Permit Reference Number: DP3430LX

Operator: ZF Automotive UK Ltd.

Installation: ZF Automotive UK Ltd., Pontypool

Form Number: S1

Reporting of Emissions to Sewer for the period from: 01/01/23 to 31/12/23

Emission Point	Substance / Parameter	Emission Limit Value	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
S1	Zinc	5.0mg/l	0.6 max	WAS-049	27/02/23 @ 12:49	UKAS	6.3 – 10.1 %
S1	Nickel	2.0mg/l	0.2	WAS-049	27/02/23 @ 12:49	UKAS	7.1 – 8.9 %
S1	Chromium	4.0mg/l	0.2	WAS-049	01/09/23 @ 10:55	UKAS	-
S1	Copper	2.0mg/l	0.1	WAS-049	All readings	UKAS	8 – 10.4 %
S1	pH	6 – 11 [6]	9.8 Max 7.0 Min	WAS-049	03/07/23 @ 10:01 01/03/23 @ 09:39	UKAS	-

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with Natural Resources Wales is used, then the appropriate identifier is given. In other cases, the principal technique is stated, e.g., colorimetry.
[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements, or flow/time proportional samples, the percentage of the process operating time covered by the monitoring is given.
[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.
[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated. The following uncertainties are quoted on a different basis (basis as stated) – The basis of any other uncertainty figure needs to be stated. Where no figure is available Natural Resources Wales will need to agree an appropriate uncertainty value.
[6] The emission limit values for {pH} are expressed as minimum and maximum individual values.

Signed:
(Authorised to sign as representative of ZF Automotive UK Ltd.)

Date: 26/01/24

Date of form: 05/12/2013

Permit Reference Number: DP3430LX

Operator: ZF Automotive UK Ltd.

Installation: ZF Automotive UK Ltd., Pontypool

Form Number: R1

Reporting of Waste Disposal and Recovery for the year: 2023

Waste Description	Disposal Route	Tonnes	Recovery Tonnes
1a) Hazardous Wastes - Solid	Landfill	63.08	0
1b) Hazardous Wastes - Liquids	Chemical Treatment	1212.76	
2) Non-Hazardous Wastes			
TOTAL WASTE	-	1275.84	

Trends in Waste Disposal and Recovery Year	Parameter	
	Named Waste	Total Waste
2018	1172.50	1172.50
2019	1359.60	1359.60
2020	1401.28	1401.28
2021	1694.54	1694.54
2022	1971.20	1971.20
2023	1275.84	1275.84

Operator's comments:

Waste increases due to:

- Pressing of the Hydroxide Sludge during 2023 resulted in an increase in disposal of filter cake but a decrease of 45% in terms of sludge disposal. Net reduction in waste disposal = 547 tonnes of waste.
- Disposal timing – Some waste produced in 2022 but disposed of in 2023 as there was not enough for a full load in 2022.

Signed:
(Authorised to sign as representative of ZF Automotive UK Ltd.)

Date: 26/01/24

Date of form: 05/12/2013

Permit Reference Number: DP3430LX

Operator: ZF Automotive UK Ltd.

Installation: ZF Automotive UK Ltd., Pontypool

Form Number: WU1

Reporting of Water Usage for the year: 2023

Water Source	Usage (m^3)	Specific Usage (m^3/1000 parts)
Main's water	13770	2.4
TOTAL WATER USAGE	13770	

Trends in Water Usage		
Year	Parameter	
	Named Water source	Total Water usage
2018	Town's Mains	35201
2019	Town's Mains	29109
2020	Town's Mains	23617
2021	Town's Mains	18773
2022	Town's Mains	17975
2023	Town's Mains	13770

Operator's comments:

	Units	2018	2019	2020	2021	2022	2023
Zinc Plated	Pieces	911,033	817591	643,606	350,589	205,135	0
Zinc Nickel	Pieces	4,210,039	4205077	3,460,852	3,363,011	3,071,409	3,545,627
Caliper Anodised	Pieces	391,298	643658	691,180	1,324,387	1,674,195	2,200,159
Drum Anodised	Pieces	757,260	215240	228,480	168,293	0	0
Total	Pieces	6,269,630	5,881,566	5,024,118	5,206,280	4,950,739	5,745,786
Effluent Water	M^3/1000 parts	5.61	4.95	4.70	3.61	3.65	2.40

Zinc Plant not run during 2023, therefore zero water used and zero effluent from the process.

Signed:
(Authorised to sign as representative of ZF Automotive UK Ltd.)

Date: 26/01/24

Date of form: 05/12/2013

Permit Reference Number: DP3430LX

Operator: ZF Automotive UK Ltd.

Installation: ZF Automotive UK Ltd., Pontypool

Form Number: E1

Reporting of Energy Usage for the year: 2023

Energy Source	Energy Usage Quantity	Primary Energy (MWh)	CO_2 Produced (tonnes)
Electricity *	2448 MWh	5876	975
Natural Gas	0 m³	0	0
Gas Oil	0 tonnes		
	+		
TOTAL	-	5876	975

* Conversion factor for delivered electricity to primary energy = 2.4

Trends in Energy Usage Year	Parameter	
	Primary Energy usag	CO_2 produced
2017	8843 MWh	1470 Tonnes
2018	8252 MWh	1371 Tonnes
2019	6933 MWh	1152 Tonnes
2020	6499 MWh	1079 Tonnes
2021	5945 MWh	987 Tonnes
2022	5485 MWh	910 Tonnes
2023	5876 MWh	975 Tonnes

Operator's comments:
Gas Conversion m³ =((m3*29.31)/35)/1000000) MWh
The conversion factors used to calculate the Co_2 produced were taken from the sector guidance H2 section 3.1 and were 190 for natural Gas and 166 for electricity. ((MWh * Co_2 factor)/1000)

	Units	2018	2019	2020	2021	2022	2023
Zinc Plated	Pieces	911033	817591	643606	350589	205135	0
Zinc Nickel	Pieces	4210039	4205077	3460852	3363011	3071409	3545627
Caliper Anodised	Pieces	391298	643658	691180	1324387	1674195	2200159
Drum Anodised	Pieces	757260	215240	228480	168293	0	0
Total	Pieces	6269630	5881566	5024118	5206280	4950739	5745786
Electricity (Processes)	Kwh/1000 parts	543.892	487.965	537.408	474.635	461.628	426.098
Gas (Processes)	M^3/1000 parts	12.873	9.121	4.590	3.408	1.239	0.000

16% increase in parts processed.

Zinc plant not run during 2023. The zinc plant driers were gas driers whereas the zinc nickel and anodise plant use electric driers.

Signed:
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Date: 26/01/24

Date of form: 05/12/2013