

# TORONTO TRANSIT COMMISSION REPORT NO.

**MEETING DATE:** April 6, 2011

**SUBJECT:** 2008 APTA Rail Audit Updates

## **INFORMATION ITEM**

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### **RECOMMENDATION**

It is recommended that the Commission:

- i) Receive for information, updates to the 2008 APTA Rail Safety Audit plus Toronto Transit Commission management actions; and
- ii) Forward this update to the Minister of Transportation, Province of Ontario and the Clerk of the City of Toronto for information.

### **FUNDING**

Captured in Operating and Capital budgets.

### **BACKGROUND**

The American Public Transportation Association (APTA) conducts Rail Safety Audits for the Toronto Transit Commission every three years. The Rail Safety Audit contributes to the TTC's ability to maintain an effective self-regulatory safety program.

Updates of the progress that has been made to the TTC management Action Plans are reported to the Commission twice a year (April / May and October / November). This report includes updates of the management Action Plans for the 2008 APTA Rail Safety Audit conducted for the Toronto Transit Commission.

### **DISCUSSION**

This is the third update of progress that has been made to the TTC management Action Plans which addressed the audit findings, stated whether action would be taken on the recommendations, and brought forward an implementation schedule.

**JUSTIFICATION**

Commissioners have a duty under the Ontario Occupational Health and Safety Act, to take all reasonable care to ensure that TTC complies with the Act and the regulations. Similarly, the Commission has a Criminal Code duty of reasonable care for occupational and public safety. The APTA Rail Safety Audit and semi-annual updates of management Actions are provided to the Commission to help fulfil their duty of reasonable care.

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October 27, 2010  
13.79

Attachments: 2008 APTA Rail Audit Updates - March 2011



**Toronto Transit Commission: System Safety Program Corrective Action Plan (CAP) Status Report**  
 APTA Rail Safety Audit Program  
 Date of Audit: September 15-29, 2008

**NEEDS IMPROVEMENT: GENERAL**

APTA Checklist Item #	Recommendation (as stated in APTA report)	Corrective Action / Comment (Transit Agency)	To Be Completed On or Before	Assigned Responsibility	Element Status (to be completed by APTA)
9.3, 9.4	Implement a process wherein Internal Audit recommendations which are not part of a Corrective Action Plan are "bumped up" to the next level. (Supplemental Form page 1, #4	<p>The QA Program contains the provision to include a "threshold" level that initiates a corrective action request through the client department. This will be highlighted with client management at the yearly review in November for potential re-introduction for 2010 QA Checks.</p> <p>Oct 2009 – The QA Check program will rely on the safety commitment of management highlighted by the BST initiative to ensure that corrective actions are closed appropriately. Date revised from June 30, 2009 to Dec 31, 2009.</p> <p>March 2010 – Threshold/Critical levels have been incorporated into a number of QA Checks from Rail Transportation, Bus Maintenance, SEC, Track &amp; Structure. Further checks will be updated as this item has become a standard item for the yearly QA Check review with the customer. This item is now considered closed.</p>	Closed (As of March 2010 update)	Safety – QA&E	Open, review status
16.1	Assess all confined space and follow-up with appropriate labeling to comply with O. Reg. 632/05. (Supplemental Form page 1, #5	<p>The Track &amp; Structure Department, in combination with the Plant Department, have hired a third party consultant to identify all confined spaces within the Commission and provide entry plans for all different space types. As the consultant identifies all confined spaces, they will be labeled and secured as per the current legislation.</p> <p>Oct 2009, March 2010, Oct 2010 – no update received</p> <p>March 2011 - All confined spaces have been identified and set up in a database. Required signage for surface building confined spaces has been installed. Required signage installation for subway confined spaces is underway with completion by the end of May 2011. A Confined Space Entry Plan, Confined Space Entry Permit, Confined Space Rescue Procedures and Confined Space Coordination Document have been prepared.</p>	May. 31, 2011	Track & Structure	Open, review status



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**NEEDS IMPROVEMENT: SPECIAL CONSTABLE SERVICES**

APTA Checklist Item #	Recommendation (as stated in APTA report)	Corrective Action / Comment (Transit Agency)	To Be Completed On or Before	Assigned Responsibility	Element Status (to be completed by APTA)
24.1	Create a Security Sensitive Information (SSI) policy of desired controls for security critical hard copy and electronic based information to protect from unauthorized access / misuse. (Supplemental Form page 4, #10)	<p>Develop and implement a Security Sensitive Information (SSI) policy.</p> <p>March 2010 - Draft policy circulated to stakeholders for review. Date revised from Dec 31, 2009 to June 30, 2010</p> <p>October 2010 – Comments on second draft policy received from all internal stakeholders except Plant Department. Plant unable to prioritize review due to resource constraints. Date revised from June 30, 2010 to March 31, 2011.</p> <p>March 2011 – Acting General Manager – Operations approved Staff Summary Sheet initiation.</p>	May 31, 2011	Special Constable Services	Open, review status
24.1	Instill capability within ID system to ensure validity of TTC IDs, access control levels at critical points, and training of employees to approach / engage what may be “unauthorized” individuals. (Supplemental Form page 4, #11)	<p>An intrusion detection study by URS Consultants will be completed by the end of first quarter 2009.</p> <p>TTC Industrial Security Staff Steering Committee to review report and determine action plan including items to be included in the budget.</p> <p>March 2010 – 2010 Industrial Security capital project approved. Consultant to be hired in 2010 will commence preparation of facility security plans. This item is now considered closed as it has been approved as a capital project and will be tracked under that system.</p>	Closed (As of March 2010 update)	Special Constable Services	Open, review status



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**NEEDS IMPROVEMENT: SIGNALS / ELECTRICAL / COMMUNICATIONS**

APTA Checklist Item #	Recommendation (as stated in APTA report)	Corrective Action / Comment (Transit Agency)	To Be Completed On or Before	Assigned Responsibility	Element Status (to be completed by APTA)
8.4	Develop appropriate investigative reporting on two levels referenced in Safety Culture Task Force "7 Point Action Plan." (Supplemental Form page 7, #19)	This recommendation may have been included in error. A "standard" and "process" is rigorously adhered to called "Loc-In" and is used for all lost time injuries as well as electrical shock and critical injuries.	Rejected		Closed at agency's discretion
23.1	Instill greater communication to provide for more timely removal of fluorescent tubes or supply of additional storage boxes. (Supplemental Form page 7, #18)	SEC has its own contract for lamp recycling. More careful monitoring and more timely pickup will be done to prevent overflow. Will also provide additional storage boxes if necessary.	June 2009	SEC J. Brunaccioni	Closed – review for sustainability



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**NEEDS IMPROVEMENT: SAFETY**

APTA Checklist Item #	Recommendation (as stated in APTA report)	Corrective Action / Comment (Transit Agency)	To Be Completed On or Before	Assigned Responsibility	Element Status (to be completed by APTA)
9.1	<p>Include focus on security within internal audit program utilizing, as appropriate, the Security and Emergency Management Program Requirements for Special Constable Services as verification. (Supplemental Form page 11, #17)</p>	<p>Special Constable Services to meet with Safety and Internal Audit to determine feasibility of whether or not Safety or Internal Audit can include “security and emergency management program” elements in their audit program.</p> <p>May 25/09 – SCS met with Safety and Internal Audit to initiate discussions on implementation of a security emergency management program review process.</p> <p>August 7/09 – SCS met with Safety to plan implementation of a new TTC Security and Emergency Management Program checklist to conduct annual program reviews. SCS and Safety to jointly pilot the template by year end. Annual joint program reviews to commence in 2010.</p> <p>March 2010 – Review process piloted in February 2010. Improvements to process to be implemented with annual joint program reviews to commence in 2010. Date revised from December 31, 2009 to December 31, 2010</p> <p>October 2010 – SCS completed a TTC Internal Security and Emergency Management Program Review with representatives from Safety and Environment, Rail Transportation, Bus Transportation and Training Departments on Sept. 14, 15 and 21. Presentation to senior managers at Safety Review Meeting scheduled for Nov. 15. SCS plans to co-ordinate annual reviews.</p>	<p>Closed (As of October 2010 update)</p>	<p>Safety Special Constable Services</p>	<p>Open, review status</p>



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**NEEDS IMPROVEMENT: RAIL CARS & SHOPS**

APTA Checklist Item #	Recommendation (as stated in APTA report)	Corrective Action / Comment (Transit Agency)	To Be Completed On or Before	Assigned Responsibility	Element Status (to be completed by APTA)
11.3	Agree on acceptable manner in which work orders are to be completed, utilizing OEM recommendations when vehicles were delivered ... or justify practice if different from OEM. (Supplemental Form page 14, #15)	Each action item to be initialed when completed. Each inspection procedure and sign-off form is initially based on OEM recommendations and amended through a formal review process including Engineering and all other stake holders.	June 09 Completed	RC&S All CHs and Shops	Closed

**NEEDS IMPROVEMENT: CAPITAL ENGINEERING**

12.1	Prioritize and update design standards to ensure they reflect current requirements. (Supplemental Form page 16, #4)	Design Standards to be revised and updated in two phases – 50% by end of 2009 and remaining by end of 2010. March 2010 - 75% complete at end of 2009 October 2010 - 100% of Design Standards reviewed; 85% updated March 2011 - All E&C standards have been reviewed, and updated where required.	Closed (As of March 2011 update)	Engineering	Open, review status
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**NEEDS IMPROVEMENT: CONSTRUCTION**

24.8	Formalize when a contractor is required to supply a security plan and define scope of such a plan. (Supplemental Form page 17, #2)	Master Specifications will be updated to include the requirement for contractor's security plan submission, when working at or near critical assets or infrastructures. March 2010 – On-going. Date revised from End of 2009 to June 2010 October 2010 - New Master Specification developed, No. 01 56 43, "Construction Security" expected to be approved by October 31, 2010 Date revised from End of June 2010 to Oct 31 2010 March 2011 – New Master Specification (no. 01 56 43, "Construction Security" ) approved Nov 24,2010	Closed (As of March 2011 update)	Construction, in cooperation with Engineering and SCS	Open, review status
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**NEEDS IMPROVEMENT: PLANT MAINTENANCE**

APTA Checklist Item #	Recommendation (as stated in APTA report)	Corrective Action / Comment (Transit Agency)	To Be Completed On or Before	Assigned Responsibility	Element Status (to be completed by APTA)
12.1	Prioritize the review, update, and development of procedures based on risk; provide appropriate training to support application of procedures. (Supplemental Form page 26, #9)	<p>Development of Standard Operating Procedures has been prioritized based and are under development based on the priority.</p> <p>March 2010 - A documented management system for training workers on standard operating procedures is scheduled for development in 2009 – Date revised from Dec 2009 to Dec 2010</p> <p>October 2010 –Indicated that a completion date of Dec 2010 is still anticipated.</p> <p>March 2011 – Reported as closed Dec 31, 2010</p>	Closed (As of March 2011 update)	Plant Maintenance  Supervisor – Operations Support	Open, review status





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<b>SAMPLING OF EFFECTIVE PRACTICES / COMMENDATIONS OBSERVED</b>	
<b>Safety Element No.</b>	<b>DESCRIPTION</b>
7 Hazard Management	<ul style="list-style-type: none"> <li>- Comprehensive / documented training program that includes a hazard analysis review for visitors escorted into a substation (an <b>Industry Leading Effective Practice</b>)</li> <li>- Hazard Identification and Risk Assessments (HIRA) conducted for existing and new Plant Maintenance equipment as well as all Materials and Procurement locations</li> </ul>
8 Accident / Incident Reporting & Investigation	<ul style="list-style-type: none"> <li>- Second form created as part of &amp; Point Action Plan that requires documentation of contributing and/or root cause factors of occurrence</li> </ul>
9 Internal Safety Audits 11 Vehicle Maintenance	<ul style="list-style-type: none"> <li>- Rail Car Department conducts self audits monthly and quality assurance audits of work weekly. These audits are considered an <b>Industry Leading Effective Practice</b>.</li> </ul>
10 Facilities / Infrastructure	<ul style="list-style-type: none"> <li>- Although only responsible for bridges of the TTC right-of-way (ROW), Track &amp; Structures personnel visually inspect City of Toronto bridges that go over the TTC ROW.</li> <li>- Track &amp; Structures utilizes "MiniProf" to evaluate degrading of all running rail within the system, using information to develop "State of Good Repair" on existing rail and for creating a viable rail replacement plan.</li> <li>- Plant Maintenance conducts equipment condition assessments as a means to establish "state of good repair" for assets / systems.</li> <li>- A supervisory "Spot Check" document exists in Signals / Electrical / Communications (SEC) to validate "Personal Risk Assessment" sheets completed by work gangs / teams. This supervisory spot check document is an <b>Industry Leading Effective Practice</b>.</li> <li>- ISO certification maintained by SEC Relay Shop in 2005 has continued to date.</li> <li>- TTC personnel (Transportation Supervisors) trained through ASSIST to minimize suicides.</li> </ul>
11 Vehicle Maintenance	<ul style="list-style-type: none"> <li>- Work orders equipped with SOP describing work process and specific, specialized safety requirements as reminders.</li> <li>- A "hold" procedure identified in work order / pre-trip inspection that reflects safety-critical information and if a vehicle may or may not enter revenue service.</li> </ul>



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<b>Safety Element No.</b>	<b>DESCRIPTION</b>
13 Training / Certification	<ul style="list-style-type: none"> <li>- Training program established for individuals promoted to a position of Supervisor or Foreperson; E-Learning modules under development to identify safe behavior, communications, inspections, observations, and controls.</li> <li>- Process developed within training courses (DACUM) to establish core competencies, general knowledge, required skills, and tool use / behaviors to be successful</li> <li>- Simulators used as training aids and for review of Train Controller events within subway and SRT</li> </ul>
14 Emergency Response	<ul style="list-style-type: none"> <li>- <i>Disaster Recovery Plan</i> established by Information Technology based on a Corporate "Business Impact Assessment"</li> </ul>
16 Safety Data	<ul style="list-style-type: none"> <li>- Rail Car and Shops conducts ninety-day look back to determine if running repair is a repeater within last three months, applied across fleets.</li> </ul>
18 Configuration Management	<ul style="list-style-type: none"> <li>- Track &amp; Structures SOPs and System Safety Program Plan documents include a footer indicating "hard copy uncontrolled."</li> </ul>
19 Employee Safety	<ul style="list-style-type: none"> <li>- Personal Protective Equipment (PPE) standards developed for all SEC personnel, including for hand protection. TTC has invested in flame retardant fabric uniforms and rain gear for all electrical gangs.</li> <li>- A supervisory "Spot Check" document exists in Signals / Electrical / Communications (SEC) to validate "Personal Risk Assessment" sheets completed by work gangs / teams. This supervisory spot check document is an <b>Industry Leading Effective Practice</b>.</li> <li>- A ground was developed by Engineering for use by SEC that will not disintegrate upon being energized with a "fault load."</li> <li>- A "WRAP" program instituted to identify hazards specific to individual job tasks and establish controls before proceeding with work.</li> <li>- Insulating "slippers" are placed over third rail shoes when vehicles are over a pit to minimize head injuries.</li> <li>- Pre-employment physicals include a baseline hearing test.</li> </ul>
23 Procurement	<ul style="list-style-type: none"> <li>- Environmental emphasis is being administered at TTC, such as single ply white roofs to reflect heat and others planned for implementation by 2010.</li> </ul>
24 Security	<ul style="list-style-type: none"> <li>- An independent contractor to conduct "Threat / Vulnerability Assessment" of TTC, resulting in an established "Major Security Initiatives Inventory" matrix with prioritized recommendations and identified funding for development / implementation.</li> <li>- Specific job classifications identified which require a "Police Reference Check."</li> </ul>