

CHECKLIST FOR REVIEWING OF SYSTEM SAFETY PROGRAM PLANS

Rail Fixed Guideway System: RTD Light Rail

Reviewer: Jantzen

Date: 11-7-07

659.x Ref.	CHECKLIST ITEM PUC - RULE #	SSPP Sect.	SSPP REQUIREMENTS Does the plan contain or provide for:	INCLUDED		PAGE or (SECTION)	COMMENTS
				Yes	No		
	7343(a) Introduction		The Introduction section of the SSPP shall contain the following:				
19(a)	7343 (a) (I)		A policy statement supporting the SSPP from the General Manager/Executive Director of the transit agency.	XX		Inside cover	
19(a)	7343 (a) (II)		A statement of the legal authority for the SSPP.	XX		(1.1)	
	7343 (a) (III)		A description of the purpose and scope of the SSPP.	XX		(1.2) (1.3)	
19(b)	7343 (a) (IV)		A clear definition of the goals and objectives of the SSPP.	XX		(1.4) (1.5)	
19(b)	7343 (a) (V)		A statement of the management responsibilities to ensure the goals and objectives of the SSPP are achieved.	XX		(1.6) (2.1.3) (3.3), (4.0)	
19(e)	7343 (a) (VI)		Specifications of Policies in place to support implementation of the SSPP and a description of the specific activities required to implement the system safety program including:	XX		(3.0) (4.0) (1.6)	
19(e)	7343 (a) (VI) (A)		Tasks to be performed by the rail transit safety function, by position and management accountability, specified in matrices and narrative format.	XX		(3.0)	table 3-2

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19(e)	7343 (a) (VI) (B)		Safety related tasks to be performed by other rail transit departments, by position and management accountability, specified in matrices and narrative format.	XX		(4.0)	Table 4-1
19(d)	7343 (a) (VII)		Identification of the process and procedures for controlling updates and modifications to the SSPP including specification of an annual assessment of whether the SSPP should be updated and a requirement of coordination with the Commission, including timeframes for submission, revision, and approval.	XX		(3.3.1)	
19(f)	7343 (a) (VIII)		A description of the process used by the transit agency to implement its hazard management program, including activities for:				
	7343 (a) (VIII) (A)		Hazard identification.	XX		(3.3.2)	
	7343 (a) (VIII) (B)		Hazard investigation, evaluation and analysis.	XX		(3.3.2) (3.3.3)	
	7343 (a) (VIII) (C)		Hazard control and elimination.	XX		(3.3.2) (3.3.4)	
	7343 (a) (VIII) (D)		Hazard tracking,	XX		(3.3.2) (3.3.4)	
	7343 (a) (VIII) (E)		Requirements for ongoing reporting to the oversight agency relating to hazard management activities and status.	XX		(3.3.2)	

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19(g)	7343 (a) (IX)		A description of the process used by the transit agency to ensure that safety concerns are addressed in modifications to existing systems, vehicles, and equipment, which do not require formal safety certification but which may have safety impacts.	XX		(2.1.7) (3.3.1) (3.3.2) (3.3.5) (3.3.13)	
	7343 (b) System Description		The system description section of the SSPP shall include the following:				
	7343 (b) (I)		A brief history of the system(s) operated by the transit agency.	XX		(2.1.1) (2.2.1)	
	7343 (b) (II)		The scope of service the transit agency provides.	XX		(2.1.2)	
19(c) 1&3	7343 (b) (III)		A description of the organizational structure of the transit agency, including organizational diagrams of the transit agency and the system safety unit that identify the lines of authority and communications used by the agency to manage safety issues and define responsibilities within the organization.	XX		(2.1.3)	Exhibit III
19(c) 2	7343 (b) (IV)		A description of how the safety function of the agency is integrated into the rest of the rail transit organization.	XX		(2.1.3)	
	7343 (b) (V)		A description of the physical plant including track, signal and communication system,	XX		(2.1.4)	

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			vehicle type and operating characteristics, station facilities and maintenance facilities.				
	7343 (b) (VI)		A description of the process to modify the system. The system modification review and approval process shall include the following:	XX		(2.1.7)	
	7343 (b) (VI) (A)		The identification of the unit or group of the transit agency responsible for ensuring that the hazards associated with system expansions or modifications are included in the transit agency's hazard resolution process.	XX		(2.1.7) (2.1.7.1) (1.8)	
	7343 (b) (VI) (B)		Participation of operating and safety department personnel in the design review process for new equipment and system expansions or modifications.	XX		(2.1.7.2)	
	7343 (b) (VI) (C)		A sign-off and certification process for verification of operational readiness of new equipment and system expansions or modifications prior to entering revenue service.	XX		(2.1.7.3) (3.3.13)	

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	7343 (b) (VI) (D)		Documentation of responsibility and authority for approval of modification exceptions to established design criteria for new equipment and system expansions.	XX		(2.1.7.4)	
	7343 (b) (VI) (E)		Procurement procedures that preclude the introduction into the rail fixed guideway system of unauthorized hazardous materials and supplies, as well as defective or deficient equipment.	XX		(2.1.7.5) (3.3.12) (3.3.13)	
19(h)	7343 (b) (VII)		A description of the safety certification process required by the transit agency to ensure that safety concerns and hazards are adequately addressed prior to the initiation of passenger operations for new starts projects, and subsequent major projects to extend, rehabilitate or modify an existing system, or to replace vehicles and equipment.	XX		(2.1.7.3) (3.3.13) (3.3.14)	
	7343 (c) System Safety Department Activities of the Transit Agency.		The system safety department activities of the transit agency section of the SSPP shall contain the following:				

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	7343 (c) (I)		A description of the responsibilities of those in charge of managing the system safety process within the transit agency.	XX		(3.1)	
31(a)	7343 (c) (II)		A description of the process used to identify and resolve hazards during operation including any hazards resulting from subsequent system extensions or modifications, operational changes or other changes within the rail transit environment.	XX		(2.1.7) (3.3.2) (3.3.5) (2.1.7.1) (2.1.7.2)	
31(a)	7343 (c) (III)		The hazard management process shall include the following:				
	7343 (c) (III) (A)		A description of the transit agency's approach to hazard management and the implementation of an integrated system-wide hazard resolution process.	XX		(3.3.2) (1.8)	
	7343 (c) (III) (B)		Specification of the sources of, and the mechanisms to support, the on-going identification of hazards.	XX		(1.8) (3.3.2) (3.3.5)	
	7343 (c) (III) (C)		A description of the process by which identified hazards will be evaluated and prioritized for elimination or control including hazards associated with operations, maintenance, and engineering.	XX		(1.8) (2.1.7) (3.3.2) (3.3.3)	

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	7343 (c) (III) (D)		A description of the process and mechanism used to track through resolution the identified hazard(s).	XX		(1.8) (3.3.2) (3.3.4)	
	7343 (c) (III) (E)		Definition of the minimum thresholds for the notification and reporting of hazard(s) to the Commission.	XX		(1.8) (3.3.2) (3.3.3)	
	7343 (c) (III) (F)		A description of the process by which the transit agency will provide on-going reporting of hazard resolution activities to the Commission.	XX		(1.8) (3.3.2) (3.3.3)	
19(j)	7343 (c) (IV)		A procedure for accident and hazard notification, reporting and investigation. This procedure shall comply with rules 7347 and 7348 and shall include the following:				
	7343 (c) (IV) (A)		Notification thresholds for internal and external organizations.	XX		(3.3.7) Exhibit V	
	7343 (c) (IV) (B)		The criteria for determining which accidents require investigation and who is going to conduct the investigation.	XX		(3.3.7) Exhibit V	
	7343 (c) (IV) (C)		A description of the process and procedures used for conducting accident investigations which include the reporting of findings to internal and external organizations, conclusions, development, implementation and tracking of corrective	XX		(3.3.7) Exhibit V	

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			actions that address investigation findings, and follow up to verify corrective action implementation.				
	7343 (c) (IV) (D)		Coordination with the Commission.	XX		(3.3.7) Exhibit V	
19(p)	7343 (c) (V)		An employee and contractor training and certification safety program including training and certification, drug and alcohol testing, as well as information about drug and alcohol abuse. The employee and contractor certification and training program shall include a description of the training material and documentation of training test scores and dates. The employee and contractor training and certification shall also include:	XX		(6.4) (6.7) (6.7.1) (6.8)	
	7343 (c) (V) (A)		Categories of safety-related work requiring training and certification.	XX		(6.7.1)	
	7343 (c) (V) (B)		A description of the training and certification program for employees and contractors in safety-related positions including a description of the training material used.	XX		(6.7.1)	

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	7343 (c) (V) (C)		Process used to maintain and access employee and contractor records including documentation of training test scores and dates, when applicable.	XX		(6.7)	
	7343 (c) (V) (D)		Process used to assess compliance with training and certification requirements.	XX		(6.7)	
19(n)	7343 (c) (VI)		A process for internal safety inspection of operation and maintenance facilities and equipment including audits and review of procedures that complies with rule 7349 and includes:				
	7343 (c) (VI) (A)		Identification of the facilities and equipment subject to regular safety-related inspection and testing.	XX		(2.1.6) (5.3) (6.0)	"all RTD departments"
	7343 (c) (VI) (B)		Techniques used to conduct inspections and testing.	XX		(2.1.6) (3.3.5) (5.3) (6.0)	
	7343 (c) (VI) (C)		Inspection schedules and procedures.	XX		(2.1.6) Table 2-1	
	7343 (c) (VI) (D)		Description of how results are entered into the hazard management process.	XX		(3.3.5)	
19(k)	7343 (c) (VII)		A description of the process used by the transit agency to develop an approved coordinated schedule for all emergency management program				

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			activities including:				
	7343 (c) (VII) (A)		Meetings with external agencies.	XX		(2.1.5.2) (3.3.15)	
	7343 (c) (VII) (B)		Emergency planning responsibilities and requirements.	XX		(3.3.15)	
	7343 (c) (VII) (C)		Process used to evaluate emergency preparedness, such as annual emergency field exercises.	XX		(3.3.15)	
	7343 (c) (VII) (D)		After action reports and implementation of findings.	XX		(3.3.15)	
	7343 (c) (VII) (E)		Revision and distribution of emergency response procedures.	XX		(3.3.15)	
	7343 (c) (VII) (F)		Familiarization training for public safety organizations.	XX		(3.3.15)	
	7343 (c) (VII) (G)		Employee training.	XX		(3.3.15)	
	7343 (c) (VII) (H)		An emergency plan that includes planning updates.	XX		(3.3.15) (2.1.5.2)	
19(s)	7343 (c) (VIII)		A description of the hazardous materials program including the process to ensure knowledge of and compliance with program requirements.	XX		(3.3.12)	
	7343 (c) (IX)		A contractor safety coordination program.	XX		(6.4)	
19(i)	7343 (c) (X)		A description of the process used to collect, maintain, analyze, and distribute safety data, to ensure that the safety function within the rail transit organization receives the necessary	XX		(3.3.11)	

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			information to support implementation of the system safety program.				
19(m)	7343 (c) (XI)		A description of the process used by the transit agency to develop, maintain, and ensure compliance with rules and procedures having a safety impact including:				
	7343 (c) (XI) (A)		Identification of operating and maintenance rules and procedures subject to review.	XX		(3.3.5) (3.3.9) (5.3) (6.2)	
	7343 (c) (XI) (B)		Techniques used to assess the implementation of operating and maintenance rules and procedures by employees, such as performance testing.	XX		(3.3.5) (6.2) (6.7)	
	7343 (c) (XI) (C)		Techniques used to assess the effectiveness of supervision relating to the implementation of operating and maintenance rules.	XX		(6.7)	
	7343 (c) (XI) (D)		A process for documenting results and incorporating them into the hazard management program.	XX		(3.3.11)	
19(o)	7343 (c) (XII)		A description of the maintenance audits and inspections program, including identification of the affected facilities and equipment, maintenance cycles, documentation required, and	XX		(3.3.11) (3.3.2) (3.3.5)	

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			the process for integrating identified problems into the hazard management process.				
19(q)	7343 (c) (XIII)		A description of the configuration management control process including:				
	7343 (c) (XIII) (A)		The authority to make configuration changes.	XX		(2.1.7)	
	7343 (c) (XIII) (B)		The process for making changes.	XX		(2.1.7)	
	7343 (c) (XIII) (C)		Assurances necessary for formally notifying all involved departments.	XX		(2.1.7)	
19(r)	7343 (c) (XIV)		A description of the safety program for employees and contractors that incorporates the applicable local, state and federal requirements including:				
	7343 (c) (XIV) (A)		Safety requirements that employees and contractors must follow when working on, or in close proximity to transit agency property.	XX		(6.3) (6.4) (6.7)	OSHA Contractor Employee
	7343 (c) (XIV) (B)		Processes for ensuring the employees and contractors know and follow the requirements.	XX		(6.4) (6.7)	
19(t)	7343 (c) (XV)		A description of the drug and alcohol program and the process used to ensure knowledge of and compliance with program requirements.	XX		(6.8)	
19(u)	7343 (c) (XVI)		A description of the measures,	XX		(6.9)	

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			control, and assurances in place to ensure that safety principles, requirements and representatives are included in the transit agency's procurement process.			(3.3.13)	
	7343 (d) Safety-related Activities of Other Departments of the Transit Agency.		The safety-related activities of other departments of the transit agency section of the SSPP shall contain the following:				
	7343 (d) (I)		A process of coordination of safety related tasks with other departments.	XX		(4.1)	
	7343 (d) (II)		A matrix of safety related tasks that shows department responsibility.	XX		(4.2)	
	7343 (e) System Safety Program Plan Implementation and Maintenance.		The system safety program plan implementation and maintenance section of the SSPP shall contain the following:				
	7343 (e) (I)		Program schedule for implementation and maintenance of the SSPP which shall contain the following:	XX		(5.0)	
	7343 (e) (I) (A)		Specified time intervals between SSPP reviews to determine whether or not the SSPP needs to be revised because of changed operating conditions and/or system	XX		(5.1)	

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			modifications.				
	7343 (e) (I) (B)		A detailed description of the SSPP revision process including the identification of the persons responsible for initiating, developing, and approving changes to the SSPP.	XX		(5.1) (5.2)	
	7343 (e) (I) (C)		A statement that the Commission will be notified of all changes to the SSPP and supplied with a copy of all revised pages.	XX		(5.2)	
19(I)	7343 (e) (II)		A description of the process and procedure for conducting planned and scheduled internal safety reviews to evaluate compliance with the SSPP and comply with rule 7349 including the review and modification of the SSPP based upon audit results. This procedure shall include the following:	XX		(5.3)	
	7343 (e) (II) (A)		Identification of departments and functions subject to review.	XX		(5.3)	"all RTD departments"
	7343 (e) (II) (B)		The transit agency's schedule for conducting internal reviews and the responsibility for scheduling such reviews.	XX		(5.3)	
	7343 (e) (II) (C)		A description of the process for conducting reviews,	XX		(5.3)	

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			including the development of written checklists and procedures and the issuing of findings.				
	7343 (e) (II) (D)		Written documentation of the process and procedures of issuing audit findings including an evaluation of the adequacy and effectiveness of the SSPP.	XX		(5.3)	
	7343 (e) (II) (E)		A process for the review of reporting requirements.	XX		(5.3)	
	7343 (e) (II) (F)		A process for tracing the status of implemented recommendations.	XX		(5.3)	
	7343 (e) (II) (G)		A requirement for an annual audit report, a copy of which must be submitted to the Commission by February 15 each year, which summarizes the results of the internal audits performed during the previous year, including a summary of required corrective actions taken, if any, and provision for follow up to ensure timely implementation and to determine effectiveness.	XX		(5.3)	
	7343 (e) (II) (H)		Coordination with the Commission.	XX		(5.1) (5.3)	
	7343 (f) System Safety		The system safety program plan verification section of the				

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	Program Plan Verification.		SSPP shall contain the following:				
	7343 (f) (I)		A process to ensure that the design and construction of new systems and/or extensions comply with the SSPP.	XX		(6.1)	
	7343 (f) (II)		A process to ensure compliance of existing operating systems with the SSPP.	XX		(6.2)	
	7343 (f) (III)		A process to ensure that safety audits and review of the SSPP are conducted including consideration of occupational safety and health, fire protection, safety training, and safety information and reporting.	XX		(5.3) (6.3) (6.4) (6.5) (6.6)	