# ATESTA

## Site Specific Protocol (SSP)

commissioned by Airtech ECS Ltd

#### **Operator Name**

Federal-Mogul Coventry Ltd | Tenneco

#### **Operator Address**

Holbrook Lane Holbrooks, Coventry CV6 4BG PPC Permit PPC/197

#### Monitoring Organisation Name & Address

Atesta Ltd Unit 2, Asher Court, Lyncastle Way Appleton, Warrington WA4 4ST

SSP Written By Matt Pendlebury | Technical Support Manager MCERTS Level 2 | MM 04 535 | TE1 TE2 TE3 TE4 | expires on 17/06/2024

SSP Approved By Alastair Wolff | Managing Director MCERTS Level 2 | MM 04 566 | TE1 TE2 TE3 TE4 | expires on 30/06/2025

#### Name, Date and Signature of SSP Acceptor

Customer Acceptance - I confirm that I have read and I understand the contents of this SSP and I am happy for the monitoring to proceed



Job Reference: JOB-911

SSP Date | Version Number 28/11/2023 | Version 1

Planned Dates of the Monitoring Campaign 01/12/2023

Atesta Ltd Primary Contact

Alastair Wolff | m: 07506 729 226 e: alastair.wolff@atesta.com





## Part 1a: Summary of Release Points Covered in this SSP

#### Table of Release Points

	release point name	duct shape	duct dimensions	typical velocity   m/s	typical temp   °C	typical water vapour   %
1	Main Stack	Circular	Diameter = 0.28 m	15.0	25.0	1.0



## Part 1b: Contact Details | Monitoring Personnel | Analysis Laboratories

#### **Operator Contact Details**

operator name & address
Federal-Mogul Coventry Ltd   Tenneco
Holbrook Lane
Holbrooks, Coventry
CV6 4BG
PPC Permit   PPC/197

primary site contact	alternative site contact
James Denny	Katy Nixon
t: 02476 584 545	t: 01562 888 108
e: james.denny@tenneco.com	e: katy.nixon@airtechecs.com

#### Previous Campaign Information / Monitoring Dates

information	details
Job number from the previous monitoring campaign	N/A
Dates of the previous monitoring campaign	N/A
Planned dates of this monitoring campaign <sup>1</sup>	01/12/2023

<sup>1</sup> If the monitoring dates change at late notice, it may be that the SSP is not re-issued. The final test report/s will be issued with the actual dates of the monitoring campaign.

M	lonitoring Personnel		site campaign manager	Brian Jacob	
	name	position	MCERTS level   number   expiry	MCERTS technical endorsements	mobile phone number
	Brian Jacob	Senior Team Leader	MCERTS Level 2   MM 06 693   17/08/2025	TE1 TE2 TE3 TE4	07399 934 211
	Zack Harrison	Technician	MCERTS Level 1   MM 21 1627   26/04/2026	TE1	07375 640 542

Please note that on rare occasions, it may be necessary to change the monitoring personnel from those listed in the table above. In this event, the personnel attending the site would hold the correct and relevant MCERTS qualifications for the monitoring to be undertaken. Names and details would be made available to the client before arrival on site (to facilitate inductions / security checks / permits to work etc.). If a change is made at very late notice, for example in the event of illness, it may be that the SSP is not re-issued in time for the monitoring team's attendance on site. The final test report/s will be issued with the names of the personnel who performed the monitoring campaign.

#### Analysis Laboratories

laboratory	ISO 17025 accreditation number	laboratory short name	laboratory phone number
Atesta   North West	10706	АТА	0800 970 8945
RPS Laboratories   Salford	0605	RPS	0161 872 2443

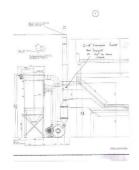


### Part 2: Monitoring Objectives | Sampling Location

#### Main Stack

The monitoring objective is to demonstrate compliance with a set of emission limit values (ELVs) as specified in the Site's Permit.

#### Sampling Location Photos



#### Sampling Location

duct shape	duct orientation	duct dimensions	duct area	platform access	platform type   location	Power	Lighting	Water
Circular	Vertical	Diameter = 0.28 m	0.06 m <sup>2</sup>	Ladder	Permanent   Outside with shelter available in nearby building	240V	No	Yes

summary of all sample port sizes available	
4" BSP	

sample ports   lines information	value
primary sample port size	4" BSP
primary sample port depth   cm	9
primary sample ports correctly located	Yes
primary sample ports number of available sampling lines	2
number of sampling lines to be used   minimum required (ISO / Traverse)	1 1
number of sampling points to be used per line   minimum required (ISO / Traverse)	1 1
total number of sampling points to be used   minimum required (ISO / Traverse)	1 1
total number of sampling points to be used (instrumental)	1

EN 15259 sampling plane criteria	result	compliant
lowest differential pressure   Pa	189	Yes
ratio of gas velocities	1:1	Yes
maximum angle of swirl   °	< 15	Yes
no local negative flow	Yes	Yes

NOTE: Water should be available on site, it does not have to be available at the sampling location.

A homogeneity test is not required for this release point. Any point (nominally 1/3 to 1/2 way into the duct) may be used for gaseous pollutant sampling.



## Part 2: Sampling Facility Requirements | Health & Safety | Expected Monitoring Deviations | Notes

#### Main Stack

#### Sampling Location / Facility Requirements (EN 15259)

sampling facility requirements in EN 15259	compliant / non-compliant
permanent sampling platform related statements	
- sampling platform has 2 levels of handrails (approximately 0.5m and 1.0m high)	Yes
- sampling platform has vertical base boards (approximately 0.25m high)	Yes
- sampling platform has chains or self closing gates at the top of ladder runs	Yes
- there is sufficient platform depth to access all sampling points without equipment overhanging guard rails	Yes
general sampling facility statements	
- the access to the sampling location is safe	Yes
- there is sufficient work area to manipulate the probe & operate measuring instruments	Yes
- the sampling plane is in a section of duct with constant shape and cross-sectional area	Yes
- the sample ports are located correctly for the size and shape of the duct according to EN 15259   A	Yes   For grid sampling (including velocity traverses)
- the sample ports are located correctly for the size and shape of the duct according to EN 15259   B	Yes   For single point sampling (including instrumental and single point manual sampling)

general statement on the conformity of the suitability of the sampling location

The sampling location meets the requirements specified in EN 15259, which enables the sampling of all test parameters to be performed without the need to report any sampling location related monitoring deviations.

#### Health & Safety Considerations | Expected Monitoring Deviations | Further Notes & Comments

health & safety considerations	expected monitoring deviations	further notes / comments
There are no further health and safety considerations.	No monitoring deviations are expected.	* - Combined limit of 5 mg/m <sup>3</sup> (total emission in combination) for Nickel, Cobalt, Chromium and their compounds.

## Part 2: Monitoring Methods



#### Main Stack

#### Monitoring Methods

MANUAL METHODS PERIODIC															
test parameter	number of	reporting	emission	expected	projected	reference method	technical	capture media	analysis lab	sample	expected	expected	estimated	accred.	reference
	tests	units	limit	emission	LOD		procedure	analysis technique	accred status	duration	sample	sample	MU	status of	conditions
	blanks		(ELV)	(reporting	(reporting				(NA = Non-	(mins)	flow rate	volume	(%)	test	(STP = 273K,
				units)	units)				Accredited)		(l/min)	(m³)			101.3kPa)
Total Particulate Matter	1 1	mg/m³	20	0.23	0.12	EN 13284-1	TP-01	Filter + Acetone / Water Rinse   Gravimetric	ATA   MCERTS	60	15	0.91	10	MCERTS	STP, wet
Chromium	1 1	mg/m³		0.001	0.00075	EN 14385	TP-05a	Filter   HNO <sub>3</sub>   H <sub>2</sub> O <sub>2</sub>   ICP-MS	RPS   MCERTS	60	15	0.91	19	MCERTS	STP, wet
Cobalt	1   1	mg/m³	5*	0.001	0.00064	EN 14385	TP-05a	Filter   HNO <sub>3</sub>   H <sub>2</sub> O <sub>2</sub>   ICP-MS	RPS   MCERTS	60	15	0.91	15	MCERTS	STP, wet
Nickel	1 1	mg/m³		0.001	0.00079	EN 14385	TP-05a	Filter   HNO <sub>3</sub>   H <sub>2</sub> O <sub>2</sub>   ICP-MS	RPS   MCERTS	60	15	0.91	15	MCERTS	STP, wet
Sulphur Dioxide	1 1	mg/m³	-	0.022	0.022	EN 14791	TP-10	0.3% H <sub>2</sub> O <sub>2</sub>   IC	RPS   MCERTS	60	15	0.91	10	MCERTS	STP, wet
Water Vapour	Concurrent	% v/v	-	1	0.5	EN 14790	TP-03	H <sub>2</sub> O + Silica Gel   Gravimetric	ATA   MCERTS	Concurrent	Concurrent	Concurrent	10	MCERTS	actual
Velocity & Flow Rate Traverse	1	m/s	-	15	1	EN 16911-1   TR 17078	TP-04a	Pitot + Thermocouple   Calculation	ATA   MCERTS	-	-	-	10	MCERTS	actual



## Part 2: Process & Operating Conditions | Typical Velocity Profile

#### Main Stack

#### Process & Operating Conditions

process & operating conditions information	details
type of process	Melting of ferrous alloys using electrical induction furnaces
batch or continuous process	Batch
fuel type	N/A
feedstock	Metal ingots
typical load / throughput of plant	2 electrical induction furnaces of capacity 50 kg and 300 kg
typical stack temperature, oxygen & water vapour content	Temperature: 25°C   O <sub>2</sub> : 20.9% v/v   H <sub>2</sub> O: 1% v/v
details of any unusual process occurrences	TBC on day of testing
details of abatement systems	AAF Fabripulse M6-168 bag filtration unit
details of CEMS installed	N/A
operating conditions required for the report	To be provided on the day of testing

Typical Velocity Profile (Source: Previous Testing Campaign)

	Line A static pressure = 30 Pa							
Pt	∆P   Pa	Temp   °C	Vel   m/s	Swirl   °				
1	189.0	25.0	15.0	< 15				





Monitoring deviations encountered during the monitoring exercise

Following completion of the sampling campaign the Site Campaign Manager (SCM), or Job Reviewer, signs against one of the statements below:

Statement 1: No deviations required	Atesta signature / initials	date
I, as the Site Campaign Manager / Job Reviewer, certify that all testing performed followed the monitoring programme as laid out in this SSP. No deviations (unless specified in the original SSP and approved by the client) were required.		

Statement 2: Deviations were required	Atesta signature / initials	date	client signature / initials	date
It was necessary to deviate from the monitoring programme as detailed in this SSP. All deviations are listed above. The client was happy for the testing to proceed / continue on this basis.			CHECK FOR EMAIL ACCEPTANCE IF NOT SIGNED	