



May 22, 2020

## **End of Line Observations**

### **Introduction**

Personnel from the Occupational Safety and Environmental Compliance Team within the CTA Safety and Security Department were tasked with observing End of Line Servicing of Rail Vehicles to determine adequacy of cleaning and disinfecting of this equipment. Personnel utilized Hygiena Brand swabs and a Hygiena Brand Ensure Luminometer to measure Adenosine triphosphate (ATP) on high-touch surfaces. ATP is present in all organic material and is the universal unit of energy used in all living cells. ATP testing is a broad indicator of cleanliness from all biological soils and useful for cleanliness monitoring. A baseline of 50 relative light units (RLUs) should be considered a passing grade for cleanliness on CTA vehicles. This passing grade demonstrates adequate cleanliness and is achievable.

Personnel also observed servicing activities to determine that processes were being performed as reported and/or according to established Standard Operating Procedures (SOPs). Work stations were also inspected to determine if appropriate equipment and product was present.

### **Observations**

#### **O'Hare Observations**

On Monday May 18<sup>th</sup> 2020, the Safety Team conducted ATP swab sampling and observations at the Blue Line O'Hare train station.

The observations were conducted at the end of the line O'Hare train station to document the methods and duration of cleaning the interior of the rail cars when they pull into the station. There were three car servicers at the site. Each one of them appeared to have a different method of cleaning. All three servicers swept the floors of the cars. One of the servicers swept and mopped the floors and at one point sprayed and wiped down some surfaces if time permitted. Another servicer swept the floors and randomly wiped seats with a damp cloth. The last servicer (middle) only swept the floor of the interior of car. None of the servicers wiped down the high touch surfaces within the interior of the cart. During the servicing process there were homeless passengers that remained in the car. There definitely was not enough time to do a thorough cleaning of the interior of the cars.

The duration of time that the trains at the end of the line for servicing ranged between 1:38:01 – 3:59:86 minutes. Some of the trains that were serviced went directly into the yard and were not put back into service.

### ATP Testing Results for O'Hare

Sampler	Date	Time	No. Rail	Cart No.	Orientation	Sample Location	Results	Comments
■	5/18/20		3353	1	CS	Door Stanchion	442	
■	5/18/20		3353	1	CS	Seat #12 Vent	10	
■	5/18/20		3353	1	NCS	Door #1 Handrail	148	
■	5/18/20		3353	1	CS	Seat #3 Stanchion	46	
■	5/18/20		3354	1	CS	Seat #12 Vent	10	Outbound
■	5/18/20		3354	1	NCS	Door #4 Handrail	148	Outbound
■	5/18/20		3354	1	NCS	Seat #3 Stanchion	187	Outbound
■	5/18/20		3354	1	CS	Seat #3 Stanchion	46	Outbound
■	5/18/20		3354	1	NCS	Seat #2 Stanchion	167	Inbound
■	5/18/20		3354	1	NCS	Door #4 Handrail	269	Inbound
■	5/18/20		3354	1	NCS	End Door	237	Inbound
■	5/18/20	10:45	2821	2	NCS	Door #2 Handrail	196	
■	5/18/20	10:47	2821	2	NCS	Seat 5-Handrail	339	
■	5/18/20	10:48	2821	2	NCS	Vent-Seat 1	240	
■	5/18/20	10:50	2821	2	CS	Seat 1 Handrail	135	
■	5/18/20	10:53	2822	1	NCS	Seat 10 Stanchion	38	
■	5/18/20	10:54	2822	1	NCS	Door #2 Handrail	607	
■	5/18/20	10:56	2822	1	NCS	Seat 7 Handrail	70	
■	5/18/20	10:57	2822	1	CS	Door 3 Handrail	198	
■	5/18/20	11:19	2821	6	NCS	Door 2 Handrail	883	
■	5/18/20	11:20	2821	6	NCS	Seat 5 Handrail	141	
■	5/18/20	11:21	2821	6	CS	Seat 1 Handrail	279	
■	5/18/20	11:22	2821	6	NCS	Vent Seat 1	205	
■	5/18/20	11:25	2822	7	NCS	Seat 10 Stanchion	135	
■	5/18/20	11:26	2822	7	NCS	Door 2 Handrail	220	
■	5/18/20	11:27	2822	7	NCS	Seat 7 Handrail	99	
■	5/18/20	11:28	2822	7	NCS	Door 3 Handrail	187	

	5/18/20	13:18	3310	3	CS	Door 3 Handrail	341	
	5/18/20	13:20	3310	3	NCS	Seat 3 Stanchion	40	
	5/18/20	13:25	3310	3	NCS	Door 4 Handrail	1621	
	5/18/20	13:35	3310	3	CS	Seat 6 Handrail	323	
	5/18/20	13:27	3309	4	CS	Emerg. Door #8	357	
	5/18/20	13:27	3309	4	CS	Seat 8 Stanchion	335	
	5/18/20	13:30	3309	4	NCS	Seat 5 Rail	886	
	5/18/20	13:30	3309	4	CS	Seat 2 Rail	294	
	5/18/20	14:20	3279	3	CS	Seat 2 Rail	568	
	5/18/20	14:21	3279	3	CS	Seat 3 Rail	668	
	5/18/20	14:22	3279	3	NCS	Door 4 Rail	319	
	5/18/20	14:25	3279	3	CS	Seat 11 Rail	90	
	5/18/20	14:30	3280	4	NCS	Seat 6 Rail	988	
	5/18/20	14:30	3280	4	NCS	Seat 8 Door	295	
	5/18/20	14:31	3280	4	CS	Seat 5 Rail	143	
	5/18/20	14:32	3280	4	CS	Seat 2 Rail	341	

### Howard Observations

On May 19, 2020 the Environmental Compliance and Occupational Health and Safety team noted the following observations. At the Howard Rail station a comprehensive cleaning is to take place after all passengers have disembarked and before the train leaves the station for the South Bound trip. While observing the cleaning techniques by the servicer on several trains, it was noted that a thorough cleaning was not being done. As trains pulled in an average of about 3 people were used to clean one train. The cleaning only consisted of the sweeping of each rail car. High touch areas were not addressed. There was notably no disinfectants present, only a bottle of graffiti remover (Ink Spot), a can of foam cleaner, and an unlabeled bottle of green liquid. (See picture below) Also present was dirty mop water and used towels. This same procedure was repeated continually as noted by the data below, with the exception of one servicer. One servicer entered one rail car with towels and a chemical bottle in hand, however the servicer then exited the rail car less than a minute later. There also were several homeless people that would not exit the train upon the arrival to Howard rail Station. If proper cleaning had been in place the servicers would still not be able to thoroughly clean due to this.

While observing the materials to be used for the cleaning of rail cars, there was notably no disinfectants present, only a bottle of graffiti remover, a can of foam cleaner, and an unlabeled bottle of green liquid. Also present was dirty mop water and used towels.

### ATP Testing Results for Howard

Sampler	Date	Time	No. Rail	Cart No.	Orientation	Sample Location	Results	Comments
████	5/19/20	8:40	5263	1	CS	#1 Strap, Door 1	274	At the end of the line for 8.32 minutes. No wipe down, only went through cars and swept
████	5/19/20	8:42	5263	1	NCS	Hand Pole/Door 3	36	
████	5/19/20	8:43	5263	1	NCS	Seat 6, stanchion	38	
████	5/19/20	8:44	5263	1	NCS	Seat 9, Strap	61	
████	5/19/20	8:40	5264	2	CS	3rd strap	160	At the end of the line for 8.32 minutes. No wipe down, only went through cars and swept
████	5/19/20	8:41	5264	2	CS	2nd seat handle bar	18	
████	5/19/20	8:42	5264	2	NCS	2nd stanchion	1057	
████	5/19/20	8:43	5264	2	CS	Door 1 Handle (L)	114	
████	5/19/20	9:15	5555	1	CS	#1 Strap, Door 4	42	At the end of the line for 14.33 minutes. No wipe down, only went through cars and swept
████	5/19/20	9:16	5555	1	CS	Door 3, hand rail	108	
████	5/19/20	9:18	5555	1	CS	Seat 5, hand rail	154	
████	5/19/20	9:19	5555	1	NCS	Seat 1, 3rd strap	365	
████	5/19/20	9:15	5687	3	CS	4th Strap	68	At the end of the line for 14.33 minutes. No wipe down, only went through cars and swept
████	5/19/20	9:16	5687	3	CS	Top Rail (seat 8-9)	298	
████	5/19/20	9:17	5687	3	NCS	Door 4 Stanchion (R)	113	
████	5/19/20	9:18	5687	3	CS	11 stanchion	13	
████	5/19/20	9:45	5505	2	NCS	Door 3, hand rail	615	At the end of the line for 11.15 minutes. No wipe down, only went through cars and swept
████	5/19/20	9:47	5505	2		Emerg. Door Handle	236	
████	5/19/20	9:48	5505	2	NCS	Strap #1, Door 1	185	
████	5/19/20	9:49	5505	2	CS	Seat 8, hand rail	392	
████	5/19/20	9:50	5559	3	NCS	2nd strap	243	At the end of the line for 11.15 minutes. No wipe down, only went through cars and swept
████	5/19/20	9:51	5559	3	NCS	(R) stanchion Door 2	540	
████	5/19/20	9:52	5559	3	CS	5th stanchion	430	
████	5/19/20	9:53	5559	3	NCS	9th stanchion	27	

	5/19/20	12:39	5687	3	NCS	4th Strap	492	No wipe down, only went through cars and swept
	5/19/20	12:41	5687	3	NCS	5th Stanchion	890	
	5/19/20	12:42	5687	3	NCS	Cab Area	902	
	5/19/20	12:43	5687	3	NCS	10th Stanchion	87	
	5/19/20	12:45	5422	4	CS	Door 3, Hand Rail L	97	No wipe down, only went through cars and swept
	5/19/20	12:46	5422	4	NCS	Seat 4, stanchion	320	
	5/19/20	12:47	5422	4		Emerg. lift Handle	32	
	5/19/20	12:48	5422	4	CS	4th Strap	35	
	5/19/20	1305	5506	1	CS	Door 2, rail	453	No wipe down, only went through cars and swept
	5/19/20	1306	5506	1	CS	Door 1, (L) Handrail	300	
	5/19/20	1307	5506	1	NCS	13th Strap	67	
	5/19/20	1308	5506	1	CS	10th Stanchion	402	
	5/19/20	13:33	5457	6	NCS	1st Stanchion	486	No wipe down, only went through cars and swept
	5/19/20	13:35	5457	6	NCS	6th Strap	58	
	5/19/20	13:37	5457	6	CS	4th Stanchion	163	
	5/19/20	13:38	5457	6	NCS	Door 4 - L Stanchion	291	
	5/19/20	13:45	5391	5	CS	Door 1 Stanchion	1974	No wipe down, only went through cars and swept
	5/19/20	13:46	5391	5	CS	Seat 3, Rail handle	201	
	5/19/20	13:48	5391	5	CS	Door 4, rail R	225	
	5/19/20	13:49	5391	5		Emerg. Door rail R	358	
	5/19/20	13:52	5392	6	NCS	14th Strap	581	No wipe down, only went through cars and swept
	5/19/20	13:53	5392	6	CS	3rd Stanchion	115	
	5/19/20	13:55	5392	6	CS	Door 3, Handle L	290	
	5/19/20	13:56	5392	6	NCS	1st stanchion	82	
	5/19/20	13:57	5377	6	NCS	Door 3, Rail R	326	No wipe down, only went through cars and swept
	5/19/20	13:58	5377	6	NCS	5th Stanchion	1140	
	5/19/20	13:59	5377	6	NCS	3rd Strap	843	
	5/19/20	14:00	5377	6	CS	Door 1, Stanchion L	1202	

**Howard platform cleaning products photos:**





### 95<sup>th</sup> Train Station Observations

On Thursday May 20<sup>th</sup> 2020, the Safety Team conducted ATP swab sampling and observations at the Red Line/95<sup>th</sup> train station.

The observations were conducted at the 95<sup>th</sup> train station to document the methods and duration of cleaning the interior of the rail cars when they pull into the station. Upon arrival, we noted one car servicer on the platform. He had a towel, and an air fresher spray, that later we found out it was called Creamsicle Odor Eliminator. He sprayed foam cleaner on a few seats and wiped it off with the same towel. After approx. two hours of the servicer working alone, two more appeared, however we only witnessed one of them sweeping the train cars, the other one walked back and forth. We observed broom/dustpans, and mop/dirty water. No other chemicals were present. We asked the servicers if they had cleaning products, they said they have Hepiside, foam cleaner and the odor eliminator, which none but the odor eliminator and foam cleaner were present the entire duration of us being there. None of the servicers wiped down the high touch surfaces within the interior of the train cars.

### ATP Testing Results for 95<sup>th</sup>

Sampler	Date	Time	No. Rail	Cart No.	Orientation	Sample Location	Results	Comments
████	5/21/20	8:09	5332	4	NCS	#3 Strap	130	



	5/21/20	8:11	5332	4	CS	Hand Pole/Door 1	14	At the end of the line for 12.40 minutes. First 3 carts were mopped, sprayed with odor eliminator
	5/21/20	8:12	5332	4	NCS	Stanchion 5	43	
	5/21/20	8:13	5332	4	NCS	Seat 7, Strap	0	
	5/21/20	8:14	5331	3	NCS	Emergency Handrail	234	At the end of the line for 12.40 minutes. First 3 carts were mopped, sprayed with odor eliminator
	5/21/20	8:16	5331	3	CS	Door 3 (R) Stanchion	45	
	5/21/20	8:17	5331	3	NCS	#3 Strap	5425	
	5/21/20	8:18	5331	3	NCS	Door 2 (R) Stanchion	116	
	5/21/20	8:54	5640	3	NCS	Door 2 (L) Stanchion	380	At the end of the line for 9.20 minutes. First carts were swept, sprayed with odor eliminator
	5/21/20	8:56	5640	3	CS	Seat 1, 3rd strap	740	
	5/21/20	8:57	5640	3	CS	6 stanchion	728	
	5/21/20	8:58	5640	3	NCS	8 stanchion	236	
	5/21/20	9:00	5639	4	NCS	Door 4 Handrail (R)	148	At the end of the line for 9.20 minutes. First carts were swept, sprayed with odor eliminator
	5/21/20	9:01	5639	4	NCS	Emergency Handrail	454	
	5/21/20	9:02	5639	4	NCS	8 Stanchion	240	
	5/21/20	9:03	5639	4	CS	7 Stanchion	297	
	5/21/20	9:15	5286	2	NCS	Door 2 Handrail (R)	681	At the end of the line for 10.30 minutes. No wipe down, only went through cars and swept
	5/21/20	9:17	5286	2	CS	Door 1 (L) Stanchion	136	
	5/21/20	9:18	5286	2	CS	Door 2 Handrail (R)	1221	
	5/21/20	9:19	5286	2	NCS	7 Stanchion	98	
	5/21/20	9:21	5540	4	CS	Door 1 Handrail (L)	246	At the end of the line for 10.30 minutes. No wipe down, only went through cars and swept
	5/21/20	9:22	5540	4	CS	Emergency Handrail	0	
	5/21/20	9:23	5540	4	CS	Door 1 Handrail (R)	2020	
	5/21/20	9:24	5540	4	NCS	Strap 2	648	
	5/21/20	9:30	5369	3	NCS	Strap 3	389	No wipe down, only went through cars and swept
	5/21/20	9:30	5369	3	CS	1st Stanchion	259	
	5/21/20	9:31	5369	3	NCS	1 seat handrail	99	
	5/21/20	9:31	5369	3	CS	Door 3 Handrail (R)	191	
	5/21/20	9:42	5361	3	NCS	Door 2, Hand Rail L	345	At the end of the line for 10.52 minutes. First carts were swept, sprayed with odor eliminator
	5/21/20	9:42	5361	3	CS	1st Strap	22	
	5/21/20	9:43	5361	3	CS	4th Strap	384	
	5/21/20	9:43	5361	3	CS	Door 4 handrail	779	



████	5/21/20	9:45	5362	4	NCS	Emergency Handrail	191	At the end of the line for 10.52 minutes. First carts were swept, sprayed with odor eliminator
████	5/21/20	9:45	5362	4	CS	5th Strap	77	
████	5/21/20	9:46	5362	4	NCS	3 stanchion	176	
████	5/21/20	9:46	5362	4	CS	Door 1 handrail (L)	861	
████	5/21/20	9:56	5372	5	CS	Door 3 handrail (L)	371	At the end of the line for 8.44 minutes. First carts were swept, sprayed with odor eliminator
████	5/21/20	9:56	5372	5	NCS	5th Stanchion	740	
████	5/21/20	9:57	5372	5	CS	Door 3 handrail (R)	1125	
████	5/21/20	9:57	5372	5	NCS	3 <sup>rd</sup> Strap	577	
████	5/21/20	10:00	5371	6	NCS	10th stanchion	1057	At the end of the line for 8.44 minutes. First carts were swept, sprayed with odor eliminator
████	5/21/20	10:00	5371	6	CS	4th stanchion	1526	
████	5/21/20	10:01	5371	6	CS	Door 3 handrail (L)	635	
████	5/21/20	10:01	5371	6	NCS	Door 2 handrail (L)	611	
████	5/21/20	10:11	5400	8	CS	6th Strap	570	At the end of the line for 3.02 minutes. Carts were swept, no wipe down
████	5/21/20	10:11	5400	8	CS	10 <sup>th</sup> Stanchion	224	
████	5/21/20	10:12	5400	8	NCS	Door 1 handrail (L)	296	
████	5/21/20	10:12	5400	8	CS	4th stanchion	204	
████	5/21/20	10:13	5399	7	NCS	3 <sup>rd</sup> seat handrail	696	At the end of the line for 3.02 minutes. Carts were swept, no wipe down
████	5/21/20	10:13	5399	7	NCS	6 <sup>th</sup> strap	167	
████	5/21/20	10:15	5399	7	NCS	Door 1 handrail (L)	3685	
████	5/21/20	10:15	5399	7	NCS	Emergency Handrail	354	