	Department - Environmental	SOP #	ENV-EES-09
		Revision #0	
		Implementation Date	XX/X/202X
Page #	1 of 6	Last Reviewed/Update Date	12/11/2020
SOP Owner	M. Paul	Approval	R. Kalinowsky

Standard Operating Procedure – Push Travel Inspection

1. Purpose

The purpose of this SOP is to define how to properly read push/travels on the battery for EES Coke Battery LLC and document the observations.

2. Scope

This document is intended to give a description on how to properly read, calculate, document and report push/travel emissions for #5 Coke Battery at EES Coke Battery LLC.

3. Responsibilities

Sidock field personnel and the Sidock Project Manager (or their designee) are responsible for implementing this procedure. Only field personnel certified to USEPA Method 9 shall perform push/travel observations.


4. PPE Requirements

The following PPE is required for personnel responsible for implementing this procedure:

1. Standard Battery PPE (leather gloves; FR clothing; hard hat; safety glasses; radio; metatarsal safety boots; hearing protection; CO detector; ½- face respirator on person). This can be all on person, if Field Personnel is reading from the truck.

5. Communication

1. Prior to reading visible emissions from push/travels, Field Personnel shall sign into the log book at the Battery Foreman's Office.
2. Prior to reading visible emissions from push/travels, Field Personnel need to speak to the Battery Foreman or Team Leader regarding any safety issues or other events that may affect the completion of this task.
3. Field Personnel shall have a radio tuned to Channel #2 on their person.
4. If a reading cannot be obtained for any reason, Field Personnel shall immediately inform EES Coke Environmental personnel via text.
5. If any single opacity reading is $\geq 10\%$, Field Personnel shall inform Battery Foreman/ Team Leader.
6. If any single opacity observation is $\geq 20\%$, Field Personnel shall inform EES Coke Environmental personnel, and Battery Foreman/ Team Leader.
7. If any 6-reading average opacity is $\geq 35\%$, Field Personnel shall inform EES Coke Environmental personnel, and Battery Foreman/ Team Leader.


	Department - Environmental	SOP #	ENV-EES-09
		Revision #0	
		Implementation Date	XX/X/202X
Page #	2 of 6	Last Reviewed/Update Date	12/11/2020
SOP Owner	M. Paul	Approval	R. Kalinowsky

6. Safety Requirements


1. When parked for reading push travels, be aware of vehicles and people moving around the grounds. Make sure to park in the safest place possible.

7. Procedure


1. Fugitive visible emission observations of push/travel operations must comply with Method 9B as specified in Michigan Rule 1031(e)(i)-(vi).
2. Field Personnel must observe visible emissions from push/travel operations associated with four (4) consecutive pushes each day, 7 days per week. Pushes from additional ovens may be observed, if necessary. The additional ovens do not need to be included in groups of consecutive pushes, once the four ovens have been observed.
3. **Visible emissions from pushing/traveling operations associated with each oven shall be observed at least once every ninety (90) days. Sidock Project Manager, or their designee, shall track the ovens observed for push/travel to facilitate the observation of each oven within 90 days of the date the oven was last observed.**
4. **Sidock Project Manager, or their designee, shall inform field personnel by text of the five ovens with the closest expiration dates on their 90-day windows at least weekly when any oven is due to be observed within 40 calendar days. The notification shall include the applicable due dates for each oven.**
5. **If an oven cannot be observed within 90-days of its last observation date, field personnel will observe the first push from the oven during daylight after the expiration of the 90-day window.**
6. Field Personnel shall document pushing/traveling observations by completing the Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (Form A-5).
7. Push/travel observations shall only be performed during daylight hours.
8. Observer shall stand on the coke side of the battery (or inside a truck or other vehicle) where a clear view of the push can be obtained. This generally should be a location on the ground in the coke side yard outside the hot car tracks. The observation shall not be restricted to the ground level, but may be performed from some elevated level. The observer's line of sight should be approximately perpendicular to the line of travel of the quench car. The observer shall also position themselves such that the sun position conforms to the requirements of Method 9 (i.e., with the sun oriented in the 140° sector to their back.)
9. If observations of emissions from a pushing operation are interrupted due to events beyond the control of the observer, the data from that pushing operation shall be invalidated unless a violation has already been noted.

	Department - Environmental	SOP #	ENV-EES-09
		Revision #0	
		Implementation Date	XX/X/202X
Page #	3 of 6	Last Reviewed/Update Date	12/11/2020
SOP Owner	M. Paul	Approval	R. Kalinowsky

10. Complete the weather and emissions point information, and a drawing showing the relative positions of the emission source being observed, the observer and the sun on the form.
11. Observation of fugitive visible emissions from the pushing and traveling operations shall be performed in accordance with the requirements of USEPA Method 9, except as provided in this procedure.
12. Fugitive visible emissions during the pushing of coke into the coke receiving car shall be read above the battery top.
13. Field Personnel shall begin reading the opacity of the visible emissions from the pushing operation in 15-second increments starting when coke begins to fall into the coke receiving car and ending with the sixth reading or when the coke receiving car begins to travel to the quench tower, whichever occurs first.
14. Field Personnel shall read the opacity of visible emissions from the coke receiving car as it travels from the oven to the quench tower. Readings shall be in 15-second increments beginning when the coke receiving car begins to move away from the oven and ending when the car reaches the quench tower.
15. **Field Personnel shall notify EES Coke Environmental personnel, and Battery Foreman/ Team Leader immediately via text if any single opacity reading during a push/travel observation exceeds 20% opacity.**
16. **Field Personnel shall notify EES Coke Environmental personnel, and Battery Foreman/ Team Leader immediately via text if any 6-reading average opacity for a push/travel combination exceeds 35% opacity for an oven.**
17. **If any 6-reading average opacity for a push/travel combination exceeds 35% opacity for any oven, Field Personnel shall observe the first push during daylight from that oven after corrective actions have been completed and document whether the corrective actions were adequate.**
18. The following information shall be documented on the Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (Form A-5):
 - The name of the facility/establishment.
 - The county where the facility is located.
 - The facility's establishment number/identifier.
 - The location of the equipment.
 - Regulatory district.
 - Date of observations.
 - The city where the facility is located.
 - The observer's name.
 - The observer's Method 9 certification date.
 - The process equipment for which visible emissions observations were performed and the operating mode of the equipment.
 - The background color at the start and end of the observations.
 - The sky conditions at the start of the observations.
 - The wind speed at the start and end of the observations.
 - The wind direction at the start of the observations.
 - Descriptions of the emission point at the start and end of the observations.

	Department - Environmental	SOP #	ENV-EES-09
		Revision #0	
		Implementation Date	XX/X/202X
Page #	4 of 6	Last Reviewed/Update Date	12/11/2020
SOP Owner	M. Paul	Approval	R. Kalinowsky

- The ambient temperature at the start and end of the observations.
 - The humidity at the start of the observations.
 - The height of the emissions source above ground level.
 - The height of the emissions source relative to the observer.
 - The distance of the emissions source from the observer.
 - Direction of the emissions source from the observer.
 - A source layout sketch showing the locations of the emissions source(s) and sun relative to the observer.
 - A description of emissions at the start and end of the observations.
 - The color of emissions at the start and end of the observations.
 - Identification of whether the emissions plume was continuous, fugitive, intermittent or not applicable.
 - Identification of whether water droplets were present during the observations.
 - Identification of whether the plume was attached, detached or not applicable.
 - Identification of point in the plume where opacity was determined at the start and end of the observations.
 - Description of visual background at the start and end of the observations.
 - Identification of the oven(s) for which pushing and traveling emissions were observed.
 - The start and end times for the observations for each oven.
 - The opacity readings for the pushing and traveling operations for each oven.
 - The highest instantaneous opacity reading for each push/travel combination.
 - Identification of whether any instantaneous opacity reading exceeded 20% for each push/travel combination.
 - The highest 6-reading average opacity for each push/travel combination.
 - Identification of whether any 6-reading average opacity exceeded 35% for each push/travel combination.
 - Any issues observed during the pushing and traveling observations.
 - The name and signature of the EES Coke personnel notified of observed issues, if applicable.
 - The date and time that EES Coke personnel were notified of observed issues during the pushing and traveling observations, if applicable.
 - Description of corrective actions implemented to address issues identified during the pushing and traveling observations.
19. Field personnel shall review the completed Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (Form A-5) and confirm that all of the items specified in Step 18 above are documented on the form.
20. Field personnel shall document their review of the daily Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (Form A-5) by initialing each element specified for Push/Travel Method 9 on the Field Technician QA/QC Form for Daily Method 303 and Push-Travel Inspection Reports (Form A - Tech QC).

	Department - Environmental	SOP #	ENV-EES-09
		Revision #0	
		Implementation Date	XX/X/202X
Page #	5 of 6	Last Reviewed/Update Date	12/11/2020
SOP Owner	M. Paul	Approval	R. Kalinowsky

21. The Field Technician QA/QC Form for Daily Method 303 and Push-Travel Inspection Reports (Form A - Tech QC) shall be updated by Field Personnel daily prior to the distribution of the daily reports.
22. The completed Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (Form A-5) shall be included in the daily inspection report and distributed in accordance with the requirements for the daily inspection reports specified in ENV-EES-YY.
23. **Once Field Personnel have distributed the completed Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (A-5) to the Sidock Project Manager, or their designee, for QA/QC review, Field Personnel shall not modify any data on the hard copy form without consultation and coordination with the Sidock Project Manager, or their designee. Failure to follow this requirement may result in conflicting data between the hard copy records and the electronic recordkeeping system maintained by the Project Manager or their designee. Conflicting data may result in incorrect compliance calculations.**

8. References

1. USEPA Method 9 and Michigan Method 9B.

9. Attachments

- Method 9B Visible Emission Observation Form for Fugitive Emissions from Push Travel (Form A-5) (example)

Method 9B
Visible Emission Observation Form
for Fugitive Emissions from Push Travel
Form A-5

ESTABLISHMENT EES COKE BATTERY		COUNTY Wayne	ESTABLISHMENT NO. P0408
EQUIPMENT LOCATION Zug Island		DISTRICT Detroit	DATE (MM/DD/YY)
CITY River Rouge	OBSERVER		CERTIFIED BY/DATE
PROCESS EQUIPMENT Coke Battery / Door Machine / Hot Car		OPERATING MODE	BACKGROUND COLOR START STOP
PROCESS EQUIPMENT Door Machine / PECS		OPERATING MODE	SKY CONDITIONS START
DESCRIBE EMISSION POINT START STOP		WIND SPEED START STOP	WIND DIRECTION START
HEIGHT ABOVE GROUND LEVEL		AMBIENT TEMP START STOP	HUMIDITY START
HEIGHT RELATIVE TO OBSERVER		<div style="border: 1px solid black; padding: 5px;"> <p>SOURCE LAYOUT SKETCH</p> <p>SUN </p> <p>WIND </p> <p>PLUME/STACK </p> </div> <p align="right">DRAW NORTH ARROW</p>	
DISTANCE FROM OBSERVER			
DIRECTION FROM OBSERVER			
DESCRIBE EMISSIONS START STOP		<div style="text-align: center;"> <p>X EMISSION POINT</p> <p>X OBSERVER POSITION</p> <p>140°</p> <p>----- SUN LOCATION LINE</p> </div>	
EMISSION COLOR START STOP			
PLUME TYPE: CONTINUOUS FUGITIVE N/A INTERMITTENT			
WATER DROPLET PRESENT: YES NO			
IF WATER DROPLET PLUME: ATTACHED N/A DETACHED			
POINT IN PLUME WHERE OPACITY WAS DETERMINED START STOP			
DESCRIBE BACKGROUND START STOP			

Oven No. _____ Start Time: _____ am/pm Stop Time: _____ am/pm

Push	Min	Sec	0	15	30	45
	0					
	1					
Travel	Min	Sec	0	15	30	45
	0					
	1					

Highest Instantaneous Opacity _____ %
 Instantaneous Over 20%? Yes No
 Average Opacity of 6 Highest Readings _____ %
 Average Opacity of 6 Highest Readings over 35%? Yes No

Oven No. _____ Start Time: _____ am/pm Stop Time: _____ am/pm

Push	Min	Sec	0	15	30	45
	0					
	1					
Travel	Min	Sec	0	15	30	45
	0					
	1					

Highest Instantaneous Opacity _____ %
 Instantaneous Over 20%? Yes No
 Average Opacity of 6 Highest Readings _____ %
 Average Opacity of 6 Highest Readings over 35%? Yes No

Oven No. _____ Start Time: _____ am/pm Stop Time: _____ am/pm

Push	Min	Sec	0	15	30	45
	0					
	1					
Travel	Min	Sec	0	15	30	45
	0					
	1					

Highest Instantaneous Opacity _____ %
 Instantaneous Over 20%? Yes No
 Average Opacity of 6 Highest Readings _____ %
 Average Opacity of 6 Highest Readings over 35%? Yes No

Oven No. _____ Start Time: _____ am/pm Stop Time: _____ am/pm

Push	Min	Sec	0	15	30	45
	0					
	1					
Travel	Min	Sec	0	15	30	45
	0					
	1					

Highest Instantaneous Opacity _____ %
 Instantaneous Over 20%? Yes No
 Average Opacity of 6 Highest Readings _____ %
 Average Opacity of 6 Highest Readings over 35%? Yes No

Notify Battery Personnel Immediately if Any 6-Reading Average Opacity is Greater than 35%, or if any Instantaneous Opacity is Greater than 20%.

Any Issues? Describe _____
EES Person Notified of Issue _____
Signature _____ Date / Time _____
Corrective Action Taken _____