did not follow City procedures or caused a violation of State and/or Federal law, the Committee can recommend disciplinary action to the affected Department Director. The Committee tracks spill statistics in order to assist in reducing the number of spills.

Applicable Procedures

• Emergency Preparedness & Response Procedure (OEQ-EMS-010)
• AD 3-74, Spill Response Procedure
• AD 3-73, Environmental Management Program

Documents

• Spill reports
4.5 CHECKING

The City of Dallas will use its EMS to verify that its environmental performance is continually improving. It is a self-correcting system where gaps (nonconformances) are identified and then resolved, and records are kept of key environmental indicators as evidence that the system is working.

The City of Dallas checks and corrects its EMS using four components:

1. Monitoring and measuring key characteristics of its operation
2. Identifying nonconformance and corrective and preventive action
3. Maintaining EMS records
4. Performing EMS internal and external audits

4.5.1. Monitoring and Measurement

Monitoring and measuring environmental indicators allows tracking of EMS effectiveness and environmental progress. The City of Dallas has procedures in place to regularly monitor and measure key characteristics of its operations and activities that can have a significant impact on the environment. Information is recorded to track: performance, relevant operational controls, and progress of the environmental objectives and targets.

Monitoring and measurement data are collected for each applicable objective and target. These data are entered into Intelex for tracking.

Equipment used to monitor the key characteristics of operations and activities that can have a significant impact on the environment is regularly calibrated, if required, or verified and maintained. Calibration, verification and monitoring records for this equipment are retained according to the City of Dallas Calibration Procedure.

Applicable Procedures

- Legal & Other Requirements Procedure (OEQ-EMS-002)
- AD 3-73, Environmental Management Program
- Monitoring and Measurement Procedure (OEQ-EMS-011)
- Calibration Procedure (OEQ-EMS-015)

Applicable Documentation

- Legal & Other Requirements Matrix
• Monitoring and Measurement Data in the Intelex Objectives and Targets Module

4.5.2. Evaluation of Compliance

Environmental compliance is a key element of the City's EMS. “You get what you inspect, not what you expect” is the underlying theme to the City’s Evaluation of Compliance Program. The City of Dallas has developed and implemented a procedure to periodically evaluate compliance with applicable legal and other requirements. Records of the results of these evaluations are retained as a part of the EMS.

Each fiscal year, OEQ develops a compliance audit plan. The plan is approved by the Managing Director of OEQ. OEQ communicates applicable parts of the plan to the EMS departments via email and meetings, as needed.

In order to ensure facilities are audited periodically, OEQ developed a table which specifies the audit schedule on the following frequencies: annually (Consent Decree facilities), every one to two years (“A” facilities), every two to three years (“B” facilities), every four years (“C” facilities), and every five years (“D” facilities). The audit frequency in this schedule is based on the extent to which a facility is regulated. For example, if a facility is listed in Appendix D of the Consent Decree, the facility is audited annually. If a facility has a water quality discharge permit (TPDES permit), the facility will be audited every one to two years. If a facility is an office space only, it will be audited every five years. OEQ conducts these audits for the City of Dallas and maintains a team of experienced auditors. At the discretion of the audited department, these audits can be conducted under the provisions of the Texas Audit Privilege Act.

A sample of “Other” requirements (such as Administrative Directives) are audited along with legal requirements.

Compliance issues discovered during the audit are categorized and reported according to the City’s EMS nonconformance procedures.

Audits and associated “negative” findings (nonconformances and observations) are tracked in Intelex. Nonconformances identified during the audit can be closed only upon verification by the OEQ auditor assigned to do so. The completion of actions in response to nonconformances can be verified remotely (through Intelex) or on-site.

The scope of the “Evaluation of Compliance” audits includes, at minimum, a facility tour and a review of historical issues, especially nonconformances and observations identified during the last audit.
OEQ reports the “draft” audit results in writing via email at the end of each audit day. Final nonconformances and observations must be entered into Intelex within 10 business days of the audit closing meeting.

OEQ issues two types of reports as a result of internal compliance audits. For initial assessments, OEQ has three months to complete a detailed audit report and close the audit in Intelex. For periodic assessments, OEQ has one month to briefly report the results and close the audit in Intelex.

Applicable Procedures

- Legal & Other Requirements Procedure (OEQ-EMS-002)
- Evaluation of Compliance Procedure (OEQ-EMS-017)

Applicable Documentation

- Annual audit plan
- Legal & Other Requirements Matrix
- Facility-specific audit reports in Intelex
- Nonconformances in Intelex
- Texas Audit Privilege Act documentation

4.5.3. Nonconformity, Corrective Action and Preventive Action

A nonconformance is defined as non-fulfillment of a requirement either of the EMS or an associated environmental legal requirement. Identification and correction of nonconformances is essential to the maintenance and continual improvement of the EMS. The City of Dallas has developed a procedure to identify nonconformances, investigate root causes, take corrective actions and record and evaluate the effectiveness of corrective actions. In order for the City of Dallas EMS to be most effective, preventive action or “near misses” are also identified. Data to detect potential problems or nonconformances before they occur must be analyzed and corrected. Nonconformances are usually generated from an Audit, but may also be generated by an observation and report of an employee.

Nonconformances are issued as either major or minor. Major nonconformances indicate that the issue is the lack of implementation of a major portion of the ISO standard or a major component of a regulatory requirement. For example, no documentation of generator status under RCRA or no training on the EMS would be a major nonconformance. A minor nonconformance is the lack of implementation of a part of the ISO standard or a portion of a regulatory requirement.
requirement. For example, missing environmental aspects or lack of training for some employees under Right to Know would be a minor nonconformance. Observations, which are similar to warnings, may also be issued. Observations are simply a flag to the facility that there is a problem that needs to be corrected to avoid a nonconformance in the future.

In order to encourage innovation, commendables may be issued during the audit. A commendable is issued to recognize when an employee or facility has gone beyond the requirements of the EMS or legal requirements.

When a nonconformance is identified, it is entered into Intelex by the appropriate OEQ staff. The nonconformance is issued to the affected EMR for review. The EMR will verify the nonconformance, determine the root cause, and then develop a corrective action plan with assigned responsibilities and due dates. Once the corrective action plan is complete, the EMR will notify OEQ via Intelex. The designated OEQ staff will verify that the nonconformance has been corrected and will close it out in Intelex. Effectiveness of corrective action for an external audit nonconformance must be confirmed before the nonconformance can be closed in Intelex.

Observations and associated Preventive actions may also be reported and tracked in Intelex.

Applicable Procedure

- Nonconformance, Corrective and Preventive Action Procedure (OEQ-EMS-012)

Applicable Documentation

- Nonconformances in Intelex

4.5.4. Control of Records

Environmental records allow the City of Dallas to demonstrate environmental performance that is consistent with internal and external requirements. The City of Dallas has developed a procedure for the identification, maintenance and disposition of environmental records.

Environmental records are kept and are legible, identifiable and traceable to the activity, product or service involved. They are readily retrievable and protected against damage, deterioration, or loss. The record retention times are established and recorded. Environmental records include training records, audit results, and monitoring and measurement records, etc. It is important to note that environmental records covered under this procedure are only those records
deemed by the Department to be related to an environmental issue. Records of performance evaluations, emergency call logs, or purchasing logs are not considered part of the EMS.

**Applicable Procedure**

- Documents & Records Management Procedure (OEQ-EMS-008)

**Applicable Documents**

- Environmental Records

**4.5.5. Internal Audit**

To drive continual improvement, the City of Dallas EMS must be periodically reviewed. The City of Dallas has established a systematic and documented internal EMS audit procedure as a method of self-assessment. The intent of internal audits is to objectively obtain and evaluate findings to determine whether the EMS conforms to the established EMS audit criteria.

Each fiscal year, OEQ develops an annual audit plan. EMS audits are generally combined with the “Evaluation of Compliance” audits. The audit plan is approved by the Managing Director of OEQ.

The City of Dallas audit procedure dictates that an EMS internal audit will be conducted by OEQ for each Department at least once per year. Due to the large number of facilities in the EMS, this annual audit will not be at all City facilities, but at a selected number of facilities. The selection of facilities is driven by past history and environmental risk. Every EMS audit will include a review of historical findings, especially findings from the previous fiscal year’s audit. Work sites visits are conducted as well as it is important to interact with EMS staff out in the field.

EMS audit results are reported to the EMR in writing via email at the end of each audit day. At the completion of the EMS audit process, these daily emails are compiled into a draft list of findings and communicated to the EMR (or EMR’s designee) at a closing meeting. Nonconformances may be issued to the affected Department, or to OEQ, depending on the nature of the nonconformance. The final EMS audit report will be issued to the EMR. Nonconformances are reviewed during Senior Management Review.

**Applicable Procedure**

- EMS Audits Procedure (OEQ-EMS-013)
Applicable Documentation

- EMS Audit Checklist
- EMS Audit Reports
- Nonconformances in Intelex

### 4.6 Senior Management Review

Periodic management review of the City of Dallas EMS ensures its continued suitability, adequacy, and effectiveness. The City of Dallas has established a procedure for Senior Management Review. This review includes assessing opportunities for improvement and the need for change(s) to the EMS, including the Environmental Policy and objectives and targets. In order to assess performance of the EMS, Senior Management Reviews evaluate the results of EMS activities including results from internal audits and compliance reviews, communication from external parties, environmental performance, progress on environmental objectives and targets, status of corrective and preventive actions and follow-up from previous management reviews.

The Senior Management Reviews will be held at least annually. An annual EMS report will be prepared and reviewed during the meeting. Meeting minutes from the Senior Management Reviews document accomplishments, decisions, action items, team requests, status of previous action items, and future focus. The annual Senior Management Review of the EMS may be conducted jointly with management reviews of the City's other two management systems, i.e., Quality and Safety.

Applicable Procedure

- Senior Management Review Procedure (OEQ-EMS- 014)

Applicable Documentation

- Annual EMS Reports
- Management Review Meeting Minutes
## 5. Revision History

<table>
<thead>
<tr>
<th>Rev. No.</th>
<th>Date</th>
<th>Reason for Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11/20/07</td>
<td>Removal of Objectives and Targets from Action Plan; Addition of Revision History</td>
</tr>
<tr>
<td>2</td>
<td>06/09/08</td>
<td>Clarified in Sec. 4.2 that intimate knowledge of EMS and Policy are not expected from contractor employees. Better defined normal, abnormal, and emergency conditions in Sec. 4.3.1. Clarified in Sec. 4.3.2 that legal review includes rules other than EPA &amp; TCEQ and that a permitted facility's legal review should include only environmental rules. Clarified annual updates to OTs in Sec. 4.3.3. Clarified in Sec. 4.4.3 that the external communication procedure applies to EMS issues only. Clarified in Sec. 4.4.7 that fire and natural disaster response are not included herein. Reference to a City Manager’s Office meeting was deleted in Sec. 4.5.2. Clarified in Sec. 4.5.4 that only records related to environmental issues are to be controlled. Removed reference to semiannual management reviews in Sec. 4.6.</td>
</tr>
<tr>
<td>3</td>
<td>11/07/11</td>
<td>Sec. 1 – Added “City Hall” to list of EMS departments to match the BV certificate, clarified that SWM remains under PBW and Flood Control remains under STS, deleted reference to EPA as a City partner. Sec. 4 – Changed “ISOsoft” to “Intelex” throughout this section and the entire document. Sec. 4.3.2 – Clarified that “Other Requirements” include voluntary commitments, and legal requirements</td>
</tr>
</tbody>
</table>
are limited to those rules applicable to aspects.

Sec. 4.3.3 – Clarified that dept. directors commit to OTs annually, deleted reference to City wide and multi-department OTs, clarified that OT progress reports are now entered directly into Intelex, removed reference to Action Plan.

Sec. 4.4.2 – Removed reference to EMS video at new employee orientation.

Sec. 4.4.3 – Removed reference to EPA and TCEQ involvement in the awards program.

Sec. 4.4.5 – Added requirement to maintain a master list of controlled documents.

Sec. 4.4.6 – Added SOGs and SOPs to list of operational controls.

Sec 4.4.7 – Clarified that the emergency procedure applied only to depts. within the EMS fenceline, removed OEQ involvement in table tops, added OEM involvement in table tops, removed reference to ECC reviewing NOVs and NOEs.

Sec. 4.5.1 – Removed reference to City wide and multi-department OTs.

Sec. 4.5.2 – Entire section revised to accurately reflect current compliance internal audit procedures.

Sec. 4.5.3 – Changed references to “Lead Auditor” to “OEQ staff”.

Sec. 4.5.5 – Entire section revised to accurately reflect current EMS internal audit procedures.

Sec. 4.6 – Removed reference to CMO retreat, added description that annual review may be conducted jointly with the Quality and Safety mgt. systems, removed reference to monthly Environmental Accountability Report.