

Southern California Regional Rail Authority (SCRRA)

Internal Audit Department



METROLINK®

Performance Audit: Central Maintenance Facility Operations

Audit Report No. 2020-03-IA

Date: December 30, 2019

Presented to: Board of Directors and
Audit and Finance Committee

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EXECUTIVE SUMMARY

The Internal Audit Department conducted a performance audit of the Central Maintenance Facility Operations. This audit was included in the FY 2020 *Annual Internal Audit Plan* based on the result of the FY 2020 risk assessment process and as a special request from the Chief Executive Officer. The FY 2020 *Annual Internal Audit Plan* was approved by the Board of Directors on June 28, 2019.

The objective of this audit was to evaluate compliance with Standard Operating Procedures and Practices established at the Central Maintenance Facility (CMF) to control and monitor pollution levels produced by operating activities at CMF. Elements of the Standard Operating Procedures and Practices established include the oversight and monitoring of:

- Head End Power (HEP) usage;
- Ground Power Stations usage;
- Train idling times;
- Maintenance activities conducted by the Contractor(s) at night and during the weekend;
- Sand deliveries;
- Maintenance of key equipment.

The audit period is from July 1, 2018 through November 8, 2019.

SUMMARY OF FINDINGS

- **Finding 1:**
Contractor monitoring needs improvement
- **Finding 2:**
Ground power stations missing equipment
- **Finding 3:**
Timeliness and documentation of inspections conducted on Sand Silo Filter Housing needs improvement
- **Finding 4:**
Lack of guidance and training to address the use of Sand Silo access hatch
- **Finding 5:**
Environmental stewardship requirements are not consistently followed
- **Finding 6:**
Various standard operating procedures are inconsistent with current practice or other internal documents

RECOMMENDATIONS

- 1. Management should obtain a receipt acknowledgement from the contractors (i.e. Bombardier and Amtrak) that they have and understand the most current *Good Neighbor Standards and Practices* and the *SCRRRA Fuel Conservation Program*. The contractors should be reminded of these requirements regularly and held contractually accountable.**
- 2. Procedures should be implemented to effectively monitor and document contractor compliance with the requirements under the Good Neighbor Standards and Practices and the Fuel Conservation Program. An example of a procedure would be to conduct and document periodic spot checks of train activity (i.e. idling engines, HEP usage, load testing). Non-compliance with the requirements should be immediately communicated to the contractor.**
- 3. The Facilities Maintenance Department should ensure that the order of missing Ground Power Stations parts is provided to Bombardier as soon as it is received.**
- 4. Management reviewing completed work orders should ensure that all documented evidence is included in the Net Facilities System. Employees not following procedure should be coached on the required procedures.**
- 5. Management should ensure that Sand Silo Inspections are conducted timely.**
- 6. Update the current SOP to establish guidelines as to the inspection procedures to be followed when the Sand Silo access hatch is opened. Ensure that SCRRRA personnel are trained with the new guidelines.**
- 7. Ensure all trash containers have lids as required under Good Neighbors Standards and Practices or update the Good Neighbors Standards and Practices to clarify that only large trash containers are required to be covered.**
- 8. Facility Management should conduct regular spot checks throughout the facility to ensure compliance with all requirements under the *Good Neighbors Standards and Practices* and the *Storm Water Pollution Prevention Plan*. Non-compliance should result in holding the contractor contractually accountable and performing necessary training.**
- 9. The Chief Operations Officer should attend the Monthly Maintenance Meetings with Bombardier Transit Corporation as required under the *Maintenance of Equipment Service Requirements 30-003*, or the SOP should be updated to assign a designee who can attend in place of the COO. In addition, all monthly meetings should be supported by sign in sheets as a best practice.**
- 10. The Maintenance of Equipment Service Requirements 30-003 should be reviewed and updated for accuracy and to add the appropriate title for the responsible staff based on the new organizational structure.**

- 11. Sand delivery times should be clarified to reflect the time frame (from beginning to end) as to when a sand delivery can begin and the latest it could end. Once updated, communication on delivery times should be clarified with the Community Relations Group.**
- 12. The Fuel Conservation Program (along with all SOPs) should be regularly reviewed to ensure consistency and that the practices are still applicable. The review dates, along with managers signatures, should be reflected on the document.**
- 13. The CMF diagram on the website should be updated to accurately reflect the load testing areas and to ensure the community is aware of the change.**

REVIEW OF REPORT

We discussed our findings and recommendations with SCRRA management. SCRRA management indicated agreement with the audit findings and recommendations and developed a corrective action plan to address the recommendations.

Internal Audit thanks the Operations, Government and Community Relations, and Marketing and Communications departments' management and staff for their assistance and cooperation during our audit. If you have any questions or comments, please contact Elisabeth Lazuardi, Senior Manager, Audit at (213) 452-0335 or LazuardiE@scrra.net.

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GLOSSARY of ACRONYMS

Acronyms	Definition
AESS	Automatic Engine Start/Stop
AQMD	Air Quality Management District
CMF	Central Maintenance Facility
COO	Chief Operations Officer
HEP	Head End Power
LAUS	Los Angeles Union Station
MOU	Memorandum of Understanding
SCRRA	Southern California Regional Rail Authority
SOP	Standard Operating Procedure

INTRODUCTION

The Internal Audit Department conducted a performance audit of the Central Maintenance Facility Operations. This audit was included in the FY 2020 *Annual Internal Audit Plan* based on the result of the FY 2020 risk assessment process and as a special request from the Chief Executive Officer. The FY 2020 *Annual Internal Audit Plan* was approved by the Board of Directors on June 28, 2019.

BACKGROUND

The Central Maintenance Facility (CMF) is located on the east bank of the Los Angeles River near the intersection of the 5 and 110 freeways and is approximately 2.5 miles from Los Angeles Union Station (LAUS). The CMF is traversed by several sets of tracks used for maneuvering trains and houses a maintenance building, tanker truck unloading area, pump house, underground storage tanks, train washing building, train fueling and sand loading area. Currently, the CMF is one of two service, inspection, and repair facilities in the system and the only facility equipped to handle heavy maintenance and repairs of the service fleet. As such, the CMF has served a critical role in enabling the Southern California Regional Rail Authority (SCRRA) to operate 365 days a year.

SCRRA has contracted and oversees the services provided by Bombardier Transit Corporation (Bombardier) and the National Railroad Passenger Corporation (Amtrak). Bombardier performs rolling stock and equipment maintenance as well as fueling and cleaning responsibilities (under a subcontract) of the train fleet. Amtrak operates trains and supplies trains with engineer crews. Both Contractors have a strong presence at the CMF and are a critical component of this audit.

While the CMF operations is within proximity to LAUS, it is also housed among a robust community composed of residents, businesses, schools and parks. Over the years, community members have raised concerns regarding the operations and its potential environmental impact to the area. As such, SCRRA has worked with the community to address these concerns by committing to make various modifications and enhancements to the facility. Some of those key modifications included the following commitments:

- Purchasing Tier 4 locomotives to reduce emissions;
- Using ground power stations at service and inspection areas to reduce idling noise;
- Reduce Head End Power (HEP) usage;
- The Establishment of a 24-hour hotline for the community to contact SCRRA community relations staff;
- Limited hours for load testing;
- Strict compliance with operating hours;

On April 11, 2019 SCRRA's Chief Executive Officer held a public meeting with community members and SCRRA Management. The meeting allowed community members to bring their

concerns directly to the leadership. The meeting resulted in SCRRA's development of an Action Plan (the Plan) to immediately begin addressing current community concerns as well as ensuring that past commitments were fulfilled.

The Plan, put into motion on May 9, 2019, included eleven (11) critical elements that, in part, addressed:

- Noise and emissions produced by activities at CMF;
- Efforts to modernize CMF;
- Accountability and oversight of activities conducted at CMF.

The eleven (11) elements of the Plan contained various due dates ranging from short-term, mid-term to long-term actions. One of the short-term actions was the completion of an internal audit of the CMF Operations. This report represents the outcome of that audit.

Additionally, we collaborated with management to develop a survey. The survey was distributed to the community which included residents of Elysian Valley and Cypress Park. There were 3,279 surveys distributed by SCRRA through the usage of various delivery methods (i.e. standard mail, email, and direct distribution to Dorris Place Elementary School).

The closing date of the survey was November 8, 2019. All survey responses (215 in total) were delivered directly to Internal Audit for processing. Based on the survey responses it was noted that the top three quality of life factors that were of importance to the community were 1.) Air Quality 2.) Water quality 3.) Noise levels. As such, survey responses were taken into consideration when ordering the audit findings in this report.

OBJECTIVES, SCOPE, AND METHODOLOGY

OBJECTIVE

The objective of this audit was to evaluate compliance with Standard Operating Procedures and Practices established at the Central Maintenance Facility (CMF) to control and monitor pollution levels produced by operating activities at CMF. Elements of the SOPs and Practices established include the oversight and monitoring of:

- Head End Power (HEP) usage;
- Ground Power Stations usage;
- Train idling times;
- Maintenance activities conducted by the Contractor(s) at night and during the weekend;
- Sand deliveries;
- Maintenance of key equipment.

The audit objective aligned with the CEO vision of modernizing SCRRA business practices. It also aligned with SCRRA Strategic Goal #7: To Improve Organizational Efficiency.

SCOPE

We audited the CMF Operations for the period of July 1, 2018 through November 8, 2019.

METHODOLOGY

The testing methodology utilized to achieve the audit objectives included:

- Review of recorded meetings with Community Members held on:
 - April 11, 2019
 - May 9, 2019
 - September 9, 2019
- Validated key SOPs and Practices, which include:
 - *Procedure 30-003: Equipment Service Requirements*
 - *Conformed Contract No. OP137-17: Equipment Maintenance Services Appendix A "Service and Support Facilities and Equipment"*
 - *Conformed Contract No. OP137-17: Equipment Maintenance Services Appendix N "SCRRA Fuel Conservation Program"*
 - *Sand Silo Operation and Maintenance Standard Operating Procedures*
 - *Storm Water Pollution Prevention Plan*
 - *Good Neighbor Standards & Practices*
 - *SOP Ground Power Utilization Practice*
- Validated key Community Communications related SOPs and Practices, which include:
 - Public Affairs On-Call Practices
 - Community Notice Practices
- Validated practices and supporting records maintained to ensure Contractor's awareness and compliance with SOPs.
- Performed site visits to observe the operations to determine compliance with policies and/or SOPs.
- Validated the adequacy of communications and follow up with Community Members;
- Reviewed the maintenance records for the Sand Silo towers;
- Interviewed and correspondence with key SCRRA Management and Contractors;
- Survey conducted with community members.

We conducted this performance audit in accordance with *generally accepted government auditing standards* and in conformance with the *International Standards for the Professional Practice of Internal Auditing* promulgated by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to obtain sufficient and appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

CONCLUSION

Based upon the results of the testing performed within the scope of the audit, the following areas need improvement:

- Contractor Monitoring;
- Ground power stations need missing equipment;
- Timeliness and documentation of inspections conducted on sand towers;
- Lack of guidance and training to address the use of Sand Silo access hatch;
- Environmental stewardship requirements are not consistently followed;
- Various standard operating procedures are inconsistent with current practice or other internal documents.

FINDINGS, RECOMMENDATIONS, AND MANAGEMENT RESPONSES

Finding 1:

Contractor monitoring needs improvement

Criteria

- *Good Neighbor Standards and Practices* reflect work restrictions that are to occur, including the following:
 - Locomotives should not be left to idle in the yard except when necessary for service or repair;
 - Load testing should be done in designated areas between the hours of 10 AM & 6PM weekdays, and 10 AM & 1PM on weekends.
- The *SCRRRA Fuel Conservation Program* includes operating requirements regarding the use of Head-End Power as follows:
 - The main and HEP engines will start no earlier than 45 minutes before the train departure time;
 - HEP engines run for no reason between the time passengers get off the train at Los Angeles Union Station and the train arrives at the CMF.

Condition

Locomotive Idling (Bombardier) – There was no process in place to effectively monitor idling locomotives.

On October 3, 2019, we observed trains idling on the yard between 10 AM -12 PM. During this observation, locomotive 892 was idling and flagged (indicating that the locomotive is being serviced), however, there was nobody on or near servicing the train. The auditor waited about 10 minutes for someone to return to work on the train, but nobody returned. Attempts to find the contracted employee tagged to be working on the train were unsuccessful. A manager indicated that possibly the contracted employee was at lunch.

Utilization of Head-End Power (Amtrak) – The auditors made five trips taking the head-in train from LAUS into the CMF. The dates the testing was conducted were as follows:

Date	Approximate Departure Time	HEP On/Off
September 19, 2019	8:45 AM	On
September 24, 2019	8:30 AM	On
September 26, 2019	8:30 AM	Off
October 3, 2019	9:15 AM	On
October 15, 2019	7:15 AM	Off

On three of the five days tested, the HEP was running. According to the *Fuel Conservation Program* the HEP must be off on the trip from LAUS into the CMF.

Also, there is no logging of HEP engine usage for management to review for contractor compliance. In addition, we were unable to obtain support that Amtrak staff (the train

operators) were provided with a copy of the *Fuel Conservation Program* during the audit period (July 1, 2018 – October 31, 2019).

Load Testing (Bombardier) – During site visit observations, we noted that load testing was performed in areas designated by management.

However, there was no effective process in place to monitor contractor compliance with the *Good Neighbor Standards and Practices* for Load Testing. Currently, there is no system that logs train activity nor are there any manual spot checks documented that support train activity oversight.

Cause

No process in place to conduct and document contractor compliance with SOPs currently in place for idling, load testing and HEP requirements.

Effect

Ineffective processes in place to conduct contractor oversight can result in commitments made to the community members being left unfulfilled.

Recommendations

- 1. Management should obtain a receipt acknowledgement from the contractors (i.e. Bombardier and Amtrak) that they have and understand the most current *Good Neighbor Standards and Practices* and the *SCRRA Fuel Conservation Program*. The contractors should be reminded of these requirements regularly and held contractually accountable.**
- 2. Procedures should be implemented to effectively monitor and document contractor compliance with the requirements under the *Good Neighbor Standards and Practices* and the *Fuel Conservation Program*. An example of a procedure would be to conduct and document periodic spot checks of train activity (i.e. idling engines, HEP usage, load testing). Non-compliance with the requirements should be immediately communicated to the contractor.**

Management Response

Management concurs.

Corrective Action Plan

Corrective action 1

- Management will provide to Contractors most current *Good Neighbor Standards and Practices* and *SCRRA Fuel Conservation Program* with their acknowledgement of receipt.

Corrective action 2

- The Operations contractor manager will establish compliance checks with trains crews at LAUS

- The rolling stock contractor will document HEP status for all applicable train sets where HEP should be off when equipment arrives to the CMF and dropped off by the Operations contractor.
- The rolling stock contractor will log emergency load testing to be performed outside of the loco shop area. Once permanent sound monitors are installed at the CMF, the system will be configured to sound out automatic alerts after certain decibels are reached to be notified of excessive noise and investigate appropriately.
- Management will establish compliance checks on rolling stock contractor for load testing on special trains based on their schedule as well as random compliance checks on equipment idling in the yard and ground power station usage.

Target Implementation Dates

December 31, 2019

Responsible for Implementation

- Carlos Perez - Asst Director, Maintenance of Equipment and Luis Carrasquero – Interim Director, Maintenance of Equipment for Bombardier
- Tonyette Moore - Operations Administrator

Accountable for Implementation

Rod Bailey - Deputy Chief Operating Officer

Eric Hosey - Chief Operating Officer

Finding 2:

Ground power stations missing equipment

Criteria

Good Neighbor Standards and Practices states that “Trains should be hooked up to ground power whenever possible.”

Condition

There is a total of 19 ground power units at the CMF, there are 4 in the Service and Inspection area and 15 in the Storage area.

During observation, the auditor inquired about the required equipment, such as cabling needed to utilize the units, and if there were all in working condition. He was advised that a recent inventory of the cables conducted by the contractor indicated that there were 26 additional jumper cables out of a total of 50 needed to optimize the use of the Ground Power Stations. Consequently, staff placed an order for the equipment on September 25, 2019; the inventory is scheduled to arrive between November 6, 2019 – December 4, 2019.

Cause

Historically, there was no requirement in place to perform regular inventories on ground power equipment.

Effect

If the ground power units are not operating because of missing equipment, the operations risk non-compliance with the operating procedures and compromising the commitments made with the community.

Recommendations

- 3. The Facilities Maintenance Department should ensure that the order of missing Ground Power Stations parts is provided to Bombardier as soon as it is received.**

Management Response

Management concurs with comments

Corrective Action Plan

Corrective action 3

- The required equipment is on order and will be provided to Bombardier upon receipt.
- The Good Neighbor Standard and Practices update will be drafted to further clarify the equipment needed to be connected to ground power, when equipment should be shut off and turned on prior to service to match current practices.
- Material Inventory will ensure that there is a 10% reserve inventory maintained on Ground Power station cables according to inventory needed provided by the Contractor.

Target Implementation Dates

- December 31, 2019 for providing contractor with all cables needed for ground power station utilization.
- March 31, 2020 for obtaining 10% reserve inventory for all ground power station cables.

Responsible for Implementation

- Carlos Perez - Asst Director, Maintenance of Equipment and Luis Carrasquero - Interim Director, Maintenance of Equipment for Bombardier
- Matthew Schupbach - Materials Management & Warehousing

Accountable for Implementation

Rod Bailey - Deputy Chief Operating Officer

Eric Hosey - Chief Operating Officer

Todd McIntyre - Chief Strategy Officer

Finding 3:

Timeliness and documentation of inspections conducted on Sand Silo Filter Housing needs improvement.

Criteria

- Facilities and Maintenance - *Sand Silo Operation and Maintenance SOP* indicates that there shall be “Weekly Inspections and Preventative Maintenance” performed on the sand tower equipment.
- Government Accountability Office – *Federal Internal Controls Standards 10.03* states: “Management designs appropriate types of control activities for the entity’s internal control system. Control activities help management fulfill responsibilities and address identified risk responses in the internal control system.”

Condition

Inspections of Filter Housing – The SOP requires that a Preventive Maintenance form be filled out in the *Net Facilities System* (Asset Management Software used to track Asset Condition) and that documented evidence be provided for the following: a.) The exact gauge reading b.) Filter Housing condition and c.) Dust seal joints condition.

We validated the documentation support and noted exceptions in four (4) out of five (5) tests:

Work Order No.	Work Order Date	Testing Result
12043037	1/08/2019	Compliant
12439782	3/26/2019	No documented evidence available for pressure gauge reading, Filter Housing Condition or Dust Seal Joint condition
12623744	4/30/2019	No documented evidence available for Dust Seal Joint condition
12735156	5/21/2019	No documented evidence available for Dust Seal Joint condition
12915187	6/25/2019	No documented evidence available for Dust Seal Joint condition

The completed work orders were approved by a manager with no supporting documentation in the *Net Facility System*. A new procedure established on September 23, 2019 requires picture evidence and a narrative description of the testing conducted on the results of the a.) The exact gauge reading b.) Filter Housing condition and c.) Dust seal joints condition.

We validated Work Order 13404469 conducted on September 26, 2019, to ensure the new requirements were being followed, noting that the Filter Housing condition and the Dust Seal Joint condition were not described in the work order as required under the new procedure. Consequently, the Senior Manager of Facilities provided additional coaching to the employee that did not follow the updated process. No additional issues were noted subsequent to that date.

Inspection Frequency – We validated the frequency of inspections/preventive maintenance performed on the Sand Silo equipment. The SOP requires that inspections occur on a weekly basis.

Upon review of the inspection frequency on thirty-one (31) out of forty-three (43) weeks between January 1, 2019 – October 31, 2019, two (2) exceptions were noted:

Inspection Date	Prior Inspection Date	Number of Days
5/28/2019	5/16/2019	12
8/12/2019	8/2/2019	10

Cause

Oversight over the SOP requirements has not been stringent.

Effect

Delayed inspections of Sand Silo Equipment could result in malfunctioning equipment and the inability to comply with commitments made with the community. In addition, insufficient documentation of inspections performed makes it difficult, if not impossible, to provide evidence that the inspections were completed properly.

Recommendations

- 4. Management reviewing completed work orders should ensure that all documented evidence is included in the Net Facilities System. Employees not following procedure should be coached on the required procedures.**
- 5. Management should ensure that Sand Silo Inspections are conducted timely.**

Management Response

Management concurs.

Corrective Action Plan

Corrective action 4 and 5

- The recommendations outlined have been implemented. Inspections are completed weekly. An email notification is provided to Management following completion of each inspection.

Target Implementation Dates

Completed Oct 1st, 2019 (Pending Internal Audit Verification)

Responsible for Implementation

Tracy Berge – Senior Manager, Facilities & Fleet Maintenance
Eric Poghosyan - Senior Manager, Facilities & Fleet Maintenance

Accountable for Implementation

Rod Bailey - Deputy Chief Operating Officer
Eric Hosey - Chief Operating Officer

Finding 4:

Lack of guidance and training to address the use of Sand Silo access hatch

Criteria

Government Accountability Office – *Federal Internal Controls Standards 10.03* states: “Management designs appropriate types of control activities for the entity’s internal control system. Control activities help management fulfill responsibilities and address identified risk responses in the internal control system.”

Condition

Terminated Sand Delivery - On September 28, 2019 we observed the sand delivery. The delivery to the West Silo was terminated because there was a minor discharge of dust coming from the top of the tower. The discharge was caused by a damaged seal on the access hatch. Based on our review of sand delivery records, it was noted that this was the second terminated delivery that occurred during the audit period (a terminated delivery was also noted on November 3, 2018).

Cause

Guidelines were not in place addressing appropriate inspection procedures to be taken subsequent to the use of the access hatch.

Effect

A faulty Access Hatch seal could result in a terminated sand delivery, as was the case to the West Silo on September 28, 2019. A terminated delivery could result in unnecessary charges (i.e. delivery charges and restocking fees) and an inadequate supply of sand for operating needs.

Recommendations

- 6. Update the current SOP to establish guidelines as to the inspection procedures to be followed when the Sand Silo access hatch is opened. Ensure that SCRRA personnel are trained with the new guidelines.**

Management Response

Management agrees with this recommendation.

Corrective Action Plan

Corrective action 6

- SOP for Sand delivery was revised on September 30, 2019 to address the use of Access Hatch. Maintenance staff were trained on the procedures including inspection of the seal following the opening of the access hatch if the hatch is opened.

Target Implementation Dates

Completed on October 1, 2019 (pending Internal Audit verification)

Responsible for Implementation

Tracy Berge – Senior Manager, Facilities & Fleet Maintenance
Eric Poghosyan - Senior Manager, Facilities & Fleet Maintenance

Accountable for Implementation

Rod Bailey - Deputy Chief Operating Officer
Eric Hosey - Chief Operating Officer

Finding 5:

Environmental stewardship requirements are not consistently followed

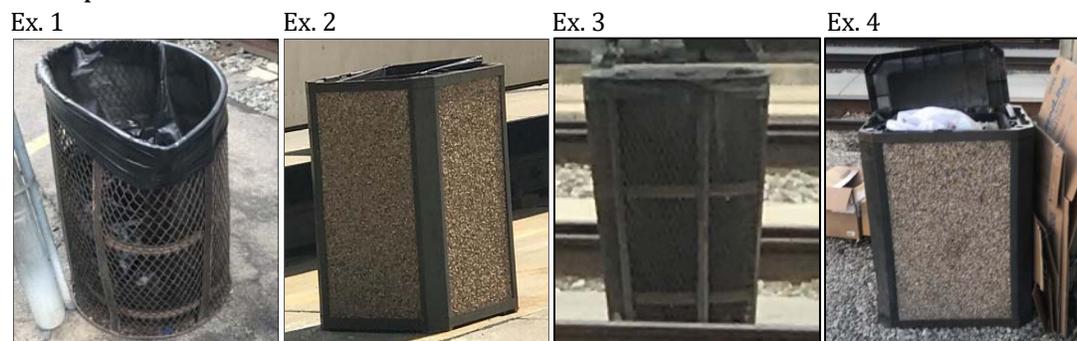
Criteria

- The *Good Neighbor Standards and Practices* states “All trash and recyclable containers must be covered and not allowed to overflow.”
- *Storm Water Pollution Prevention Plan*:
 - Section 4.1.1 Good Housekeeping indicates “The contract between SCRRA and the Facility operator requires that operations at the Facility be conducted using safe work practices and good housekeeping.”
 - Section 4.1.5 Employee Training indicates “Contract employees have been trained in the importance of spill response and good housekeeping in order to prevent discharges of pollutants to the storm drain.”

Condition

During site visits conducted there were instances where the environmental stewardship requirements reflected under the *Good Neighbors Standards and Practices* and the *Storm Water Pollution Prevention Plan* were not being followed. Some of the issues are described below:

Trash containers not covered – There are multiple trash containers located in the service area that are used by contracted personnel when servicing the trains. While we noted that all trash containers were emptied on a regular basis, we did observe multiple trash containers that did not have lids as required under the *Good Neighbor Standards and Practices*. Some examples include:



Ex. 5



Trash in Service Area – We also noted loose trash such as plastic bottles, bottle caps, food containers, paper napkins, plastic gloves, crushed cans, etc. The trash was located between tracks, on ballast and on concrete areas at the facility. See examples:

Ex. 6 - Wrapper



Ex. 7 - Glove



Ex. 8 – Soda Bottle



Ex. 9 – Paper towel



Ex. 10 – Food Container



Ex. 11 – Crushed Soda Can



Ex. 12 Paper Towel



Ex. 13 Bottle Cap/Misc.



Ex. 14 – Water Bottle



Ex. 15 – Glove



Ex. 16 – Water Bottle



Ex. 17 – Loose Paper



Loose Drainage Connection – During operating hours, while trains were being serviced on October 15, 2019, we noted a waste removal hose from a passenger car that was not properly connected to the sewage receptacle. Despite the lack of a secured connection, the train continued to be serviced. Based on discussion with management on October 31, 2019, while a damaged hose was used in Exhibit 16 below, **no contamination occurred since the secondary container catches any overflow from the hose**. Nonetheless, management agreed to the importance of securing the connection between the hose and the sewage receptacle.



Ex. 16- Improper Connection



Ex. 17 – Proper Elbow Connection

Cause

Oversight procedures are not in place by SCRRRA personnel to ensure that contractors are following standard operating practices related to stewardship requirements.

Effect

Non-compliance to proper waste protocol could result in pollution to the environment (soil, water, air) as well as potential fines and penalties from environmental regulatory agencies.

Recommendations

7. **Ensure all trash containers have lids as required under Good Neighbors Standards and Practices or update the Good Neighbors Standards and Practices to clarify that only large trash containers are required to be covered.**
8. **Facility Management should conduct regular spot checks throughout the facility to ensure compliance with all requirements under the *Good Neighbors Standards and Practices* and the *Storm Water Pollution Prevention Plan*. Non-compliance should result in holding the contractor contractually accountable and performing necessary training.**

Management Response

Management concurs.

Corrective Action Plan

Corrective Action 7:

- Large trash container with damaged covers are being replaced.
- Smaller containers are emptied daily and do not fall under the requirement to be covered that is outlined in the Good Neighbor Standards and Practices.
 - Good Neighbor Standards and Practices update will be drafted to state that only large containers and containers not emptied daily will be required to be covered.

Corrective Action 8:

- Housekeeping practices for each section of the facility have been developed by the contractor to address the trash, gloves, bottles and other material on the ground.
- Monthly walks with the area supervisor for each section have been established to observe and address housekeeping issues directly with the supervisor responsible. Inspections will be documented and recorded.
- Rolling stock equipment contractor will be issued Project letter to red tag and remove from service area any broken or damaged hoses.
 - Contractor staff were instructed to inspect hoses in the Service & Inspection Area prior to use, red tag defective equipment and remove from area and only use equipment that is intact.

Target Implementation Dates

7. Good Neighbor Standards and Practices update to be drafted by November 30, 2019 (pending Internal Audit Verification).
8. Monthly inspection walks were initiated on November 7, 2019 and will be conducted with Contractor Health, Safety & Environment Manager and the area supervisor for the following sections:
 - Locomotive Shop – First inspection conducted November 7, 2019 (pending Internal Audit verification).

- Car Shop – First inspection conducted November 14, 2019 (pending Internal Audit verification).
- Service & Inspection Area– First inspection conducted November 21, 2019 (pending Internal Audit verification).
- Storage Track Area– First inspection conducted December 5, 2019 (pending Internal Audit verification).

Project letter issued to the Rolling stock equipment Contractor in regard to the red tagging and removal of broken/damaged hoses from area of service to be issued by November 30, 2019 (pending Internal Audit verification).

Responsible for Implementation

Carlos Perez - Asst Director, Maintenance of Equipment
Tracy Berge – Senior Manager, Facilities & Fleet Maintenance
Eric Poghosyan - Senior Manager, Facilities & Fleet Maintenance
Luis Carrasquero – Interim Director, Maintenance of Equipment

Accountable for Implementation

Rod Bailey - Deputy Chief Operating Officer; and
Eric Hosey - Chief Operating Officer

Finding 6:

Various standard operating procedures are inconsistent with current practice or other internal documents

Criteria

- Maintenance of Equipment – *Equipment Service Requirements 30-003* last reviewed in March of 2017 indicates “Monthly meetings are held with the Maintenance Contractor, Authority’s Maintenance of Equipment Department and Authority’s Chief Operating Officer to go over the monthly occurrences, safety records, efficiency testing program and improvement planning”
- Maintenance of Equipment – *Equipment Service Requirements 30-003* indicates that “Authority Compliance Officers also provide oversight and audit the Central Maintenance Facility’s Daily Servicing.”
- Government Accountability Office – *Federal Internal Controls Standards 12.05* states: “Management periodically reviews policies, procedures, and related control activities for continued relevance and effectiveness in achieving the entity’s objectives or addressing related risks. If there is a significant change in an entity’s process, management reviews this process in a timely manner after the change to determine that the control activities are designed and implemented appropriately.”

Condition

We noted that some practices were different than documented SOP requirements. The following conditions A. through G. were noted:

- A. *The Maintenance of Equipment Service Requirements 30-003* indicates that the Chief Operating Officer (COO) should attend monthly meetings held with the Maintenance Contractor (i.e. Bombardier). However, testing of records did not reflect the attendance of the COO. In addition, sign in sheets for November 2018 and April 2019 were not available.
- B. *The Maintenance of Equipment Service Requirements 30-003* indicates that “Authority Compliance Officers also provide oversight and audit the Central Maintenance Facility’s Daily Servicing.” However, on March 15, 2019, SCRRA underwent a realignment in which the Compliance Unit was assigned to the Safety and Security Department. As such, staff responsible for oversight of the Daily Servicing are no longer referred to as Compliance Officers. Currently, Equipment Department inspectors are performing this function as opposed to Compliance Officers. The SOP should be updated to reflect updated titles to eliminate confusion.
- C. The Facilities and Maintenance - *Sand Silo Operation and Maintenance SOP* created on 12/26/2018 and revised on 9/30/2019 indicates that “For the CMF location, sand delivery shall occur on Saturday between 10 AM and 12 PM”. This same information is communicated to the Community that have signed up for Community Email updates.

Based on documented support, we identified that on January 12, 2019, the sand delivery was not completed until 1:15 PM. Upon inquiry, we noted that the stated SOP *delivery time* of 10 AM – 12 PM refers to the *arrival time* of the delivery truck. Once the delivery truck arrives on site, the delivery of the sand could take between 30-45 minutes per tower.

The SOP does not provide a definitive timeframe for sand deliveries. In addition, the communication that goes out to the community, which is based on the SOP, could be confusing to community members.

- D. We observed the sand delivery conducted on September 28, 2019. During the delivery we noted that the Facilities and Maintenance - *Sand Silo Operation and Maintenance SOP* version produced on December 26, 2018 provides incorrect instructions for receiving sand deliveries:
 - Green lamp OFF means silo is half full
 - Red lamp ON means the silo is full.This mistake could cause confusion to the employee receiving the delivery. **Management updated and revised this SOP effective September 30, 2019 reflecting the correct procedure.**
- E. The *Fuel Conservation Program* was put in place on May 6, 2010 and no subsequent updates or revisions to the program are documented. It contains key procedural requirements in connection with main engine idling, head-end power

usage, utilization of Automatic Main Start/Stop System (AESS), as well as scheduled layover times at outlying layover locations including the CMF.

- F. Load Testing Times per the *Good Neighbor Practices* was inconsistent with posted times at the CMF. *Good Neighbor Standards and Practices* indicates that “Load testing should only be done in designated areas between the hours of 10 AM and 4 PM weekdays, and 10 AM and 1 PM on Weekends.” *Posted signage* indicates that load testing times are between 7AM to 6PM on weekdays and between 10AM and 1PM on weekends. **The issue was resolved, and the SOP was updated by Equipment Management during the audit fieldwork.**
- G. Designated load testing areas have been communicated to Community Members on the Community Website. The website contains a diagram of the CMF which indicates that load testing occurs right in front of the locomotive Shop. Based on observation and inquiry, load testing can also occur at the Storage area on the north side of the facility.

Cause

Periodic reviews and updates of key SOPs are not regularly performed.

Effect

The SOPs in place have been established, in part, to ensure that commitments made with community members near the facility are honored. When SOPs are either not followed, inconsistent with one another, or are not reviewed and updated regularly, there is a risk of not fulfilling those commitments.

Recommendations

- 9. **The Chief Operations Officer should attend the Monthly Maintenance Meetings with the Contractor as required under the Maintenance of Equipment Service Requirements 30-003, or the SOP should be updated to assign a designee who can attend in place of the COO. In addition, all monthly meetings should be supported by sign in sheets as a best practice.**
- 10. **The Maintenance of Equipment Service Requirements 30-003 should be reviewed and updated for accuracy and to add the appropriate title for the responsible staff based on the new organizational structure.**
- 11. **Sand delivery times should be clarified to reflect the time frame (from beginning to end) as to when a sand delivery can begin and the latest it could end. Once updated, communication on delivery times should be clarified with the Community Relations Group.**
- 12. **The Fuel Conservation Program (along with all SOPs) should be regularly reviewed to ensure consistency and that the practices are still applicable. The review dates, along with managers signatures, should be reflected on the document.**

13. The CMF diagram on the website should be updated to accurately reflect the load testing areas and to ensure the community is aware of the change.

Management Response

Management concurs.

Corrective Action Plan

Corrective Action 9:

- Update verbiage of *Maintenance of Equipment Service Requirements 30-003* so that Chief Operating Officer (COO) attendance is optional to the monthly Bombardier Transit Corporation meeting but given monthly report. Monthly report will also contain sign in sheet of attendees of meeting.

Corrective Action 10:

- Update verbiage of *Maintenance of Equipment Service Requirements 30-003* to correct titles and responsibilities regarding Compliance Officers.

Corrective Action 11:

- Update Sand delivery times on the SOP

Corrective Action 12:

- Fuel Conservation Program will be updated to reflect current SCRRRA fleet and target conservation policies.

Corrective Action 13:

- Equipment department will provide the Community Relations Group updated locations and verbiage for CMF map for load testing areas so that the Community diagram can be updated.

Target Implementation Dates

- January 31, 2020

Responsible for Implementation

- Correction Actions 9, 10, 12 and 13:
 - Carlos Perez - Asst Director, Maintenance of Equipment; and
 - Luis Carrasquero – Interim Director, Maintenance of Equipment
- Corrective Action 11:
 - Tracy Berge – Senior Manager, Facilities & Fleet Maintenance
 - Eric Poghosyan - Senior Manager, Facilities & Fleet Maintenance

Accountable for Implementation

Rod Bailey - Deputy Chief Operating Officer; and
Eric Hosey - Chief Operating Officer

Reviewed and acknowledged by:



Stephanie Wiggins
Chief Executive Officer

December 30, 2019

Date