



WMSC Commissioner Brief: W-0222 – Evacuation for Life Safety Reasons – Gallery Place-Chinatown Station – January 19, 2023

Prepared for Washington Metrorail Safety Commission meeting on May 16, 2023

Safety event summary:

Smoke and fire on the roadway on the lower level (Green and Yellow Line tracks) at Gallery Place-Chinatown Station led to an evacuation of the lower level of the station at approximately 1:19 p.m. on January 19, 2023.

A Metro Transit Police Department Liaison in the Rail Operations Control Center received a report of smoke at Gallery Place Station. This was reported to the Rail Operations Control Center (ROCC) at 1:08 p.m. At this time, a train was servicing the platform on Track 1. That Train Operator did not report any issues. The Train Operator of a train that had departed Track 2 two minutes earlier had also not reported any issues¹. Personnel in the ROCC directed a Station Manager to investigate. The Assistant Operations Manager requested Metro Transit Police Department and D.C. Fire and EMS response.

At 1:12 p.m., the ROCC personnel began to hold and turn back trains that would otherwise have continued to the Gallery Place-Chinatown Station lower level. Normal service continued on the Red Line (upper level).

Metrorail's fan desk staff activated station ventilation fans at 1:14 p.m.

Metrorail evacuated and closed the lower level of Gallery Place-Chinatown Station at 1:19 p.m. (although trains had been stopped, riders had continued to enter the lower level until this time to wait for Green Line trains until the platform was closed and evacuated).

At 1:21 p.m., after a Station Manager confirmed and informed the Rail Traffic Controllers that there was smoke at the station on the Track 2 side, third rail power was de-energized between Gallery Place-Chinatown and Mt. Vernon Square stations on both tracks.

D.C. Fire and EMS and a Rail Supervisor arrived at approximately 1:25 p.m. The Radio Rail Traffic Controller designated the Rail Supervisor as Metrorail's On-Scene Commander, which is contrary to Metrorail's SOP #1A governing command and control of emergencies. The SOP requires Metro Transit Police Department personnel on scene, if present, to be the On-Scene Commander.

Metro Transit Police stated that they later assumed the On-Scene Commander role, which was communicated on an MTPD radio channel.

After a Rail Supervisor properly hot stuck to confirm third rail power was de-energized and the placement of Warning Strobe and Alarm Devices (WSADs) that provide a warning if power is restored, D.C. Fire and EMS determined the

¹ Metrorail train-to-wayside communications systems did not record doors being operated on this train at the platform, however the station was serviced. This is an example of broader issues for this system that the WMSC identified through several investigations and follow up oversight activities and communicated to Metrorail personnel including personnel responsible for the Automatic Train Control system and vehicle-wayside communication. Metrorail continues to examine potential causes of missing or incorrect data related to these systems.



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smoke and fire was from trash burning on a light fixture behind the third rail. The trash was removed and service was later restored.

Probable Cause:

The probable cause of this event was Metrorail allowing combustible material to accumulate and remain on the roadway, in this case leading to a debris fire on top of a light fixture near the third rail.

Corrective Actions:

As corrective actions in response to investigation W-0213, Metrorail is removing trash weekly from behind parapet walls, and is designing engineering solutions to prevent accumulation of trash and debris. Metrorail is also reviewing the grate covering it has piloted at stations in the core of the system.

Examples of other related open CAPs

- C-0162 was created to address a 2022 emergency management and fire and life safety audit finding that Metrorail does not consistently follow the incident command system (ICS) structure and has procedures that do not comply with National Incident Management System (NIMS)/ICS requirements. For this CAP, which has an expected completion date of January 2025, WMATA has committed to creating and implementing an Incident Management System Framework in alignment with NIMS/ICS.



Washington Metropolitan Area Transit Authority
Department of Safety (SAFE)
Office of Safety Investigations (OSI)
FINAL REPORT OF INVESTIGATION A&I E23039

Date of Event:	01/19/2023
Type of Event:	Evacuation for Life Safety Reasons
Incident Time:	13:08 hours
Location:	Gallery Place Station, Track 2
Time and How received by SAFE:	13:08 hours via MAC
WMSC Notification Time:	13:55 hours
Responding Safety Officers:	WMATA SAFE: No WMSC: No Other: No
Rail Vehicle:	N/A
Injuries:	None
Damage:	Minor damages and cleanup
Emergency Responders:	Metro Transit Police Department (MTPD), District of Columbia Fire and Emergency Medical Services Department (DCFEMS), Office of Rail Transportation (RTRA)
SMS I/A Number	20230202#105933

Gallery Place Station – Evacuation for Life Safety Reasons
January 19, 2023

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Abbreviations and Acronyms

AIMS	Advanced Information Management System
ARS	Audio Recording System
CCTV	Closed-Circuit Television
DCFEMS	District of Columbia Fire and Emergency Medical Services
I/A	Incidents/Accidents
MAC	Mission Assurance Coordinator
MSRPH	Metrorail Safety Rules and Procedures Handbook
MTPD	Metro Transit Police Department
NOAA	National Oceanic and Atmospheric Administration
OSI	Office of Safety Investigations
ROCC	Rail Operations Control Center
ROCS	Rail Operations Control System
RTRA	Office of Rail Transportation
SAFE	Department of Safety
SMS	Safety Measurement System
WMATA	Washington Metropolitan Area Transit Authority
WMSC	Washington Metrorail Safety Commission

Washington Metropolitan Area Transit Authority (WMATA)
Department of Safety (SAFE) – Office of Safety Investigations

Note that all times listed are approximate and may contain minor variations due to differences between systems of record.

Executive Summary

On Thursday, January 19, 2023, at 13:08 hours, the Rail Operations Control Center (ROCC) received a report from Metro Transit Police Department (MTPD) of smoke visible near Gallery Place Station on Track 2. The ROCC dispatched an Office of Rail Transportation (RTRA) Station Manager to investigate and contacted MTPD to assist. ROCC also requested the District of Columbia Fire and Emergency Medical Services Department (DCFEMS) to respond to the scene.

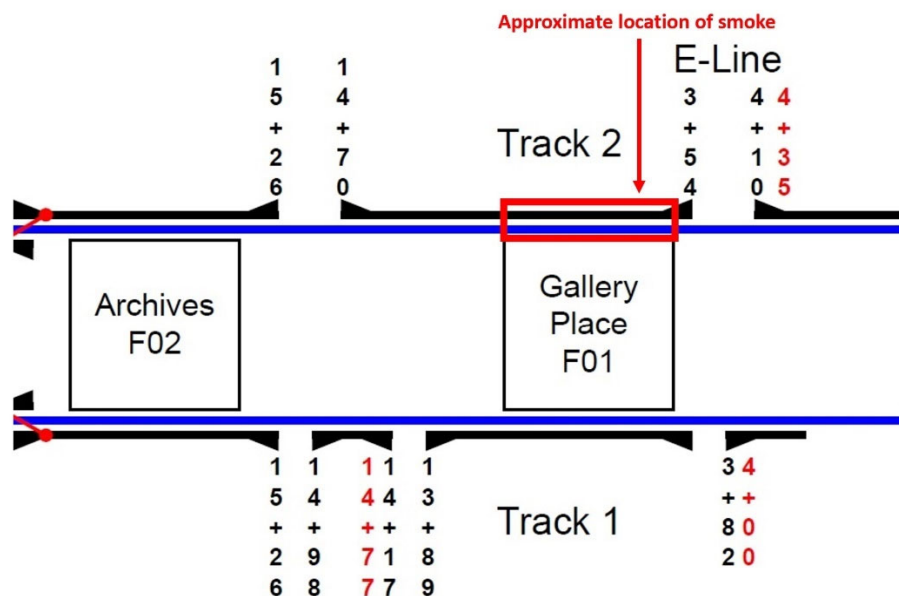
The Station Manager confirmed the report of smoke in the station and requested bus shuttle services. The Green/Yellow Line was closed for normal revenue services while emergency personnel investigated. ROCC de-energized third rail power between Mount Vernon Square Station and Gallery Place Station on Track 1 and Track 2. DCFEMS determined the source of smoke to be from trash burning on a light fixture behind the third rail. The burning trash was removed and all emergency personnel cleared the roadway without incident. MTPD cleared the roadway and released the scene to RTRA. No injuries or significant damages were reported as a result of this incident.

The probable cause of the call for evacuation for life safety reasons at Gallery Place Station was combustible material accumulating on top of a light fixture near the third rail. The debris was removed and normal revenue services restored. This investigation did not identify significant deficiencies with communication or non-compliance of established emergency procedures under direction of responding emergency personnel.

Incident Site

Gallery Place Station, Track 2

Field Sketch/Schematics



Purpose and Scope

The purpose of this incident investigation and candid self-evaluation is to collect and analyze available facts, determine the probable cause(s) of the incident, identify contributing factors, and make recommendations to prevent a recurrence.

Investigative Methods

The investigative methodologies included the following:

- Documentation Review – A collection of relevant work history information and process documentation contained in Metro systems of record. These records include:
 - Metrorail Safety Rules and Procedures Handbook (MSRPH)
 - National Oceanic Atmospheric Administration (NOAA)
 - Metro Transit Police Department (MTPD) Event Report
 - Rail Operations Control Center (ROCC) Incident Report
 - Rail Operations Control System (ROCS) SPOTS Report
- System Data Recording Review – A collection of information contained in Metro Data Recording Systems. This data includes:
 - Audio Recording System (ARS) playback
 - Closed Circuit Television (CCTV)
 - Advanced Information Management System (AIMS) playback

Investigation

Based on a complete review of the event and available data systems, at 13:08 hours, on Thursday, January 19, 2023, ROCC received a report from MTPD of smoke near Gallery Place Station, lower level, on Track 2. ROCC subsequently requested the Station Manager to investigate the report of smoke. MTPD and DCFEMS were also requested by ROCC to assist with the event. ROCC began to turn back trains on the Green/Yellow Line at 13:12 hours. The Station Manager confirmed and advised ROCC that smoke was visible at Gallery Place on Track 2 and requested shuttle bus service.

Based on AIMS data, Train ID 515 was the first train to be turned back at 13:21 hours on Track 2 in approach to Gallery Place Station. Tunnel fans were activated at 13:14 hours.

13:14:25.391	01/19/23	Gallery	P1 L	UPE E Line Fan	Exhaust	COMMANDED Exhaust	BY 015175 AT jgwksfacil1pp
13:14:25.391	01/19/23	Gallery	P1 L	UPE E Line Fan	On	COMMANDED Emergency On	BY 015175 AT jgwksfacil1pp
13:14:26.941	01/19/23	Gallery	P1 L	UPE E Line Fan	Status	COMMANDED CHANGE =	Emergency On
13:14:29.091	01/19/23	Gallery	P1 L	UPE F Line Fan	Exhaust	COMMANDED Exhaust	BY 015175 AT jgwksfacil1pp
13:14:29.091	01/19/23	Gallery	P1 L	UPE F Line Fan	On	COMMANDED Emergency On	BY 015175 AT jgwksfacil1pp
13:14:30.129	01/19/23	Gallery	P1 L	UPE F Line Fan	Status	COMMANDED CHANGE =	Emergency On
13:14:30.254	01/19/23	Shady Grove		TRAIN 118	TURNBACK ON TRACK A15-A1-948		
13:14:31.146	01/19/23	Gallery	P1 L	UPE E Line Fan	Status	CURRENT STATE =	Automatic
13:14:31.682	01/19/23	Gallery	P1 L	UPE E Line Fan	Status	UNCOMMANDED CHANGE =	Emergency On

Figure 1 - AIMS Event Log indicating Fan Activation in area of Gallery Place Station

Third rail power was de-energized between Gallery Place and Mount Vernon Square Stations on Track 1 and Track 2 at 13:21 hours. At 13:25 hours, DCFEMS and an RTRA Supervisor arrived on scene. ROCC designated the RTRA Supervisor as the On-Scene Commander (OSC). Per SOP 1A, the RTRA Supervisor should have been designated as the RTRA IC Liaison as MTPD personnel were already on scene. This was corrected at 13:28 hours when MTPD assumed the OSC role.

ROCC de-energized third rail power between Mount Vernon Square Station and Gallery Place Station on Track 1 and Track 2 and allowed the emergency personnel to assess the incident site. DCFEMS determined the source of smoke was from trash burning on a light fixture behind the third rail. The trash was removed, and all emergency personnel cleared the roadway without incident. At 13:44 hours, MTPD cleared the roadway and released the scene to RTRA. The lower level of the station was evacuated, and train service was suspended for a total duration of 35 minutes. The Red Line remained open and continued normal services throughout this incident.

After the scene was released to RTRA, ROCC energized third rail power between Gallery Place and Mount Vernon Square Stations on Track 1 and Track 2 at 13:50 hours. Train ID 504 was the first train to service Gallery Place Station, Track 1 at 13:58 hours in the direction of Greenbelt Station. No injuries or significant damages were reported as a result of this incident. The damages totaled \$685.92, which included the costs of materials and labor.

Chronological ARS Timeline

A review of ARS playback, i.e., phone and radio communications, revealed the following timeline:

Time	Description
13:08 hours	<u>ROCC MTPD Liaison</u> : Received a report from MTPD of smoke on the roadway at Gallery Place, Track 1. [MTPD-1X] Radio RTC instructed Train ID 515 to hold at L'Enfant Plaza Station, Track 1. [OPS 3]
13:13 hours	<u>ROCC</u> : Station Manager confirmed there was smoke in the station at Gallery Place and requested shuttle bus services. [OPS 3]
13:14 hours	<u>ROCC</u> : Tunnel fans activated. [AIMS]
13:19 hours	<u>ROCC</u> : MTPD initiated ICS and assumed OSC. [MTPD 1x]
13:21 hours	<u>ROCC</u> : ROCC de-energized third rail power from Mount Vernon Square to Gallery Place Stations, Tracks 1 and 2. [OPS 3]
13:25 hours	<u>RTRA</u> : RTRA Supervisor and DCFEMS arrived on scene. [OPS 3]
13:28 hours	<u>ROCC</u> : MTPD Officer arrived on scene to relieve the current OSC. Former MTPD OSC assumed MTPD Forward Liaison. [OPS 3]
13:34 hours	<u>ROCC</u> : ROCC granted RTRA Supervisor foul time to hot stick and confirm third rail power was de-energized. RTRA Supervisor confirmed the third rail was de-energized and placed WSADs for roadway protection. [OPS 3]
13:44 hours	<u>MTPD</u> : MTPD contacted ROCC and reported all personnel were clear of the roadway. MTPD released the scene to the RTRA Supervisor. [OPS 3]
13:50 hours	<u>ROCC</u> : ROCC restored third rail power and normal services were resumed. [OPS 3]

****Note:** Times above may vary from other systems' timelines based on clock settings.

L'Enfant Plaza

FI	IN	ST
TP	SP	FA

Archives

FI	IN	ST
TP	SP	FA

Gallery Place

FI	IN	ST
TP	SP	FA

F03

515

F02

F01

Playback Control

01/19/23
13:10:20
EST 20X

Setting

The screenshot shows the 'The Great Train Robbery' simulation interface. At the top, four station names are listed: L'Enfant Plaza, Archives, Gallery Place, and Mt Vernon Square. Below each station name is a status bar with six indicators: FI, IN, ST, TP, SP, and FA. The main area displays a train track with two tracks, a signal, and a train. A 'Playback Control' window is open in the bottom left, showing the date 01/19/23, time 13:21:40, and a 20X speed setting.

Incident Date: 01/19/2023 Time: 13:08 hours
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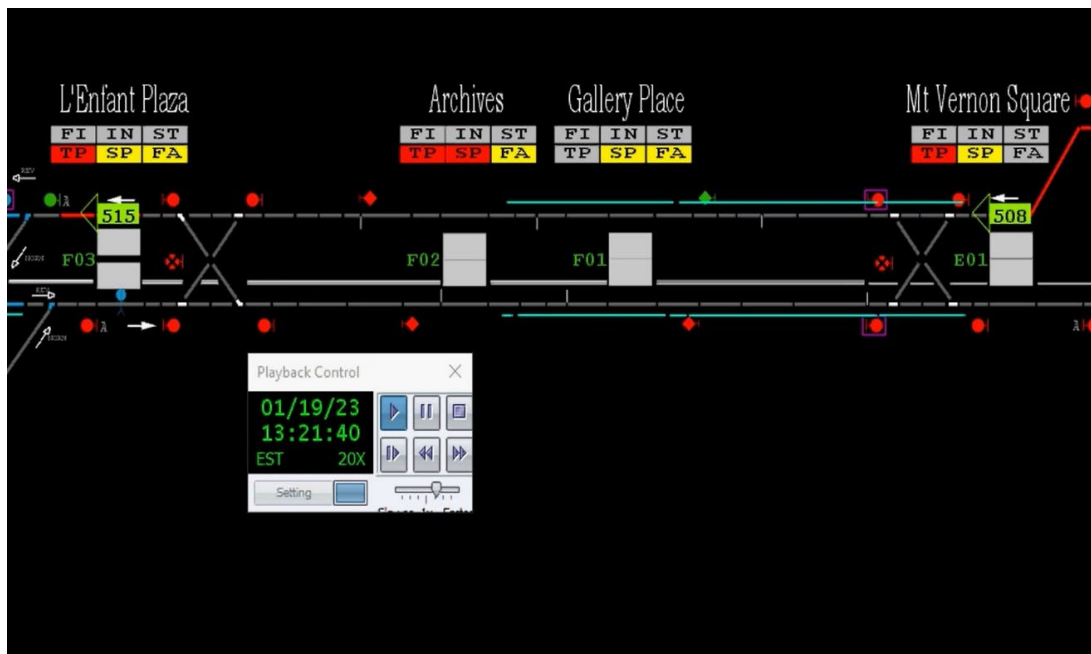


Image 3 – Third rail power was de-energized between Gallery Place and Mount Vernon Square Stations on Track 1 and Track 2 at 13:21 hours.



Image 4 – Third rail power was energized between Gallery Place and Mount Vernon Square Stations on Track 1 and Track 2 at 13:50 hours.

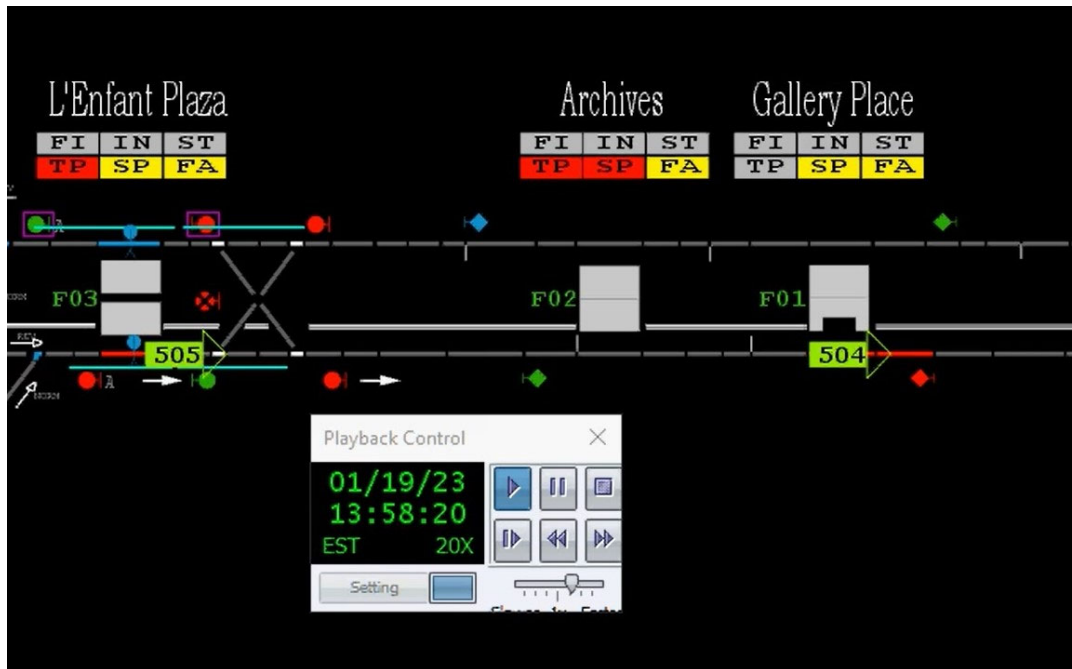


Image 5 – Train ID 504 was the first train to service Gallery Place Station, Track 1 at 13:58 hours.

Weather

On January 19, 2023, at the time of the incident, NOAA recorded the temperature as 46° F, 7 MPH winds, overcast, and 79% humidity. This event occurred within a tunneled section of the rail system. Weather was not a contributing factor in this incident (Weather source: NOAA – Location: Washington, DC)

Immediate Mitigation to Prevent Recurrence

- ROCC dispatched RTRA, MTPD and DCFEMS to mitigate the incident.
- ROCC de-energized third power between Gallery Place and Mount Vernon Square Stations.
- ROCC turned back trains, implemented SOP 1A and requested shuttle bus services.

Related Rules and Procedures

- SOP 1A – *Command, Control and Coordination of Emergencies on the Rail System*

Findings

- Smoke was reported emitting from Gallery Place Station, Track 2 by MTPD.
- MTPD requested for services to be halted on the Green/Yellow Line while DCFEMS completed their investigation.
- Red Line services continued without interruption while emergency services performed mitigation activities on the Green/Yellow Line.
- Trash smoldering on a light fixture behind the third rail was determined to be the source of the smoke.
- ROCC incorrectly designated RTRA Supervisor as OSC while MTPD personnel were present on scene. This was corrected within four minutes.

Probable Cause Statement

The probable cause of the call for evacuation for life safety reasons at Gallery Place Station was combustible material accumulating on top of a light fixture near the third rail. The debris was removed, and normal revenue services restored. This investigation did not identify significant deficiencies with communication or non-compliance of established emergency procedures under direction of responding emergency personnel.

Recommended Corrective Actions

There were no Recommended Corrective Actions related to the emergency response for this event.

Appendices

Appendix A – Rail Operations Control System (ROCS) Spots Report

ROCS SPOTS REPORT

based on up-to-the-second operational performance data from the Rail Operations Control System

Current date/time: Sun Jan 22 16:34:40 2023

Select Platform: and/or Select ID: Leave blank to remove criteria

and/or Select 4-digit car number: Leave blank to remove criteria

Select Date: Select Times (0-24HRS): From To

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
514	F01-1	6	44				13:07:43	13:08:08	25	13:07:18	13:08:31	3102-3103.3026-3027.3175-3174	-
504	F01-1	6	44				13:57:54	13:58:20	26	13:57:26	13:58:43	3183-3182.3251-3250.3001-3000	50:11

Diagram 1 – ROCS Spots Report displaying train movements through Gallery Place Station, Track 1, Green/Yellow Line during the smoke incident.

ROCS SPOTS REPORT

based on up-to-the-second operational performance data from the Rail Operations Control System

Current date/time: Sun Jan 22 16:36:47 2023

Select Platform: and/or Select ID: Leave blank to remove criteria

and/or Select 4-digit car number: Leave blank to remove criteria

Select Date: Select Times (0-24HRS): From To

Generate Report

ID	Platform	length	dcode	Right door open	Right door close	dwell	Left door open	Left door close	dwell	Head Arrived	Tail cleared	cars	Headway door open to door open
506	F01-2	8	43							13:04:46	13:06:06	7726-7727.7391-7390.7740-7741.7653-7652	-
511	F01-2	6	43				14:03:12	14:03:46	34	14:02:35	14:04:10	3092-3093.3178-3179.3159-3158	-

Diagram 2 – ROCS Spots Report displaying train movements through Gallery Place Station, Track 2, Green/Yellow Line during the smoke incident.

Appendix B – Rail Operations Control Center Incident Report (Abridged)

View Approved Incident Report

INCIDENT ID: 2023019GREEN3

DATE 2023-01-19	TIME 1310	LINE Green	ITEM 3
LOCATION (STATION/YARD) Gallery Pl-Chinatown (F01)		LOCATION/CHAIN MARKER (If Applicable)	REPORTED BY MTPD Liaison
TRAIN ID 507	DIRECTION O/B	TRACK NUMBER 2	DEPTS NOTIFIED Everbridge Alert/Messaging
CAR NUMBERS (XXXX-XXXX)			
Lead Car			
-	-	-	-
Caused Issue <input type="checkbox"/>	Caused Issue <input type="checkbox"/>	Caused Issue <input type="checkbox"/>	Caused Issue <input type="checkbox"/>
TRBL CODE FIRL-LIGHT FIXTURE FIRE (WAYSIDE/STATION)		RESP CODE PWR	

TYPE INCIDENT

Smoke and Fire in Station.

ACTION PLAN

Dispatch RTRA Supervisor and MTPD, De-energize Third Rail Power, Turn Trains, Implement SOP 1A, Request Shuttle Bus Service.

DELAYS IN MINUTES

LINE	INCIDENT	TRAIN	TOTAL DURATION
11	11	11	0

TRIPS MODIFIED

PARTIAL	GAP TRAIN	LATE DISPATCHES	REROUTED	NOT DISPATCHED	OFFLOADS
0	0	0	0	0	0

FIVE PRIMARY CONSOLE INDICATIONS

BCP	BRAKES ON ILLUMINATED	ALL DOORS CLOSED ILLUMINATED	AUTO\MANUAL ILLUMINATED	BPP
			AUTO	

View Approved Incident Report

INCIDENT CHRONOLOGY	
TIME	DESCRIPTION
1310	MTPD Liaison reported smoke on the roadway at Gallery Place on track two. ROCC dispatched RTRA Supervisor and MTPD. ROCC instructed train 507, Mt. Vernon Square on track two, to offload and verify clear of customers. ROCC Assistant Operations Manager, ROIC, MTPD and all concerned personnel were notified.
1312	ROCC instructed train 515, track one at L' Enfant Plaza, to offload and verify clear of customers.
1313	Gallery Place Station Manager confirmed smoke in the station. Shuttle bus services were requested.
1318	Train 507 verified train was clear of customers and ready to move. ROCC instructed train 507 to continue in service in the direction of Greenbelt.
1319	Train 515 verified clear of customers and ready to move. ROCC instructed train 515 to continue in service in the direction of Branch Avenue.
1321	Third rail power was de-energized via AIM screen.
1323	ROCC train dispatcher instructed Greenbelt and Branch Ave terminals to extend the headway from 8 minutes to 12 minutes.
1325	Unit 4, RTRA Supervisor [REDACTED] and DCFD reported on scene. ROCC designated RTRA Supervisor [REDACTED] as the On Scene Commander.
1328	MTPD arrived on scene. Officer [REDACTED], badge #491, was the On Scene Commander.
1334	ROCC granted RTRA Supervisor [REDACTED] foul time at Gallery Place on track two to hot stick and confirm.
1337	RTRA Supervisor [REDACTED] verified third rail power was de-energized at Gallery Place on track two and WSADs were placed for protection.
1344	MTPD notified ROCC that all Fire and Rescue personnel were clear of the roadway and the scene was released to RTRA and third rail can be restored at ROCC discretion.
1350	Third Rail Power was restored. Train 504 was the first train to go normal. Normal service resumed.

MAXIMO TICKET#
8647515

REPORT PREPARED BY	NAME	CLICK TO SIGN
RADIO CONTROLLER 1	[REDACTED]	✓
BUTTON CONTROLLER 1		
RADIO CONTROLLER 2	[REDACTED]	✓
BUTTON CONTROLLER 2	[REDACTED]	✓

SUPERINTENDENTS OR ASSISTANTS SECTION	
ADDITIONAL FOLLOW-UP CORRECTIVE ACTIONS OR REMARKS	
FOLLOW-UP INFORMATION OBTAINED FROM SUPPORT DEPARTMENTS	
NOTIFICATIONS/PAGE GROUPS	#1/CEO <input type="checkbox"/> #2/DGM & BELOW <input type="checkbox"/>
ADDITIONAL NOTIFICATIONS MADE BY PHONE	

View Approved Incident Report

APPROVED BY	NAME	CLICK TO SIGN
REPORT APPROVED BY SUPT. OR ASST SUPT.		

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Appendix C – MOC Emergency Tunnel Fan Operation Form

M **MOC Emergency Tunnel Fan Operation Form**
metro **WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY** 110-ROCC-ALL-04-01
Approved: 3/3/2022

Call Time: 13:15

Incident Description: Arcing Insulator / Trash Fire / etc.
Report of smoke on the roadway

Nearest Station: Metro Center AO1
F01 - Gallery Place

Chainmarker: xxx + xx

Platform Limits

Track #: Track 2

Train ID: 507 and 515

Proposed Evacuation Route: (towards which station)
Gallery Place - F01

Playbook/Page Reference: F01-1, Page 158

Incident Zone(s): Platform Limits

Name: [REDACTED] Date: 1/19/23

*Maintenance Lead shall scan and save this form in the "R" Shared Network Drive per the ROCC Record Retention Process, 700-ROCC-ALL-04-XX. 51.931

Incident Date: 01/19/2023 Time: 13:08 hours
Final Report – Evacuation for Life Safety
E23039 Reasons

Rev. 1 Drafted By: SAFE 702 – 3/15/2023
Rev. 1 Reviewed By: SAFE 71 – 03/20/2023
Rev. 1 Approved By: SAFE 71 – 03/20/2023

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