



Element Materials Technology, Unit C6, Emery Court, The Embankment Business Park, Heaton Mersey, Stockport, SK4 3GL
 Your Element Contact: Derek Myers (07870 177 819)
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Site Specific Protocol (SSP) Commissioned by
 Federal-Mogul Coventry Ltd

Installation Name & Address
 Federal-Mogul Coventry Ltd
 Holbrook Lane
 Holbrook
 Coventry
 CV6 4BG

PPC Permit: PPC/197

Dates of the Proposed Monitoring Campaign
 To be confirmed


SSP Reference Number
 EMT-SSP-XXXXX

Release Point References	
- Main Stack	

Report Written by James Eldridge, MCERTS Level 2
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Report Date & Version 31st March 2021, Version 1
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Report Approved by James Eldridge Senior Technical Advisor MCERTS Level 2 MM 05 641 TE1 TE2 TE3 TE4

Signature of Report Approver (Element) 
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Name of Client James Denny

I confirm that I have read and understood the sampling protocol contained in this report, that the sampling location complies with the requirements of all relevant UK legislation, and I am happy for the sampling to proceed.

Date of Client Approval

Signature of Client (for SSP Approval)

SSP Part 1

CONTACT DETAILS, MONITORING DATES & PERSONNEL

This SSP (Site Specific Protocol) will be updated, if required to include feedback from each visit.

Operator Contact Details

Operator Name	Federal-Mogul Coventry Ltd
Site Location	Coventry
Full Installation Address	Holbrook Lane Holbrook Coventry CV6 4BG
PPC Permit	PPC/197

	Primary Site Contact	Alternative Site Contact
Contact Name	James Denny	N/A
Telephone Number	02476 584 545	N/A
Fax Number	-	N/A
Mobile Phone Number	-	N/A
Email Address	james.denny@tenneco.com	N/A

Monitoring Dates

Dates of Previous Campaign	15th October 2019
Job No. of Previous Campaign	CAT-5182
Planned Dates of Campaign	To be confirmed

(If the Planned Dates of the Campaign change at late notice, the SSP will not be re-issued. The final test report will detail the actual monitoring dates.)

Analysis Laboratories (with short name reference as referenced in Part 2 of the SSP)

Element Stockport (EET)	ISO17025 Accreditation Number: 4279
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Stack Emissions Monitoring Personnel

where SCM = Site Campaign Manager

Position	Name	MCERTS Accreditation	MCERTS Number & Expiry Date	Technical Endorsements
SCM	The sampling details will be updated, once a sample date has been agreed. Sampling will be led by an MCERTS Level 2 Team Leader with the required Technical Endorsements for the testing to be performed.			

Further Notes on Stack Emissions Monitoring Personnel

There may be, in exceptional circumstances, a need to change the personnel who will be performing the monitoring. If this was to occur, the sampling team sent to site will hold all the necessary MCERTS Technical Endorsements for the required tests. As this scenario would most likely happen at late notice, the SSP will not be re-issued. The names of the monitoring personnel will be available to the client on the day of sampling (or before if required for inductions / site security / permits to work). The names of the monitoring personnel along with their personal MCERTS accreditation details will also be detailed in the final test report.

SSP Part 2

DETAILS OF MONITORING: STACK AND LOCATION DETAILS

Release Point Reference	Main Stack
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Operating & Process Information	Details
Type of Process	Foundry Process
Batch or Continuous Process	Batch Process
Feedstock / Fuel Type	Induction Furnace Fume and Milling Extraction / Aluminium Scrap
Load / Throughput / Continuous Rating of Plant	TBC
Expected Velocity, Temperature & Moisture	19.2 m/s 32 °C 0.9 % v/v
Details of Abatement System	Bag Filter
Details of any CEMS Installed (including DCS)	N/A
Process Details Required	Operating conditions to be Provided by Site Contact
Reference Conditions 1	273K, 101.3kPa, without correction for water vapour content.
Reference Conditions 2	N/A

Sampling Location Details	Value	Details									
Stack Type / Shape	Circular	Podium Steps with edge protection and self closing gate									
Diameter / Dimensions (m)	0.28										
Access	On Ground										
Platform Type and Location	Mobile Tower										
Orientation of Duct	Vertical										
Sample Port Size / Diameter	4" BSP										
Sample Port Depth (cm)	9										
Sample Ports Correctly Located?	Yes										
Number of Sampling Lines Available	2										
Number of Sampling Lines to be Used	1										
Number of Sample Points to be Used (per line)	1										
Total Number of Sample Points to be Used	1										
EN 15259 / Homogeneity Representative Point/s	-					N/A					
Availability of Utilities						Power	110V	Lighting	No	Water	No

EA Technical Guidance Note M1 / EN 15259 Platform Requirements	Value
Sufficient working area to manipulate probe and operate the measuring instruments	Yes
Platform has 2 levels of handrails (approx. 0.5m & 1.0m high)	Yes
Platform has vertical base boards (approx. 0.25m high)	Yes
Platform has chains / self closing gates at top of ladders	Yes
There are no obstructions present which hamper insertion of sampling equipment	Yes
Safe Access Available	Yes
Easy Access Available	Yes

Sampling Plane Validation Criteria		
Requirement	Value	Compliant
Lowest Differential Pressure (Pa)	314	Yes
Ratio of Gas Velocities (:1)	1.0	Yes
Maximum Angle of Swirl (°)	0	Yes
No Local Negative Flow	Yes	Yes

Sampling Platform / Improvement Recommendations:
The sampling location meets all the requirements specified in EA Guidance Note M1 and EN 15259, and therefore there are no improvement recommendations.

SSP Part 2

DETAILS OF MONITORING: SAMPLING METHOD INFORMATION

Release Point Reference Main Stack (continued)

In the "Units" column, ¹ = Reference Conditions 1, ² = Reference Conditions 2

PERIODIC SAMPLING: MANUAL METHODS															
Determinand	Number of Runs Blanks		Units	Emission Limit	Expected Emission	Projected LOD	Standard Reference Method	Element Technical Procedure	Absorption Media / Analysis Technique	Analysis Lab ISO17025S tatus	Sample Duration (mins)	Sample Flowrate (ACTUAL) (l/min)	Sample Volume (REF) (m ³)	Projected MU (%)	Status of Testing
Particulate Matter	1	1	¹ mg/m ³	20	5.00	0.081	EN 13284-1	CAT-TP-01 / 03	Filter / Gravimetric	EET MCERTS	120	20	2.219	30%	MCERTS
Heavy Metals	1	1	¹ mg/m ³	5	0.50	0.003	EN 14385	CAT-TP-06	HNO ₃ & H ₂ O ₂ / ICPMS	EET MCERTS	120	20	2.219	15%	MCERTS
Sulphur Dioxide	1	1	¹ mg/m ³	N/A	2.00	0.011	EN 14791	CAT-TP-09	H ₂ O ₂ / IC	EET MCERTS	120	20	2.219	15%	MCERTS
Water Vapour	1	0	¹ % v/v	N/A	1.00	0.100	EN 14790	CAT-TP-05	Gravimetric	EET MCERTS	120	20	N/A	5%	MCERTS
Velocity	1	0	¹ m/s	N/A	19.00	3.000	EN ISO 16911-1	CAT-TP-41	Pressure & Temp	EET MCERTS	N/A	N/A	N/A	10%	MCERTS

Velocity Profile - Source: Previous Testing Campaign

Traverse Point	Depth m	ΔP Pa	Sampling Line A			
			Temp °C	Wet Density kg/m ³	Velocity m/s	Swirl °
STATIC (Units: Pa)			110.0			
Mean		345.2	25.0	1.156	20.51	
1	0.14	345.2	25.0	1.156	20.51	0.0

Monitoring Objectives / Unusual Occurrences / Comments / Health & Safety / Expected Deviations from Standard Reference Methods

1	Demonstrate compliance with a set of emission limit values (ELVs) as specified in the Site's Permit
2	Sampling will be conducted for the entire batch duration - typically 2 to 3 hours in duration.
3	N/A
4	N/A

SSP Part 3

DEVIATIONS FROM THE SSP THAT MAY HAVE OCCURED ON SITE DURING THE SAMPLING CAMPAIGN

Make a note of any deviations from this SSP below:

(Deviations may include: modification to a sampling duration, removal of a test, change to the number of sampling runs etc.)

At the end of the sampling campaign, the Team Leader must select one of the statements below and complete the required boxes:

(1) I certify that all testing performed for this sampling campaign followed the testing programme as detailed in this SSP, and no deviations (unless specified in the original SSP and approved by the client) were required.

<input type="checkbox"/> (tick)	Signature of Team Leader	Date of Signature

(2) It was necessary to deviate from the testing programme as detailed in this SSP. All deviations are listed above. The client was informed of the deviations and was happy for the testing to proceed / continue on this basis.

*(A client signature **MUST** be obtained for Contract Review purposes)*

<input type="checkbox"/> (tick)	Signature of Team Leader	Date of Signature	Signature of Client	Date of Signature