

Environment – Quarterly Report – 4th Quarter 2010

Groundwater and surface water monitoring system

Monitoring system of underground water is centred 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	6.50	6.45	6.38	6.32	6.00	6.35	6.12	9.16	6.61	6.85	7.03	7.02	6.28		
Temperature	°C	12.90	12.90	12.70	12.10	10.90	11.40	11.20	11.50	12.10	12.20	14.60	11.80	12.70	2.80	1.20
pH	—	7.56	7.59	7.66	7.60	7.80	7.61	7.64	7.56	7.68	7.72	7.81	7.60	7.64	8.63	8.76
Conductivity	mS/m	79.40	71.80	71.80	69.40	72.00	66.60	67.80	71.40	62.70	64.20	66.10	70.10	68.50	52.90	43.40
COD-Mn	mg/l	0.25	0.25	0.16	0.38	0.16	0.19	0.31	0.28	0.19	0.31	0.31	0.16	0.19	1.41	2.89
Nitrates	mg/l	11.10	11.80	20.00	24.10	21.80	14.00	22.60	28.30	11.40	10.80	17.50	22.30	22.30	1.00	0.70
NEL-IR *	mg/l	0.05	0.03	0.06	0.03	0.55	0.03	0.03	0.07	0.03	0.04	0.03	0.04	0.03	0.05	0.04
BTX	mg/l	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Etylbenzene	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Hydrocarbon index	mg/l	<0.10	<0.10	<0.10	<0.10	0.86	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzene	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Toluene	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	0.20	<0.05
Dimethylbenzenes	ug/l	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.10	<0.05



TOC	mg/l	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	
Oxygen	mg/l														>5.00	15.36

Indexes of industrial waste water contamination

Quantity of industrial waste water discharged into the public sewerage: 120,426.00 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	8.02	527.00	197.00	1,180.00	27.90	0.35

* 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.356/2010 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.

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 2010 is described in following table.

Wastes	Amount in t	Utilization in %	Disposal in %
Hazardous	932.78	9.00 %	91.00 %
Others	12,105.18	99.00 %	1.00 %
Total	13,037.96	93.00 %	7.00 %