INCIDENT REPORTING SYSTEM

PROGRAM EVALUATION AND AUDIT

METROPOLITAN
C O U N C I L

December 10, 2014

INTRODUCTION

The incident reporting system (or "SOS" system, for spills, odor and safety) is used by Environmental Services (ES) to electronically report and track various incidents. The main purpose of the system is to centralize reporting of several incident types from many locations and enable management to track and analyze incident trends over time.

 Development of the system has been ongoing, but began as early as the year 2000 as a way to report odor complaints. Work began to expand the system to other incident types by 2009, beginning with spills and moving to safety incidents. Vehicle damage and property damage/theft incidents were added in 2014. Each incident type is assigned a "business owner" who is responsible for close out of each incident in their area.

Purpose

The purpose of the audit was to evaluate the following:

- The adequacy of access management of sensitive information
- The effectiveness of the incident reporting system in meeting the operational needs of Environmental Services and other departments that rely on the system

Scope

The scope of the audit was focused on the safety module of the incident reporting system, but other incident types were also included. The timeframe of the audit covers the development of the safety module from the end of 2009 through the present. Incidents from January-July of 2014 were analyzed in greater detail.

Methodology

The following methods of inquiry were used:

- Interviews with key staff, including project management, information services and system users
- Review of system documentation
- Review of access management practices

Assurances

This audit was conducted in accordance with the Institute of Internal Auditors' *International Standards for the Professional Practice of Internal Auditing* and the U. S. Government Accountability Office's *Government Auditing Standards.*

OBSERVATIONS

Access controls for incident details were not in place when the audit began.

Incident details were available to all employees through MetNet, the agency's intranet, without needing special access permissions. Employees involved in incidents were often identifiable from incident descriptions. Isolated examples of medical records were also found, the result of managers being unclear about what they were supposed to attach. Procedures to periodically review user rights currently do not exist.

The following actions were taken during the course of the audit:

- ES management consulted with Office of General Counsel personnel on compliance with data practices laws.
- Previous incidents were "scrubbed" of prior medical information.
- Access to safety incident details was restricted to managers only.
- Employee names were replaced with employee numbers, to help ensure privacy.
- Additional training was planned for what information should be entered in the system.

The incident reporting system does not adequately meet the information of process needs of Risk Management staff.

The First Report of Injury form (FROI) is used by Risk Management to report "all work-related injury claims…where the claimed disability exceeds three calendar days," known as "lost-time" claims. This form is required to be submitted to the MN Department of Labor within 14 days of when the employer was notified of the disability or the first day of lost work-time by the employee. Claims must also be paid or denied within this time frame or fines may be charged to the agency.

Prior to the incident reporting system, the MCES/RA Incident Notification Form was used to report various incidents, including those termed "safety" incidents. Since safety incidents could lead to lost-time claims, information Risk Management used to initiate a claim and submit the FROI electronically to the State was included in the MCES/RA Incident Notification Form. This information was removed from the ES incident reporting process when the safety module was developed in the electronic incident reporting system. This led to worker's compensation representatives spending more time tracking down what they need to file claims and increases the risk of fines for not meeting time requirements. The Risk Management department was consulted during the development of the safety module, but the effect on existing processes was not anticipated.

Incidents were missing documents and not closed as required.

From January to July of 2014, 86 incidents were found to be in new, open or in process status, referred to as "open incidents" for simplicity.[1] (Appendix 1) A majority of open incidents were safety related (58%). Safety incidents remained open in each month over the timeframe reviewed, indicating that open incidents were not simply recent incidents that did not have time to be closed. (Appendix 2) Investigation forms were also not consistently attached to safety incidents as required in ES procedures. 47 of 50 safety incidents did not have investigation forms according to reports. Though the actual amount of missing forms is likely lower due to the system not accurately reporting whether forms were attached, missing reports were found during the audit and were also cited during interviews. Business owners are supposed to ensure all forms are attached when closing the incident according to MCES Work Instruction 503.01.04 "Incident Reporting Roles and Responsibilities," revised 07/01/2014.

Several issues contributed to open safety incidents and missing forms. Responsibility for close-out of incidents that fell into more than one area, such as safety and property damage, was unclear and not documented. Secondly, procedures for the investigation process were unclear due to an error on the investigation form which some supervisors found confusing. The form incorrectly stated that employees should not be involved in the investigation, when in practice it is not required to exclude them in all cases. Thirdly, supervisors were not being held accountable to attach forms and complete follow-up actions as required to close-out an incident. An employee was recently assigned responsibility to follow-up on open incidents, which has helped increase accountability. Lastly, there was general confusion about the incident reporting process for safety incidents, which will be discussed in a separate point below.

Vehicle and damage/theft comprised 20% and 17% of open incidents, respectively. (Appendix 1) Business owners for each incident type did not have the correct functionality in the system to close-out incidents, which help explains why they were not closed. But the fact that nearly 10 incidents were in "open" status for each reveals that supervisors were not completing required action items as well.

Confusion exists as to who should be utilizing the incident reporting system.

In 2014 there were at least six instances when Metro Transit, Southwest Project Office or Regional Administration employees entered incidents into the SOS system. This is likely due to employees in other divisions being unsure about where to report, but there isn't a process for follow-up for these incidents so they remain open within the system. Without follow-up there is risk that the Council may not have timely notification of potential safety and liability issues.

Clarification for how to report incidents that occur at the Robert Street office, where employees from ES and other divisions have offices in the same building, could also be beneficial. An ES employee was found to have reported an incident for an employee from a different division through the system.

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[1] An incident is "New" after intake, "Open" after follow-up information has been saved, "In Process" after an action item has been saved, "Completed" after all action items have been recorded as complete, and "Closed" after the business owner has reviewed and closed the incident. Incidents in new, open or in process status are used as a proxy for incidents that have not received required follow-up actions.

Documentation of follow-up actions was not present for this incident. This demonstrated ambiguity for follow up responsibility when incidents are reported between employees from multiple divisions. Though this may be a rare occurrence, it is important that all incidents receive documented follow-up and closure to comply with Council policy.

Several issues were mentioned by users in interviews related to the incident reporting system not being "user-friendly."

A consistent theme from user interviews was dissatisfaction from having to print, fill out, and attach the accident investigation form to the system for safety incidents. Six employees mentioned this issue, while four of them specifically said this contributed to the system not being "user-friendly" or "accommodating." Four of these six employees were either Business Unit Managers or Assistant Business Unit Managers. This issue has been recognized by management, but prompt enhancements could not be made due to resource constraints.

Three individual interviews and an observation of a large meeting of ES managers indicated confusion about how to use the system, contributing to open incidents and lack of follow-up by managers. An employee responsible for ensuring managers follow-up on incidents as required reported some don't know what forms or attachments to fill out or are not aware action items are needed. An Assistant Business Unit Manager reported many "challenges," including not being sure what to attach, what to type, which fields were required, and how to follow-up on action items, leaving them with the question of "Am I doing this right?" Themes from the meeting of ES managers include discussion of missing paper work, clarifying the reporting process and clarifying responsibilities for close-out when an incident falls in to more than one category. Safety incidents were the primary incidents discussed.

Inaccurate reports also contributed to the feeling that the system was not "user-friendly." Three individual interviews revealed issues with the system reporting inaccurately reporting that forms had not been uploaded. Further investigation revealed that the reports used to identify accident investigation forms had been attached could not recognize when attachments were uploaded. Instead, users must manually check a button for the reports to identify completed forms. Inaccurate reports led to an employee following-up on what they thought were delinquent reports and confused supervisors who thought they had already uploaded them.

Lack of project management controls and dedicated resources contributed to user difficulties.

The project lacked formal project management controls and documents, including a formal business case, feasibility study, project plan and budget. Each phase of the project began prior to the project management office being established during the 4th quarter of 2012 which contributed to the lack of project controls.

The project took longer to complete than expected. The development of safety reporting began toward the end of 2009 and was completed by the middle of 2012. At that time the project went into an "enhancement" or "maintenance" phase, where improvements in functionality were prioritized by a steering committee. This was not seen as an extension of the original project by Information Services, but rather a series of small enhancements to an otherwise closed project. However, enhancements

were still occurring at the time of the audit in the third quarter of 2014, some with significant operational impact, nearly four years from the beginning of the project.

For safety incident reporting, the system was not just to centralize reporting, but was also a defined process with multiple compliance requirements across divisions. While prioritization of enhancements, deciding on a project scope and improving functionality over time is to be expected, the incremental approach may not have been appropriate for safety reporting, where changes in the process have significant operational impact and require retraining and changes to procedures. Adequate resources were not available for timely development and likely also contributed to the incremental approach taken to developing the safety reporting process. Concerns about a lack of Information Services resources was listed as a constraint in the project charters for each of three project phases and was mentioned as an issue by ES management.

CONCLUSIONS

The incident reporting system has centralized the reporting of spills, odor, safety, motor vehicle and damage/theft incidents while moving toward an electronic system. This information allows for trend analysis of incidents over time and will eventually serve to better demonstrate compliance with state and federal incident reporting requirements. It is an improvement over the old system of paper reports by giving management the ability to quickly track incident follow-up, which was not easily accomplished prior to the electronic system.

The application has not been quickly institutionalized. Training and procedures have been developed and provided by management, but supervisors and business owners reported a lack of understanding of procedures, most notably for safety incidents. Reporting of incident trends is available, but the ability for management to demonstrate compliance with ES requirements has not been fully developed. Lack of dedicated resources and project management controls contributed to the project taking longer than expected and delayed enhancements to improve system functionality. These issues, along with other small items, contributed to a consistent feeling among those interviewed that the system is not "user-friendly."

Greater resources to complete necessary enhancements in a timely manner, greater clarity of the reporting process for all user roles and incident types, greater accountability for use of the system and project management controls should help institutionalize the system and meet the business needs of management.

RECOMMENDATIONS

Program Evaluation and Audit recommendations are categorized according to the level of risk they pose for the Council. The categories are:

- **Essential** – Steps must be taken to avoid the emergence of critical risks to the Council or to add great value to the Council and its programs. Essential recommendations are tracked through the Audit Database and status is reported twice annually to the Council's Audit Committee.
- **Significant** – Adds value to programs or initiatives of the Council, but is not necessary to avoid major control risks or other critical risk exposures. Significant recommendations are also tracked with status reports to the Council's Audit Committee.
- **Considerations** – Recommendation would be beneficial, but may be subject to being set aside in favor of higher priority activities for the Council, or may require collaboration with another program area or division. Considerations are not tracked or reported. Their implementation is solely at the hands of management.
- **Verbal Recommendation** – An issue was found that bears mentioning, but is not sufficient to constitute a control risk or other repercussions to warrant inclusion in the written report. Verbal recommendations are documented in the file, but are not tracked or reported regularly.

1. (Essential) Implement planned management controls to address access to incidents and the entering of private data. In addition, develop written procedures for annual review of access permissions to better ensure the appropriate access.

Management Response: To facilitate capture of all incidents, the system allows anyone to initiate an incident into the system. This item has been addressed in May 2014 by restricting access to anyone with a business need (ES managers, Safety, Risk Management).

Written procedures for access updates and an annual review of access permissions will be developed with the Executive Sponsor, the Manager of Safety and the ES Applications Manager. This will include role review, review of data protection, and user security education.

Staff Responsible: Larry Rogacki

Timetable: Restricted access was completed May 26th, 2014. Written procedures for updates and an annual review will be completed by December 31, 2014.

2. (Essential) Clarify and identify accountability for the reporting, investigation and close-out processes for all users. Consider the following areas to clarify the processes:

- Formally document responsibilities for incidents that fall into more than one reporting area.
- Update the accident investigation process to reflect current practices.
- Clarify written procedures in plain language to help all users perform their responsibilities.

- Increase accountability for incident follow-up and incident close-out to demonstrate compliance with ES policy.
- Modify reporting to better track requirements have been met for each incident
- Perform additional training as needed.

Management Response: *Improved documentation on process, accountability, and reporting has been initiated. A business process flow chart with defined responsibilities was drafted in September 2014. Expanded reporting functionality has highlighted areas of missing information and improved accountability. A refresher training session for Business Owners is scheduled for early December.*

MCES Work Instruction 503.01.04 "Incident Reporting Roles and Responsibilities" will be revised and will include the items mentioned above.

Staff Responsible: *Larry Rogacki*

Timetable: *Work Instruction revision March 31, 2015*

3. (Essential) ES administration should work with Risk Management to ensure the incident reporting system addresses their information and process needs of Risk Management staff. Procedures for liability and workers compensation related incidents should be updated as necessary in coordination with Risk Management.

Management Response: *MCES has met with Risk in October 2014 and information requirements have been documented. Some of the requirements may need to be addressed outside of the Incident Reporting System. MCES will work with Risk and Information Services to determine whether a separate reporting process needs to be developed or if these can be incorporated into the existing system.*

Staff Responsible: *Larry Rogacki*

Timetable: *March 31, 2015*

4. (Significant) Utilize the project management office to establish controls and project documentation for future work on the incident reporting system.

Management Response: *A business analyst from the I.S. Project Management Office is assisting the Executive Sponsor and the Manager of Safety in writing a formal business case to identify and document unmet business requirements for the ES Incident Reporting System. The business case will be taken to the ES/IS Advisory Committee on Nov. 14, 2014 for the approval to proceed with the project. Upon approval a Project Manager (PM) will be assigned and will follow standard project management practices. The PM will work with the Executive Sponsor, the Manager of Safety, Risk Management and the ES Applications Manager to get necessary commitment of resources for the project. Monthly project status reports will be written and published in project server, as well as all project documentation.*

Staff Responsible: *Larry Rogacki (Executive Sponsor)*

Timetable: *Presentation of business case at November 14 ES/IS advisory meeting. All work on this project will be conducted through the PMO.*

5. (Significant) Develop controls to better ensure that the system is used only by the ES employees. If incidents are reported that involve employees from other divisions, procedures should be established to notify appropriate parties and close the incidents.

Management Response: *The ES Incident Reporting System will be restricted to only allow ES employees to report incidents. All others will be presented a message that this is a restricted application for ES staff only. It will also include a message about who to contact if they have a business reason that access should be expanded beyond the identified group.*

Staff Responsible: *Larry Rogacki*

Timetable: *December 1, 2014*

APPENDIX

Appendix 1: Incidents in "New," "Open," or "In Process" Status by Incident Type; 01/01/14 – 08/08/14

Incident Type	Total Incidents	Total in "New," "Open," or "In Process" Status	% in "New," "Open," or "In Process" Status	% of total incidents in "New," "Open," or "In Process" Status
Safety	59	50	85%	58%
Spills	25	3	12%	3%
Vehicle	18	17	94%	20%
Damage and Theft	17	15	88%	17%
Odors	4	1	25%	1%
Total	**123**	**86**	**70%**	100%

Appendix 2: Safety Incidents in "New," "Open," and "In Process" Status by Month; 01/01/14 – 08/08/14

Month	New	Open	In Process	Total
January	1	2	9	12
February	0	2	4	6
March	1	3	4	8
April	0	3	4	7
May	1	3	1	5
June	0	2	2	4
July	1	5	2	8
Total	**4**	**20**	**26**	**50**