TORONTO TRANSIT COMMISSION REPORT NO.

MEETING DATE: August 23, 2010

SUBJECT: RUSSELL HILL SUBWAY TRAIN ACCIDENT OF

AUGUST 11, 1995

DUE DILIGENCE CHECKLIST UPDATE

ACTION ITEM

RECOMMENDATION

It is recommended that the Commission:

- i) Receive for information the updated Due Diligence Checklist relating to the Russell Hill Subway Train Accident of August 11, 1995, which provides a status report on the progress toward closing the Coroner's Jury Recommendations and the TTC's Internal Team Recommendations.
- ii) Forward this report to the Chief Coroner of Ontario, the City of Toronto, and the Province of Ontario for information.

FUNDING

Already in place

BACKGROUND

Twenty previous Due Diligence Checklist updates were submitted to the Commission at its meetings of April 2, 1996, May 28, 1996, July 9, 1996, December 10, 1996, March 4, 1997, December 16, 1997, June 17, 1998, December 2, 1998, September 1, 1999, December 8, 1999, September 5, 2000, August 29, 2001, August 28, 2002, August 27, 2003, September 22, 2004, August 31, 2005 August 30, 2006, September 19, 2007, October 23, 2008 and October 26, 2009.

The following definitions have been provided to staff to clarify their meaning within the Due Diligence Checklists:

Closed

means that every aspect of the recommendation has been addressed and completed. There is documentation supporting the closure. For example: a signed-off written procedure is complete and currently being followed, the equipment is purchased and in use, or a memo is on file detailing the reason the TTC has non-concurred. The person responsible has signed-off on the Due Diligence Sign-off Report.

Closed by TTC

means that every possible step has been taken by the TTC, and the completion of the recommendation rests with an outside agency. This applies only to Coroner's Jury Recommendations. The person responsible has signed-off on the Due Diligence Sign-Off Report.

Open

indicates that the implementation of the recommendation is underway.

No recommendations have closed since the last update on August 26, 2009. The TTC has closed 234 of the 236 recommendations from both the Coroner's Jury Recommendations and the Internal Teams' Recommendations. The two open recommendations relate to the implementation of speed control, and are scheduled for completion in 2011. The following table provides a summary of the current status of recommendations.

CATEGORY	August 2	26, 2009	August 2	TOTAL	
	OPEN	CLOSED	OPEN	CLOSED	
Training	0	50	0	50	50
Track	0	31	0	31	31
Transit Control	0	39	0	39	39
Vehicles	0	32	0	32	32
Signals Design	1	31	1	31	32
Signals Maintenance	0	34	0	34	34
Coroner's Jury	1	17	1	17	18
TOTAL	2	234	2	234	236

The next updated Due Diligence Checklist, which is scheduled to be presented at the Commission Meeting in August 2011, will also be forwarded to the Office of the Chief Coroner of Ontario, to ensure that the Chief Coroner is apprised of our progress with respect to the resolution of all of the recommendations stemming from the Russell Hill Subway Train Accident.

The status of the recommendations are also summarized and reported in the TTC's

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monthly Chief General Manager's report. The TTC will continue to present publicly to the Commission each year in August, until closure of all recommendations, and will outline the status of all recommendations and any outstanding issues or deficiencies.

DISCUSSION

N/A

JUSTIFICATION

N/A

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July 30, 2010 13.8.8

Attachments: Due Diligence Checklist #21

Russell Hill Subway Train Accident of August 11, 1995

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Russell Hill Subway Train Accident of August 11, 1995

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Note: This updated checklist contains updates to recommendations that were open as of the last update in Due Diligence Checklist #19, dated August 27, 2008. Disposition of the recommendations closed on that date may be referenced in previous Due Diligence Checklists.

July 30, 2010

Russell Hill Subway Train Accident Due Diligence Checklist SUMMARY

Recommendations Open as of August 26, 2009

#	Category	Scheduled R: Revised	Responsibility	Summary of Recommendation	STATUS	
1	Jury #7	S: June 2010	K. Watling	7 (i) & (v) Speed Control	Reliability improvements are being made. Sheppard Line to be reactivated by September 2010. To be operational on YUS Line by	
'	July "1	R: July 2011	ix. wating	7 (i) a (v) oped control	December 2010 and BD line by July 2011.	
3	Sig D. #16	S: June 2010	K. Watling	Speed Control System	Reliability improvements are being made. Sheppard Line to be reactivated by September 2010. To be operational on YUS Line by	
3	31g D. #10	R: July 2011		Speed Control System	December 2010 and BD line by July 2011.	

August 13, 2010

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Russell Hill Subway Train Accident of August 11, 1995

Update re: Recommendations Open as of August 26, 2009

Revised August 13, 2010

Rec	ommendation	Scheduled Completion Date	Actual Completion Date	Responsibility	Budget	Notes
	Coroner's Jury Recommend	lations 7(i, v)				
(7)	We strongly recommend the TTC conduct a comprehensive review and re-examination of the existing signal system with comparison to other Transit Authorities in North America. Attention should be focused on a human factors analysis with particular attention to signal interpretation. Action must be taken on the following items where deemed appropriate to improve safety.	Report: S: Oct. 31/96	Report Presentation (Internal): Nov.22/96 (Commission): Dec.10/96	M. Reidak		All of the recommendations below were addressed through the comprehensive Strategic Signal Plan which was presented to the Commission on December 10, 1996.

Budget - Incorporated in existing Operating Budget unless otherwise noted (CP = Capital Program).

S: = Scheduled SR = Safety Report
R: = Revised Scheduled Date RT = Review Teams

Russell Hill Subway Train Accident of August 11, 1995

Update re: Recommendations Open as of August 26, 2009

Revised August 13, 2010

Recommendation	Scheduled Completion Date	Actual Completion Date	Responsibility	Budget	Notes
7 (i) the use of lunar white aspect in conjunction with red aspect. Red is to be seen as absolute.	Study:Oct 31/96 Work:Dec 31/98 R: Jan 1999	Subsection Closed May 31/99	M. Reidak	Study Budgeted in CP 2.4	Flashing Red Signals completed May 31, 1999.
	S: Dec 31/2001 R: Dec 31/2003 R: Dec 31/2005 R: Mar 31/2002 R: Dec 31/2006 R: Dec 31/2007 R: July 2008 R: Dec 2008 R: Dec 2009 R: June 2010 R: July 2011		K. Watling		Medium Term - A speed control system will eliminate all lunar white aspects. Scheduled for completion December 31, 2006. This will be done in accordance with the Strategic Signal Plan, which was presented on November 22, 1996. Update August 2005 – To be operational on Sheppard Line by 1st Quarter of 2006, and balance of subway by the end of 2007. Update August 2006 – To be operational on Sheppard Line by 1st Quarter of 2007, and balance of subway by mid 2008. Update August 2007 – To be operational on Sheppard Line by 2nd Quarter of 2008, and balance of subway in last Quarter 2008. Update August 2008 – To be operational on Sheppard Line by end of 2008, and balance of subway in 2nd Quarter 2009. Update August 2009 – Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2nd quarter 2010. Delays are attributable to software changes, track access for testing and system debugging (hardware & software), based on operating experience. Update August 2010 – Reliability improvements are being made. Sheppard Line to be reactivated by September 2010. To be operational on YUS Line by December 2010 and BD line by July 2011.

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Russell Hill Subway Train Accident of August 11, 1995

Update re: Recommendations Open as of August 26, 2009

Revised August 13, 2010

Oct. 31/96 Installation - S: Dec. 1/2001 R: Dec. 1/2003 R: Dec. 1/2005 R: Dec 31/2006 R: Dec 31/2007 R: July 2008 R: Loc 2008 R: June 2009 R: June 2010 R: June 2010 R: June 2010 R: July 2011 K. Watling K. Watling K. Watling K. Watling K. Watling Scheduled for December 31, 2006. Update August 2005 - To be operational on Sheppard Line by 1st Qua 2006, and balance of subway by the end of 2007. Update August 2006 - To be operational on Sheppard Line by 1st Qua 2007, and balance of subway by mid 2008. Update August 2007 - To be operational on Sheppard Line by 2st Qua 2008, and balance of subway in last Quarter 2008. Update August 2008 - To be operational on Sheppard Line by end of and balance of subway in 2nd Quarter 2009. Update August 2009 - Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2st Quarter 2010. Delays are attributable to software changes, track access for testing and sys debugging (hardware & software), based on operating experience. Update August 2010 - Reliability improvements are being made. Sheppard Line She	ecommendation	Scheduled Completion Date	Actual Completion Date	Responsibility	Budget	Notes
Budget - Incorporated in existing Operating Budget unless otherwise noted (CP = Capital Program).		Oct. 31/96 Installation - S: Dec. 1/2001 R: Dec. 1/2003 R: Dec. 1/2005 R: Dec 31/2007 R: July 2008 R: Dec 2008 R: June 2009 R: June 2010 R: July 2011	otherwise noted (Update August 2005 – To be operational on Sheppard Line by 1 st Quarter of 2006, and balance of subway by the end of 2007. Update August 2006 – To be operational on Sheppard Line by 1 st Quarter of 2007, and balance of subway by mid 2008. Update August 2007 – To be operational on Sheppard Line by 2 nd Quarter of 2008, and balance of subway in last Quarter 2008. Update August 2008 – To be operational on Sheppard Line by end of 2008 and balance of subway in 2nd Quarter 2009. Update August 2009 – Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2 nd quarter 2010. Delays are attributable to software changes, track access for testing and system debugging (hardware & software), based on operating experience. Update August 2010 – Reliability improvements are being made. Sheppard Line to be reactivated by September 2010. To be operational on YUS Line
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Update re: Recommendations Open as of August 26, 2009

Revised August 13, 2010

Reco	mmendation	Scheduled Completion Date	Actual Completion Date	Responsibility	Budget	Notes				
	Signals Design Recommendation 16									
(16)	Analyze signal design in older section of subway where signals are located within stations and determine if modifications are feasible without affecting system design adversely.	S: Jun. 30/97 R: Dec. 31/01 R: Dec. 31/05 R: Dec. 31/06 R: Dec. 31/07 R: July 2008 R: Dec. 2008 R: June 2009 R: June 2010 R: July 2011		K. Watling	CP 2.4	This is not cost effective in the short term with the existing signal system. This will be addressed when a speed control system is installed. A decision has been made to proceed with a speed control system for completion December 2006. Update August 2005 – To be operational on Sheppard Line by 1st Quarter of 2006, and balance of subway by the end of 2007. Update August 2006 – To be operational on Sheppard Line by 1st Quarter of 2007, and balance of subway by July 2008. Update August 2007 – To be operational on Sheppard Line by 2 nd Quarter of 2008, and balance of subway in last Quarter 2008. Update August 2008 – To be operational on Sheppard Line by end of 2008, and balance of subway in 2nd Quarter 2009. Update August 2009 – Operational on the Sheppard Line. To be operational on the YUS and BD lines by 2 nd quarter 2010. Delays are attributable to software changes, track access for testing and system debugging (hardware & software), based on operating experience. Update August 2010 – Reliability improvements are being made. Sheppard Line to be reactivated by September 2010. To be operational on YUS Line by December 2010 and BD line by July 2011.				

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