

Environment – Quarterly Report – 4th Quarter 2011

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.

Index	Jedn	SM1	SM2	SM3	SM4	SM5	PM1	PM2	PM4	PM7	PM8	PM9	PM10	PM11	PV1	PV2
Level	m	6.92	6.94	6.65	6.87	6.57	6.24	6.19	9.41	7.25	8.30	8.10	7.50	7.18	-	-
Temperature	°C	12.10	12.20	12.00	11.80	10.90	11.20	11.90	11.90	11.80	12.00	14.09	11.80	13.10	6.00	5.60
pH	—	7.22	7.32	7.41	7.41	7.30	7.35	7.30	7.22	7.34	7.41	7.41	7.25	7.31	7.98	8.78
Conductivity	mS/m	71.90	76.50	72.80	76.40	77.60	71.00	71.90	71.60	66.80	83.10	70.80	75.80	77.60	49.40	48.40
COD-Mn	mg/l	0.94	< 0.05	0.47	0.63	0.47	0.31	0.31	0.63	0.78	0.47	0.94	0.47	0.31	3.61	3.14
Nitrates	mg/l	15.00	15.70	25.00	18.70	22.70	12.20	19.40	24.20	17.90	16.40	25.10	23.20	22.90	2.50	1.40
NEL-IR *	mg/l	0.14	0.09	0.10	0.08	0.09	0.08	0.07	0.07	0.11	0.17	0.19	0.09	0.11	0.09	0.07
BTX	mg/l	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	1.00	2.40	8.40	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
Ethylbenzene	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.20	0.20	< 0.10	< 0.10	< 0.10	< 0.10
Hydrocarbon index	mg/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Benzene	ug/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.50	1.50	5.60	0.20	< 0.10	< 0.10	< 0.10	< 0.10
Toluene	ug/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.30	0.60	1.80	0.20	< 0.10	< 0.10	< 0.10	< 0.10



Official Partner

Xylenes	ug/l	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	0.20	0.30	1.00	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
TOC	mg/l	2.41	1.83	1.68	1.62	1.70	1.49	1.44	1.46	1.30	1.13	1.38	1.17	1.35	4.03	3.88
Oxygen	mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-	11.20	15.13

Indexes of industrial waste water contamination

Quantity of industrial waste water discharged from Waste water treatment plant Kia into the public sewerage: 77,860.00 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*	7.84	377.00	124.00	966.00	11.90	0.38

* Indexes are set by qualified spot sample

Air protection

On October 3rd, 2011 there was carried out the authorized measurement of emissions to verify compliance with the set emission limits on exhaust New Dynamotest in object SO M005 Engine Shop based on the condition set in permit for object operation. The measurement confirmed that the emission limits were complied with.

Exhaust	Pollutant	Emission limit [mg.m ⁻³]	Average value [mg.m ⁻³]	Maximum [mg.m ⁻³]	Result
V2	dust	150	< 1	< 1	ACCORDANCE
	NOx	500	94	103	ACCORDANCE
	CO	undetermined	< 1	1	not assessed
	TOC	undetermined	4	5	not assessed

Emission limit and comparison values stated at: weight concentration in mg.m⁻³ under standard conditions (p=101.325 kPa, t=0°C), dry gas

Emission limits value:

General emission limit – Annex 3, part I to Regulation of MPZPaRR No. 356/2010 Coll.

Waste management

Kia Motors Slovakia s.r.o. is generating hazardous and other wastes by car production. Their amount and disposal method in the 4th quarter 2011 is described in following table.

Wastes	Amount in t	Utilization in %	Disposal in %
Hazardous	1,070.82	15.79	84.21
Others	10,696.93	98.52	1.48
Total	11,767.75	90.99	9.01