



Environment – Quarterly Report – 3rd Quarter 2013

Groundwater and surface water monitoring system

Monitoring system of underground water is centered on plant operation impact on underground water. The surface water quality is monitored in Kotrcina stream at two stream profiles.

Monitoring place	Marking	Pollution parameters
Bore	SM-1, SM-2, SM-3, SM-4, SM-5, PM-1, PM-2, PM-4, PM-7, PM-8, PM-9, PM-10, PM-11, PM-13	temperature, level, pH, conductivity, CHSk-Mn, NEL-IR, BTEX, TOC
Creek - Kotrcina	PV-1, PV-2	temperature, pH, oxygen, conductivity, CHSK-Mn, nitric nitrogen, NEL-IR, BTX, benzene, toluene, xylene, ethylbenzene, hydrocarbon index, TOC
Rainwater sewage <i>(behind oil separator)</i>	DK-2 KIA	NEL-IR



Indexes of industrial waste water contamination

Quantity of industrial waste water discharged into the public sewerage: 90,446.00 m³.

Index	pH	COD _{Cr}	BOD ₅	Soluble Substances	N total	P total
Unit		mg/l	mg/l	mg/l	mg/l	mg/l
Public sewerage limit	6-9	800	400	2,500	70	10
Concentration of pollutants*	8.79	384.00	168.00	208.00	19.20	< 0.10

* Indexes are set by qualified spot sample



Air protection

Kia Motors Slovakia s.r.o. is operating following air pollution sources dividing based on public notice No. 410/2012 Coll.:

Large air pollution source	Middle air pollution sources
Paint shop	Press shop
Vehicle process center (VPC)	Body shop
Tank Farm	Assembly shop
	Engine shop
	Canteen
	Main office
	Section 6 (Utility buildings)
	Fuel station

During the trial operation there was realized the first authorized emission measurement on the air pollution sources that has obligation of emission measurement based on legislation. The results confirmed the observance of emission limits by all measured air pollution sources.



On August 7 – 9, 2013 there was carried out the authorized periodical measurement of emissions to verify compliance with the set emission limits on some exhausts in object SO 300 Paint shop. The measurement confirmed that the emission limits were complied with.

Exhaust	Pollutant	Emission limit [mg.m ⁻³]	Average measured value [mg.m ⁻³]	Result
V02-02	particulates	150	0.8	COMPLIANCE
	F (in particulates)	5	<0.15	COMPLIANCE
	HF	5	<0.15	COMPLIANCE
V04-04	TOC	150	81	COMPLIANCE
V11-72	particulates	3	<0.79	COMPLIANCE
V06-59	particulates	3	0,7	COMPLIANCE
V09-70	particulates	3	<1.08	COMPLIANCE
V08-62	particulates	3	<0.77	COMPLIANCE
V10-63	particulates	3	<0.82	COMPLIANCE
V15-64	particulates	3	<0.57	COMPLIANCE
V14-57	particulates	3	<0.38	COMPLIANCE
V13-71	particulates	3	<0.60	COMPLIANCE

*Status conditions expressing the mass concentration of 0° C, 101.3 kPa and wet gas (V02-02), dry gas (other exhausts)
The requirement to comply with the emission limit by integrated permit for Paint shop*



On August 21 and 22, 2013 there was carried out the authorized periodical measurement of emissions to verify compliance with the set emission limits in waste gas from end thermal oxidizers TAR in object SO 300 Paint Shop. The measurement confirmed that the emission limits were complied with.

Exhaust	Pollutant	Emission limit [mg.m ⁻³]	Average measured value [mg.m ⁻³]	Result
V22-19	NO _x -NO ₂	200	164	COMPLIANCE
	CO	100	80	COMPLIANCE
	TOC	20	3	COMPLIANCE
V27-20	NO _x -NO ₂	200	161	COMPLIANCE
	CO	100	81	COMPLIANCE
	TOC	20	5.5	COMPLIANCE
V34-21	NO _x -NO ₂	200	159	COMPLIANCE
	CO	100	69	COMPLIANCE
	TOC	20	18.1	COMPLIANCE
V40-22	NO _x -NO ₂	200	159	COMPLIANCE
	CO	100	66	COMPLIANCE
	TOC	20	4.1	COMPLIANCE
V43-23	NO _x -NO ₂	200	160	COMPLIANCE
	CO	100	82	COMPLIANCE
	TOC	20	2.8	COMPLIANCE

*Status conditions expressing the mass concentration of 0° C, 101.3 kPa, dry gas and reference oxygen value in waste gas 17% (vol.)
The requirement to comply with the emission limit by integrated permit for Paint shop*



Waste management

Kia Motors Slovakia s.r.o. is generating hazardous and other wastes by car production. Their amount and disposal method in the 3rd quarter 2013 is described in following table.

Wastes	Amount in t	Utilization in %	Disposal in %
Hazardous	1,312.01	4.11	95.89
Others	12,925.98	98.64	1.36
Total	14,237.99	89.93	10.07

Based on the Act No. 119/2010, obliged person – Kia Motors Slovakia s.r.o. ensures collection, recovery and recycling of packaging at its own expense.