

### ***11.3 Attachments to Chapter 3***

- Attachment 11.3.1:** Summarized data about characteristics of surface and groundwater used by Kozloduy Nuclear Power Plant during operation
- Attachment 11.3.2:** Vertebrates, inhabiting the region of Kozloduy NPP and Rare or endangered animal species habituating on the site and next to Kozloduy Nuclear Power Plant
- Attachment 11.3.3:** Characteristics of the soils in the 30km area of Kozloduy Nuclear Power Plant site
- Attachment 11.3.4:** Cultural heritage sites in the 30km area around Kozloduy Nuclear Power Plant
- Attachment 11.3.5:** Visual data and maps related to section 3.13

***Attachment 11.3.1 Summarized data about characteristics of surface and groundwater used by Kozloduy Nuclear Power Plant during operation***

1. EXTRACT OF CONCENTRATION VALUES FOR THE PERIOD 2003 - 2008															
Point name	Date	Water temperature	Diluted oxygene	Oxygen saturation	COD (bichromatic)	BOD5	Oxidation (permang)	Nitrogen (ammon.)	Nitrogen nitric	Nitrogen nitrate	Orophosphate PO4	pH	Suspended solids	Phenols (volatil)	Oil product
		oC	mg/l	%	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l		mg/l	mg/l	mg/l
MPC		-5		75	25	5	10	0.1	0.002	5	0.2	8.5	30	0.01	0
Danube river downstream Kozloduy town	15.05.2007	22.8	9.43	108		1.2	1.8					8.37	21		
Danube river downstream Kozloduy town	19.06.2007	25.4	6.24	76.1		1.42	2.98					8.16	26		
Danube river downstream Kozloduy town	10.07.2007	25.7	6.76	70.8		1.4	1.6					7.98	29		
Danube river downstream Kozloduy town	24.10.2007	14.5	3.93	38.1		0	1.05					8.28	26		0.101
Ogosta river at Danube confluence	21.01.2003	4.2	8.83	74		1.1	1.5	0.05	0.018	1.9	0.1	8.42	28		
Ogosta river at Danube confluence	19.02.2003	2.4	9.26	67.2	14	2.8	2	0.06	0.018	2.1	0.64	8.67	19		
Ogosta river at Danube confluence	05.03.2003	4.5	11	82.9		2.9	3.8	0.48	0.16	2.2	0.06	8.74	177		
Ogosta river at Danube confluence	10.04.2003	9.3	9.5	84			1.8	0.01	0.017	2	0.34	8.63	11		
Ogosta river at Danube confluence	14.05.2003	19.5	6.88	71.2	13	1.8	2.5	0.06	0.05	1.8	0.18	8.27	24		
Ogosta river at Danube confluence	12.06.2003	21.1	6.75	77.4	10	1.1	2.1	0.01	0.05	1.6	0.24	8.36	33		
Ogosta river at Danube confluence	09.07.2003	21.8	7.2	82.8		1.8	2.6	0.03	0.028	1.5	0.19	8.47	38		
Ogosta river at Danube confluence	05.08.2003	21.1	5.5	64	9	1.8	2.6	0.11	0.026	2.8	0.23	7.89	19		
Ogosta river at Danube confluence	03.09.2003	18.7	7.05	79.1		1.9	2.8	0.01	0.014	0.5	0.18	8.44	28		
Ogosta river at Danube confluence	22.10.2003	11.6	7.81	70.5		1	1.8	0.05	0.029	2.4	0.58	8.5	38		
Ogosta river at Danube confluence	06.11.2003	12.7	6.75	64	9	2	2.7	0.11	0.039	1.6	0.85	7.87	32		
Ogosta river at Danube confluence	10.12.2003	3.4	8.73	67.2	10	1	2.6	0.02	0.016	1.9	0.27	8.25	26		
Ogosta river at Danube confluence	30.01.2004	1.4	7.42	52.8	7.7	2.3	3.5	0.04	0.014	2.7	0	8.19	38		
Ogosta river at Danube confluence	05.02.2004	7.2	6.25	54.1	11.3	2.7	2.4	0	0.016	1.9	0.2	7.82	37		0
Ogosta river at Danube confluence	17.03.2004	10.1	8.98	79	16.4	3.9	2.6	0.04	0.037	2.2	0.19	8.01	19		
Ogosta river at Danube confluence	05.04.2004	10.3	7.6	73	15.1	1.9	1.6	0.19	0.052	1.9	0.33	7.51	30		
Ogosta river at Danube confluence	13.05.2004	17	6.45	67.1	10	3.5	2.9	0.04	0.013	1.7	0.14	8.2	38		
Ogosta river at Danube confluence	24.06.2004	21.4	6.18	64.2	13	1.24	3	0.005	0.034	1.7	0.57	7.84	61		
Ogosta river at Danube confluence	13.07.2004	22.4	4.02	46.5	23	1.1	1.2	0.02	0.089	1.16	0.42	7.87	31		
Ogosta river at Danube confluence	05.08.2004	23.8	8.15	97.6	14	2	1.96	0.092	0.013	1.23	0.34	8.51	74		0
Ogosta river at Danube confluence	15.09.2004	17.1	6.78	78.1	14	4.5	4.3	0.02	0.007	1.2	0.23	8.22	30		

**P16Del09Rev02\_EIA\_R – Chapter 11**

Ogosta river at Danube confluence	20.10.2004	16.2	9.04	86.7	15.3	2.1	1.98	0.087	0.008	1.76	0.592	8.09	33		
Ogosta river at Danube confluence	10.11.2004	11.8	8.53	79.1	16	2.1	1.9	0.03	0.008	2.3	1.13	8.77	31		
Ogosta river at Danube confluence	02.12.2004	7.9	7.58	62.6	10	2.5	1.95	0.025	0.007	1.94	0.29	7.91	29		
Ogosta river at Danube confluence	18.01.2005	1.8	6.39	46.8	13.1	1.29	1.76	0.16	0.006	2.21	0.151	8.26	30		
Ogosta river at Danube confluence	14.02.2005	0.7	5.64	41.6	19.2	2.59	2.7	0.029	0.012	2.18	0.324	8.22	42		0
Ogosta river at Danube confluence	09.03.2005	3.4	5.36	42.8	18	3.06	4.1	0.102	0.019	2.53	0.197	8.15	28		
Ogosta river at Danube confluence	05.04.2005	9.8	4.24	38.3	10	2.05	1.29	0.012	0.019	1.37	0.221	8.05	18.5		
Ogosta river at Danube confluence	10.05.2005	13.8	3.07	30.4	8.8	2.1	1.8	0.133	0.033	2.99	0.362	7.97	36		0
Ogosta river at Danube confluence	20.06.2005	19.2	2.45	26.5		2.36	3.35	0.033	0.02	1.62	0.074	7.79	37		
Ogosta river at Danube confluence	13.07.2005	20.2	4.26	44.9		2.12	2.67	0.052	0.051	1.78	0.52	7.8	47		
Ogosta river at Danube confluence	04.08.2005	21.5	7.41	84.6		3.3	2.26	0.022	0.015	0.692	0.14	7.83	50		
Ogosta river at Danube confluence	01.09.2005	19.1	6.88	73.7		2.4	2.68	0.01	0.029	1.99	0.093	7.73	50		
Ogosta river at Danube confluence	12.10.2005	16.2	7.62	77.8		1.35	1.4	0.011	0.024	2.83	0.106	7.49	26		
Ogosta river at Danube confluence	03.11.2005	12.2	10.3	95.7		2.1	3.88	0	0.012	1.22	0.067	8.2	26		
Ogosta river at Danube confluence	07.12.2005	7.9	6.68	78.6		1.3	1.87	0.033	0.03	2.6	0.083	7.69	19.5		
Ogosta river at Danube confluence	05.01.2006	5.2	10	105		1.75	1.76	0.069	0.029	1.81	0.097	8	28		
Ogosta river at Danube confluence	02.02.2006	4.8	11.1	85.2		2.6	3.72	0.094	0.025	4.1	0.071	8.94	26		
Ogosta river at Danube confluence	22.03.2006	10.6	8.49	76.9		1.24	1.84	0.039	0.035	3.16	0.104	8.1	30		
Ogosta river at Danube confluence	18.04.2006	12.9	6.66	74.9		2.01	2.86	0.038	0.03	2.5	0.18	8.47	56		
Ogosta river at Danube confluence	10.05.2006	14	7.08	78.1		2.13	2.66	0.023	0.024	1.52	0.104	8.02	40		
Ogosta river at Danube confluence	16.06.2006	20.1	6.05	65.6		1.75	2.36	0.155	0.066	2.84	0.126	7.81	23		
Ogosta river at Danube confluence	04.07.2006	19.2	6.98	75.9		2.68	3.27	0.257	0.083	1.82	0.063	7.87	41		
Ogosta river at Danube confluence	15.08.2006	20.6	3.45	38.2		1.92	0.93	0.035	0.19	2.12	0.285	8.58	29		
Ogosta river at Danube confluence	12.09.2006	17.6	10.5	101		1.82	2.5	0.022	0.012	1.09	0.015	8.46	37		
Ogosta river at Danube confluence	11.10.2006	16.3	8.9	88.2		2.33	2.04	0.042	0.056	2.34	0.029	8.4	24.5		
Ogosta river at Danube confluence	14.11.2006	8.8	9.66	83.6		2.14	2	0.013	0.019	2.39	0.25	8.16	19		
Ogosta river at Danube confluence	06.12.2006	11.2	8.85	73.5		1.71	3.17	0	0.018	3.65	0.002	8.18	22		
Ogosta river at Danube confluence	09.01.2007	6.6	6.49	52.6		2.78	1.34	0.051	0.021	2.9	0.133	8.06	28		
Ogosta river at Danube confluence	06.02.2007	7.2	10.2	97.1		3.02	2.19	0.053	0.019	3.92	0.046	8.36	39		
Ogosta river at Danube confluence	12.03.2007	7.6	11.8	108		2.46	1.95	0	0.022	2.35		7.99	27		



**P16Del09Rev02\_EIA\_R – Chapter 11**

Ogosta river at Danube confluence	16.04.2007	6.6	8.42	88.1		2.45	3.08	0	0.021	1.97		8.39	24		
Ogosta river at Danube confluence	10.05.2007	20.1	6.89	70.1		2.24	2.46	0	0.042	1.75		8.14	25		
Ogosta river at Danube confluence	19.06.2007	24.3	7.68	99.7		1.95	2.4	0	0.023	1.45		8.24	26		
Ogosta river at Danube confluence	10.07.2007	24.8	7.06	85.9		1.6	2.23	0	0.024	1.15		8.21	27		
Ogosta river at Danube confluence	01.08.2007	21.3	5.95	67.7		2.1	3.03	0	0.025	0.76		8.32	22		
Ogosta river at Danube confluence	17.09.2007	17.1	6.94	76		2.12	1.84	0	0.015	1.62		8.17	26		
Ogosta river at Danube confluence	24.10.2007	11.3	4.43	40.4		3.07	4.59	0.166	0.053	3.47		8.35	34		
Ogosta river at Danube confluence	08.11.2007	7.9	4.72	39.6		2.06	1.96	0.232	0.097	3.16		8.2	24		
Ogosta river at Danube confluence	04.12.2007	7.1	4.96	47.9		1.79	2.31	0.112	0.025	2.36		7.28	33		
Ogosta river at Danube confluence	12.02.2008	3.6	4.96	37.7	12.1	2.67		0.101	0.046	0.912	0.343	8.28	21	0.002	0.05
Ogosta river at Danube confluence	12.03.2008	12.1	5.65	52.7	13.8	2.8		0.003	0.018	0.81	0.257	7.57	11	0.002	
Ogosta river at Danube confluence	12.05.2008	16.2	8.05	84.9	9	2.84		0.197	0.018	2.23	0.019	8.24	11	0.005	
Ogosta river at Danube confluence	03.06.2008	18.9	8.18	89.4	22.4	5.84		0.041	0.034	1.39	0.298	8.26	19	0	
Ogosta river at Danube confluence	08.07.2008											8.15			
Ogosta river at Danube confluence	18.08.2008	26.7	8.6	106	18	3.81		0.023	0.003	1.66	0.077	8.57	5	0.001	
Ogosta river at Danube confluence	03.09.2008	23.8	9.08	112	26	4.8		0.008	0.014	0.85	0.218	8.65	13	0.002	
Ogosta river at Danube confluence	08.10.2008											8.37			
Ogosta river at Danube confluence	10.11.2008											8.65			
Ogosta river at Danube confluence	09.12.2008	5.6	10.5	92.6	8.4	2.36		0.016	0.014	2.21	0.561	8.43	20	0.001	0.091
Tsibritsa river at Dolni Tsibar	08.01.2003	2.9	12	88.7		2.58	7.44	0.163	0.052	4.41	0.613	8.03	105		
Tsibritsa river at Dolni Tsibar	04.02.2003	0.1	13.5	92.4		3.86	5.68	0.031	0.024	3.17	0.615	8.16	42		
Tsibritsa river at Dolni Tsibar	13.03.2003	9.4	11	96.2		1.12	2.88	0.058	0.029	5.44	0.154	8.2	42		
Tsibritsa river at Dolni Tsibar	02.04.2003	14.5	9.5	93.6		1.52	2.56	0.072	0.031	2.52	0.2	8.47	48		
Tsibritsa river at Dolni Tsibar	09.05.2003	19.3	8.7	95.1		1.29	1.92	0.063	0.05	6.07	1.08	8.35	96		
Tsibritsa river at Dolni Tsibar	03.06.2003	23.4	6.4	75.9		3.93	6.96	0.077	0.076	2.29	1.99	8.25	48		
Tsibritsa river at Dolni Tsibar	02.07.2003	28	6.7	86.8		1.66	2.8	0.07	0.067	4.88	0.4	8.45	42		
Tsibritsa river at Dolni Tsibar	06.08.2003	22.7	8.3	97.1		0.98	2.16	0.06	0.037	3.67	0.38	8.31	42		
Tsibritsa river at Dolni Tsibar	03.09.2003	18.8	10	108		1.4	2.56	0.16	0.014	0.83	0.42	8.35	30		
Tsibritsa river at Dolni Tsibar	07.10.2003	15.5	7.6	76.6		7.4	8.08	0.19	0.037	2.46	0.876	8.46	27		
Tsibritsa river at Dolni Tsibar	06.11.2003	10.7	9.3	85.9		6.14	7.68	0.07	0.03	3.09	0.19	8.39	41		

**P16Del09Rev02\_EIA\_R – Chapter 11**

Tsibritsa river at Dolni Tsibar	03.12.2003	7.1	9.6	79.3		5.04	6.8	0.074	0.032	2.59	1.55	8.46	48		
Tsibritsa river at Dolni Tsibar	13.01.2004	1.2	12.5	88.2		1.91	2.56	0.13	0.018	5.69	0.81	8.46	45		
Tsibritsa river at Dolni Tsibar	03.02.2004	7.2	11.7	96.8		3.78	5.6	0.16	0.021	3.83	5.73	8.5	48		
Tsibritsa river at Dolni Tsibar	04.03.2004	6.6	11	89.6		2.11	2.88	10.2	0.022	5.11	0.227	8.69	48		
Tsibritsa river at Dolni Tsibar	06.04.2004	11.4	9.7	89		3.31	4.16	0.085	0.035	4.95	0.232	8.41	49		
Tsibritsa river at Dolni Tsibar	04.05.2004	18.4	8.7	93.4		4.01	4.48	0.059	0.047	1.35	0.369	8.1	45		
Tsibritsa river at Dolni Tsibar	01.06.2004	20.9	6.9	77.9		4.02	4.56	0.103	0.065	3.05	0.038	8.33	47		
Tsibritsa river at Dolni Tsibar	06.07.2004	24.2	7.8	93.9		3.25	4.64	0.412	0.06	5.23	1.15	8.35	47		
Tsibritsa river at Dolni Tsibar	04.08.2004	22.5	6.6	76.9		3.63	4.2	0	0.035	5.9	0.81	8.43	38		
Tsibritsa river at Dolni Tsibar	07.09.2004	17.8	9.1	96.4		2.74	3.3	0.282	0.019	5.66	6.08	8.33	41		
Tsibritsa river at Dolni Tsibar	05.10.2004	15.8	8.2	83.2		2.08	3.4	0.016	0.017	5.17	0.985	8.39	42		
Tsibritsa river at Dolni Tsibar	03.11.2004	13.3	8	76.7		4.23	5.2	0.127	0.038	3.62	1.312	8.44	48		
Tsibritsa river at Dolni Tsibar	01.12.2004	7.9	9.8	82.6		1.63	3.1	0.99	0.021	4.95	4.95	8.38	48		
Tsibritsa river at Dolni Tsibar	18.01.2005	3.7	10.6	80.1		1.96	2.2	0.09	0.02	6.09	0.941	8.39	39		
Tsibritsa river at Dolni Tsibar	01.02.2005	4.2	12.2	93.4		2.76	3.4	0.161	0.019	6.4	0.778	8.48	41		
Tsibritsa river at Dolni Tsibar	10.03.2005	5	11.7	91.5		3.15	3.8	0.145	0.022	4.04	2.1	8.44	48		
Tsibritsa river at Dolni Tsibar	05.04.2005	12.8	12.7	120		3.72	4.3	0.094	0.014	2.73	1.23	8.39	52		
Tsibritsa river at Dolni Tsibar	03.05.2005	17.7	9.8	103		4.01	4.4	0.102	0.043	12	0.737	8.36	47		
Tsibritsa river at Dolni Tsibar	23.06.2005	22.7	6	70.2		3.06	3.9	0.052	0.055	5.09	0.124	8.21	47		
Tsibritsa river at Dolni Tsibar	21.07.2005	24.6	5.7	69.2		2.87	3.5	0.206	0.045	3.62	0.22	8.23	48		
Tsibritsa river at Dolni Tsibar	16.08.2005	15	6.3	62.8		10	10.7	0.098	0.051	2.55	0.252	8.04	89.6		
Tsibritsa river at Dolni Tsibar	08.09.2005	20.7	6.1	68.5		4.64	5.6	0.176	0.031	5.3		8.31	43		
Tsibritsa river at Dolni Tsibar	19.10.2005	8.8	6.6	56.7		4.85	6.2	0.25	0.023	3.57	0.127	7.91	46		
Tsibritsa river at Dolni Tsibar	02.11.2005	10.2	11.2	99.8		3.04	3.6	0.093	0.022	5.26	0.106	8.19	48		
Tsibritsa river at Dolni Tsibar	08.12.2005	5.5	11.6	66.8		2.76	3.5	0.098	0.022	3.95	0.192	8.37	49		
Tsibritsa river at Dolni Tsibar	10.01.2006	2.9	14.1	104		3.95	4.4	0.115	0.018	3.76	0.13	8.17	47		
Tsibritsa river at Dolni Tsibar	21.02.2006	4.5	11.7	90.3		5.76	6.4	0.176	0.051	6	0.53	7.9	81		
Tsibritsa river at Dolni Tsibar	07.03.2006	3.2	10.7	79.7		7.96	8.2	0.229	0.092	1.66		8.03	94		
Tsibritsa river at Dolni Tsibar	19.04.2006	15.9	8.3	84.4		5.12	5.8	0.09	0.032	7.41	0.136	8.01	70		
Tsibritsa river at Dolni Tsibar	16.05.2006	21.3	11.9	135		2.22	3.2	0.123	0.034	10.6		7.79	58		

**P16Del09Rev02\_EIA\_R – Chapter 11**

Tsibritsa river at Dolni Tsibar	22.06.2006	20.3	6.7	74.7		3.12	3.8	0.057	0.024	2.51	0.051	8.27	43		
Tsibritsa river at Dolni Tsibar	18.07.2006	23.6	8.8	105		3.21	3.8	0.047	0.074	16.7		8.4	46		
Tsibritsa river at Dolni Tsibar	22.08.2006	19.5	9.7	106		8.4	9.6	0.092	0.011	4.92		8.25	39		
Tsibritsa river at Dolni Tsibar	19.09.2006	15.9	9	91.5		4.5	5.8	0.165	0.008	3.69		8.47	45		
Tsibritsa river at Dolni Tsibar	17.10.2006	13.1	7.2	68.7		2.5	3.2	0.036	0.013	1.27		8.42	48		
Tsibritsa river at Dolni Tsibar	07.11.2006	10.3	10.9	97.4		2	2.4	0.047	0.029	14.7		8.34	43		
Tsibritsa river at Dolni Tsibar	07.12.2006	10.9	9.1	82.5		4	4.4	0.33	0.007	3.83		8.03	45		
Tsibritsa river at Dolni Tsibar	24.01.2007	8.3	11.5	97.8		2.6	3.2	0.184	0.032	16.4		8.28	40		
Tsibritsa river at Dolni Tsibar	20.02.2007	10	9.4	83.4		2.1	2.8	0.054	0.006	2.64		8.31	42		
Tsibritsa river at Dolni Tsibar	27.03.2007	12.6	9.5	89.6		4.7	5.4	0.04	0.007	2.44		8.48	48		
Tsibritsa river at Dolni Tsibar	23.04.2007	12.5	8.2	75.8		2.4	2.9	0.042	0.012	2		8.42	42		
Tsibritsa river at Dolni Tsibar	29.05.2007	18	8.3	88.3		3.2	4.1	0.07	0.013	3.22	0.475	8.34	56		
Tsibritsa river at Dolni Tsibar	26.06.2007	21	6.9	78.1		2.8	3.2	0.098	0.013	2.47		8.5	45		
Tsibritsa river at Dolni Tsibar	17.07.2007	27.6	7	90		4	4.8	0.101	0.079	7.11	5.002	8.44	71		
Tsibritsa river at Dolni Tsibar	21.08.2007	20.9	6.1	68.8		5.3	5.8	0.594	0.01	18		8.48	45		
Tsibritsa river at Dolni Tsibar	18.09.2007	19	6.5	70.6		3.1	3.4	0.177	0.01	2.28		8.27	45		
Tsibritsa river at Dolni Tsibar	16.10.2007	12.1	7.3	68.1		2.6	3.6	0.139	0.019	2.37		8.44	48		
Tsibritsa river at Dolni Tsibar	13.11.2007	7.5	7.1	59.2		3.5	4.1	0.083	0.01	1.35		7.36	64		
Tsibritsa river at Dolni Tsibar	05.02.2008		10.3	82.3	11.2	3.2		0.521	0.023	9.61		8.04			
Tsibritsa river at Dolni Tsibar	15.05.2008		8.9	82.4	11.7	3.6		0.828	0.009	1.48		8.27	50	0	
Tsibritsa river at Dolni Tsibar	10.06.2008	22.1	9.4	108	15.8	3.6		0.037	0.045	6.46		8.19	45	0	
Tsibritsa river at Dolni Tsibar	12.08.2008		7	80.92	9.6	2.1		0.04	0.039	8.71		8.2	48	0.002	
Tsibritsa river at Dolni Tsibar	09.09.2008	23.5	7.8	92.64	15.8	3.4		0.053	0.038	12.289		7.97	48	0.002	
Tsibritsa river at Dolni Tsibar	11.11.2008	8.9	9.2	79.45	10.7	2.7		0.078	0.037	6.283		7.89	43	0.002	
Tsibritsa river at Dolni Tsibar	09.12.2008		8.2	66.59	10.3	2.5		0.056	0.027	8.768		8.39	46	0.002	

## 2 SUMMARY RESULTS OF PHYSICAL AND CHEMICAL TESTS GROUNDWATER IN KOZLODUY NPP REGION FOR 2006

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	5.46	5.9	6.4	6.37
pH	-	$\geq 6,5$ and $\leq 9,5$		7.74	7.93	8	7.96
Dissolved solids	mg/dm <sup>3</sup>	500	1000	596	658	617	559
Chlor-ion content	mg/dm <sup>3</sup>	30	100	19.8	24.8	17.7	17
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	59.6	26.9	40.1	33.4
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	<0.003	0.034	0.05	0.129
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.026	0.026	<0.001	0.012
Nitrates content	mg/dm <sup>3</sup>	10	30	21.1	20.9	13.7	12.1
Permang.oxidation	mg/dm <sup>3</sup>	-	-	4.51	0.952	1.3	1.42
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2 <sup>1</sup>		0.085	0.056	0.1	0.09
Ferrous content /total/	$\mu\text{g/dm}^3$	50	200	-	-	200	-
Mangan. content /total/	$\mu\text{g/dm}^3$	20	50	-	-	< 5	-
Lead content	$\mu\text{g/dm}^3$	30	200	-	-	< 5	-

**Table 2-1. Results for samples test from test pit No 122**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	6.68	7.10	7.53	7.42
pH	-	$\geq 6,5$ and $\leq 9,5$		7.62	7.55	7.7	7.5
Dissolved solids	mg/dm <sup>3</sup>	500	1000	<b>1095</b>	<b>1187</b>	<b>1198</b>	<b>1093</b>
Chlor-ion content	mg/dm <sup>3</sup>	30	100	51.8	54.6	52.5	53.2
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	124	130	<b>239</b>	129
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.012	0.135	0.144	0.028
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.08	0.020	0.038	0.019
Nitrates content	mg/dm <sup>3</sup>	10	30	26.4	24.7	23.2	19.8
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.04	0.648	1.66	1.57
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.521	0.609	0.646	0.542
Ferrous content /total/	$\mu\text{g/dm}^3$	50	200	-	-	120	-
Mangan. content /total/	$\mu\text{g/dm}^3$	20	50	-	-	< 5	-
Lead content	$\mu\text{g/dm}^3$	30	200	-	-	< 5	-

**Table 2-2. Results for samples test from test pit No 127**

Monitored indicator	Unit	Limit envir.content	Contaminat ion limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	0.79	4.25	4.78	1.41
pH	-	$\geq 6,5$ and $\leq 9,5$		7.98	7.92	8.2	8.01
Dissolved solids	mg/dm <sup>3</sup>	500	1000	226	445	479	377
Chlor-ion content	mg/dm <sup>3</sup>	30	100	20.6	48.9	53.9	46.8
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	24.7	28.8	58.7	39.8
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.042	0.019	<0.003	0.021
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.038	0.008	<0.001	0.014
Nitrates content	mg/dm <sup>3</sup>	10	30	8.14	9.18	6.04	8.52
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.43	2.70	4.25	4.5
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.564	1.344	1.509	0.891
Ferrous content /total/	$\mu\text{g/dm}^3$	50	200	-	-	198	-
Mangan. content /total/	$\mu\text{g/dm}^3$	20	50	-	-	< 5	-

P16Del09Rev02\_EIA\_R – Chapter 11

Monitored indicator	Unit	Limit envir.content	Contaminat ion limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Lead content	µg/dm <sup>3</sup>	30	200	-	-	< 5	-

**Table 2-3. Results for samples test from test pit No 334/335**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	5.72	5.70	6.52	6.12
pH	-	≥ 6,5 and ≤ 9,5		7.79	7.73	7.85	7.73
Dissolved solids	mg/dm <sup>3</sup>	500	1000	607	663	633	599
Chlor-ion content	mg/dm <sup>3</sup>	30	100	14.2	18.4	12	12.1
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	88.5	64.5	92.3	80.8
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.006	0.058	0.018	0.037
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.017	0.022	<0.001	0.008
Nitrates content	mg/dm <sup>3</sup>	10	30	<b>52.3</b>	<b>52.3</b>	35.1	22.9
Permang.oxidation	mg/dm <sup>3</sup>	-	-	0.55	0.72	0.568	0.496
Total β – activity	Bq/dm <sup>3</sup>	2		0.069	0.078	<0.016	0.096
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	-	-	130	-
Mangan. content /total/	µg/dm <sup>3</sup>	20	50	-	-	< 5	-
Lead content	µg/dm <sup>3</sup>	30	200	-	-	< 5	-

**Table 2-4. Results for samples test from test pit No 422**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	7.04	7.45	7.63	7.5
pH	-	≥ 6,5 and ≤ 9,5		<b>10.3</b>	<b>10.31</b>	<b>10,33</b>	<b>10.64</b>
Dissolved solids	mg/dm <sup>3</sup>	500	1000	342	464	402	383
Chlor-ion content	mg/dm <sup>3</sup>	30	100	21.9	21.3	17.7	19.1
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	97.7	<b>180</b>	<b>160</b>	117
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	2.74	0.209	0.089	0.18
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.08	<b>0.399</b>	<b>0.399</b>	<b>0.87</b>
Nitrates content	mg/dm <sup>3</sup>	10	30	18.9	8.45	8.45	3.93
Permang.oxidation	mg/dm <sup>3</sup>	-	-	0.41	1.92	2.74	1.76
Total β – activity	Bq/dm <sup>3</sup>	2		0.386	0.441	0.632	0.572
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	-	-	100	-
Mangan. content /total/	µg/dm <sup>3</sup>	20	50	-	-	< 5	-
Lead content	µg/dm <sup>3</sup>	30	200	-	-	< 5	-

**Table 2-5. Results for samples test from test pit No 632**

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	4.5	5.3	6.2	4.34
pH	-	$\geq 6,5$ and $\leq 9,5$		8.4	.02	7.71	8.8
Dissolved solids	mg/dm <sup>3</sup>	500	1000	197	804	588	286
Chlor-ion content	mg/dm <sup>3</sup>	30	100	< 10	20.6	18.4	17.7
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	65,1	<b>226</b>	133	122
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.045	0.280	0.048	0.059
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.066	0.077	0.007	0.089
Nitrates content	mg/dm <sup>3</sup>	10	30	3.78	2.52	2.82	2.51
Permang.oxidation	mg/dm <sup>3</sup>	-	-	0.87	2.62	0.648	2.23
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.178	0.111	0.102	0.099
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	-	190	-
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	-	< 5	-
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	-	< 5	-

**Table 2-6. Results for samples test from test pit No 834**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	7.2	7.5	7.8	7.7
pH	-	$\geq 6,5$ and $\leq 9,5$		7.47	7.41	7.73	7.83
Dissolved solids	mg/dm <sup>3</sup>	500	1000	772	658	629	632
Chlor-ion content	mg/dm <sup>3</sup>	30	100	< 10	< 10	< 10	< 10
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	76.6	20.8	38.3	40.2
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	<0.003	0.070	0.016	0.027
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.003	0.009	<0.001	0.007
Nitrates content	mg/dm <sup>3</sup>	10	30	19.9	8.80	10.8	7.26
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.23	0.240	0.728	0.456
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.075	0.145	0.120	0.187
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	-	<b>205</b>	-
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	-	< 5	-
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	-	< 5	-

**Table 2-7. Results for samples test from test pit No Cp-3**

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	7.2	7.5	7.6	7.62
pH	-	$\geq 6,5$ and $\leq 9,5$		7.7	7.72	7.9	7.98
Dissolved solids	mg/dm <sup>3</sup>	500	1000	<b>1630</b>	638	<b>1391</b>	573
Chlor-ion content	mg/dm <sup>3</sup>	30	100	73	73.7	<b>119</b>	<b>112</b>
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	<b>210</b>	146	<b>191</b>	<b>176</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.018	0.130	<0.003	0.044
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.017	0.015	<0.001	0.057
Nitrates content	mg/dm <sup>3</sup>	10	30	<b>36.1</b>	<b>35.9</b>	20.4	24.3
Permang.oxidation	mg/dm <sup>3</sup>	-	-	2.09	0.552	1.1	1.66
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		<0.014	<0.009	<0.016	<0.013
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	-	163	-
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	-	< 5	-
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	-	< 5	-

**Table 2-8. Results for samples test from test pit No Cw-4**

**P16Del09Rev02\_EIA\_R – Chapter 11**

**3. SUMMARY RESULTS FROM PHYSICAL AND CHEMICAL TESTS OF GROUNDWATER  
IN KOZLODUY NPP REGION FOR 2007**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	5.9	7.6	-	-
pH	-	≥ 6,5 and ≤ 9,5		7.71	8.18	-	-
Dissolved solids	mg/dm <sup>3</sup>	500	1000	600	577	-	-
Chlor-ion content	mg/dm <sup>3</sup>	30	100	17.7	17	-	-
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	23.9	28.9	-	-
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	< 0.001	0.008	-	-
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.006	< 0.001	-	-
Nitrates content	mg/dm <sup>3</sup>	10	30	15	15.9	-	-
Permang.oxidation	mg/dm <sup>3</sup>	-	-	0.888	0.112	-	-
Total β – activity	Bq/dm <sup>3</sup>	2 <sup>1</sup>		0.113	0.092	-	-
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	110	-	-
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	5	-	-
Lead content	μg/dm <sup>3</sup>	30	200	-	5	-	-

**Table 3-1 Results for samples test from test pit No 122.**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	7.5	7.25	7.6	-
pH	-	≥ 6.5 and ≤ 9.5		7.63	7.68	8.16	8.04
Dissolved solids	mg/dm <sup>3</sup>	500	1000	<b>1164</b>	<b>1163</b>	<b>1150</b>	<b>1183</b>
Chlor-ion content	mg/dm <sup>3</sup>	30	100	56	53.3	61.1	57.4
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	150	104	145	<b>205</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.013	0.02	< 0.001	0.012
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.01	0.019	0.018	0.02
Nitrates content	mg/dm <sup>3</sup>	10	30	26.5	<b>31.1</b>	<b>38.2</b>	<b>34.8</b>
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.39	0.56	1.34	3.1
Total β – activity	Bq/dm <sup>3</sup>	2		0.491	0.526	0.433	0.116
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	90	75	<b>329</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	< 5	< 5	< 5
Lead content	μg/dm <sup>3</sup>	30	200	-	< 5	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.052	-
Cadmium content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	0.6	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	5	-
Zink content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	14	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	2	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-2 Results for samples test from test pit No 127.**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	0.95	1.2	1.05	-
pH	-	≥ 6,5 and ≤ 9,5		7.78	8.02	8.1	7.7
Dissolved solids	mg/dm <sup>3</sup>	500	1000	312	609	523	221
Chlor-ion content	mg/dm <sup>3</sup>	30	100	29	97.8	65.4	14.9



**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	27.8	45.1	44.1	16.8
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.027	0.012	< 0.001	0.031
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.048	0.018	0.015	0.07
Nitrates content	mg/dm <sup>3</sup>	10	30	8.94	12.3	14.6	12.3
Permang.oxidation	mg/dm <sup>3</sup>	-	-	2.32	1.92	3.68	1.58
Total β – activity	Bq/dm <sup>3</sup>	2		0.744	1.302	1.277	0.66
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	90	82	<b>917</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	< 5	< 5	14
Lead content	μg/dm <sup>3</sup>	30	200	-	< 5	< 5	10
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.273	-
Cadmiun content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	3.9	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	6	-
Zink content	μg/dm <sup>3</sup>	200	1000	-	-	11	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-3 Results for samples test from test pit No 334.**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	5.95	6.7	7.1	-
pH	-	≥ 6,5 and ≤ 9,5		7.57	7.85	8.16	7.58
Dissolved solids	mg/dm <sup>3</sup>	500	1000	648	651	636	653
Chlor-ion content	mg/dm <sup>3</sup>	30	100	12.8	14.9	16.1	12.7
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	65.6	64.4	72.6	71.9
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	< 0.001	0.029	0.049	0.009
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.016	0.002	0.007	0.025
Nitrates content	mg/dm <sup>3</sup>	10	30	<b>41.7</b>	<b>40.4</b>	<b>62.3</b>	<b>58.8</b>
Permang.oxidation	mg/dm <sup>3</sup>	-	-	0.6	0.232	2.27	0.768
Total β – activity	Bq/dm <sup>3</sup>	2		0.135	0.105	0.125	0.091
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	140	125	<b>280</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	6	< 5	< 5
Lead content	μg/dm <sup>3</sup>	30	200	-	< 5	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.061	-
Cadmiun content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	1.2	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	3	-
Zink content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	7	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-4 Results for samples test from test pit No 422.**

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	7.6	6	-	-
pH	-	$\geq 6,5$ and $\leq 9,5$		<b>9.6</b>	<b>10.43</b>	-	-
Dissolved solids	mg/dm <sup>3</sup>	500	1000	411	395	-	-
Chlor-ion content	mg/dm <sup>3</sup>	30	100	19.1	21.3	-	-
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	123	79.5	-	-
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.025	0.122	-	-
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.095	<b>0.360</b>	-	-
Nitrates content	mg/dm <sup>3</sup>	10	30	8.49	8.68	-	-
Permang.oxidation	mg/dm <sup>3</sup>	-	-	2.13	3.15	-	-
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.423	0.105	-	-
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	125	-	-
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	< 5	-	-
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	< 5	-	-

**Table 3-5 Results for samples test from test pit No 632.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	5.5	-	-
pH	-	$\geq 6,5$ and $\leq 9,5$		8.09	9.03	-	-
Dissolved solids	mg/dm <sup>3</sup>	500	1000	244	332	-	-
Chlor-ion content	mg/dm <sup>3</sup>	30	100	10.6	18.4	-	-
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	73.9	102	-	-
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.001	0.094	-	-
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.074	<b>0.127</b>	-	-
Nitrates content	mg/dm <sup>3</sup>	10	30	5.53	3.55	-	-
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.94	1.37	-	-
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.134	0.106	-	-
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	100	-	-
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	< 5	-	-
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	< 5	-	-

**Table 3-6 Results for samples test from test pit No 834.**

Monitored indicator	Unit	Limit envir.content	Contaminatio n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	7.5	6.3	8.05	-
pH	-	$\geq 6,5$ and $\leq 9,5$		7.33	7.68	7.62	7.38
Dissolved solids	mg/dm <sup>3</sup>	500	1000	672	698	701	716
Chlor-ion content	mg/dm <sup>3</sup>	30	100	< 10	< 10	< 10	7.09
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	36.9	39.1	32.1	25.1
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.013	0.042	0.011	0.011
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.01	< 0.001	0.002	0.006
Nitrates content	mg/dm <sup>3</sup>	10	30	13	14.5	<b>44.7</b>	13.4
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.02	0.304	2.05	0.92
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		0.16	0.078	0.066	0.107
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	85	110	83
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	< 5	< 5	< 5
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	< 5	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.028	-
Cadmiun content	$\mu\text{g}/\text{dm}^3$	1	5	-	-	< 1	-

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination n limit	I-st trimestre	II-nd trimest re	III-rd trimest re	IV-th trimest re
Arsenic content	µg/dm <sup>3</sup>	10	30	-	-	1.6	-
Copper content	µg/dm <sup>3</sup>	30	100	-	-	3	-
Zink content	µg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	µg/dm <sup>3</sup>	5	50	-	-	6	-
Nikel content	µg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	µg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	µg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-7 Results for samples test from test pit No Cp-3.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	7.5	5.4	7.8	-
pH	-	≥ 6,5 and ≤ 9,5		7.55	8.01	7.82	7.76
Dissolved solids	mg/dm <sup>3</sup>	500	1000	687	703	<b>1642</b>	969
Chlor-ion content	mg/dm <sup>3</sup>	30	100	36.9	67.3	13.5	63.8
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	<b>221</b>	121	<b>204</b>	<b>222</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	< 0.001	0.046	0.108	0.003
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.021	0.024	0.021	0.017
Nitrates content	mg/dm <sup>3</sup>	10	30	<b>43.3</b>	<b>47</b>	<b>51.3</b>	<b>38.5</b>
Permang.oxidation	mg/dm <sup>3</sup>	-	-	1.18	0.464	1.59	0.65
Total β – activity	Bq/dm <sup>3</sup>	2		< 0.014	< 0.019	0.042	0.115
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	-	120	<b>380</b>	199
Mangan. content /total/	µg/dm <sup>3</sup>	20	50	-	< 5	< 5	< 5
Lead content	µg/dm <sup>3</sup>	30	200	-	< 5	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	< 0.005	-
Cadmium content	µg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	µg/dm <sup>3</sup>	10	30	-	-	2	-
Copper content	µg/dm <sup>3</sup>	30	100	-	-	5	-
Zink content	µg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	µg/dm <sup>3</sup>	5	50	-	-	26	-
Nikel content	µg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	µg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	µg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-8 Results for samples test from test pit No Cw-4.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	6.2	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	8.26	7.94
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	742	717
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	23.5	20.6
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	83.3	64.9
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	< 0.001	0.002
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.007	0.120
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	19.6	20.1
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	1.28	1.06
Total β – activity	Bq/dm <sup>3</sup>	2		2	-	0.117	0.117
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	-	-	55	<b>300</b>

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Mangan. content /total/	µg/dm <sup>3</sup>	20	50	-	-	< 5	6
Lead content	µg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.11	-
Cadmium content	µg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	µg/dm <sup>3</sup>	10	30	-	-	0.6	-
Copper content	µg/dm <sup>3</sup>	30	100	-	-	4	-
Zinc content	µg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	µg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	µg/dm <sup>3</sup>	20	100	-	-	3	-
Cobalt content	µg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	µg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-9 Results for samples test from test pit No 114 (NEW).**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	7.5	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	-	7.35
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	638	630
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	26	21.9
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	52.2	46.8
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.008	0.013
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.013	0.04
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	<b>56.3</b>	< 0.003
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	1.18	0.904
Total β – activity	Bq/dm <sup>3</sup>	2	-	2	-	0.067	0.113
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	-	-	< 50	<b>455</b>
Mangan. content /total/	µg/dm <sup>3</sup>	20	50	-	-	< 5	< 5
Lead content	µg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.205	-
Cadmium content	µg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	µg/dm <sup>3</sup>	10	30	-	-	0.6	-
Copper content	µg/dm <sup>3</sup>	30	100	-	-	3	-
Zinc content	µg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	µg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	µg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	µg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	µg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-10 Results for samples test from test pit No 121 (NEW).**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	7.6	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	-	7.72
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	<b>1650</b>	<b>1870</b>
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	<b>361</b>	<b>368</b>
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	<b>174</b>	<b>180</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	< 0.001	0.006
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.006	0.031

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	<b>110</b>	0.409
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	1.22	0.568
Total β – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.279
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	-	56	<b>250</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	-	< 5	< 5
Lead content	μg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.073	-
Cadmium content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	1.6	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	3	-
Zinc content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	10	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	2	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-11 Results for samples test from test pit No 135 (NEW).**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	7.9	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	-	7.53
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	484	405
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	22.5	18.4
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	46.3	25.8
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	1.86	0.015
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.009	0.021
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	16	10.2
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	1.94	0.6
Total β – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.074
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	-	63	<b>279</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	-	< 5	< 5
Lead content	μg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.037	-
Cadmium content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	0.3	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	5	-
Zinc content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	2	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-12 Results for samples test from test pit No 213 (NEW).**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	7.15	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	-	8.25
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	649	654

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	43	43.9
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	73.4	67
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.074	0.035
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.034	0.082
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	<b>31.4</b>	<b>30.4</b>
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	4.97	0.616
Total β – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.097
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	-	< 50	<b>830</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	-	< 5	10
Lead content	μg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.15	-
Cadmium content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	3.6	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	4	-
Zinc content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	21	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-13 Results for samples test from test pit No 237 (NEW).**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	7.6	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	-	9.14
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	418	409
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	11.1	12.1
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	<b>166</b>	<b>153</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.054	0.009
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.02	0.085
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	24.3	13.6
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	4.49	3.46
Total β – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.098
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	-	59	92
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	-	< 5	< 5
Lead content	μg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.113	-
Cadmium content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	8.7	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	6	-
Zinc content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	6	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-14 Results for samples test from test pit No 512 (NEW)**

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	8.05	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	-	7.91
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	555	497
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	39.8	26.2
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	<b>160</b>	113
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.017	0.009
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.014	0.03
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	15.7	5.39
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	1.94	1.86
Total β – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.356
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	-	< 50	<b>213</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	-	12	35
Lead content	μg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.116	-
Cadmiun content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	3.6	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	4	-
Zink content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-15 Results for samples test from test pit No 614 (NEW).**

Monitored indicator	Unit	Limit envir.conte nt	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	8	-
pH	-	≥ 6,5 and ≤ 9,5		-	-	8.04	8.04
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	792	847
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	90.7	69.5
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	40.4	71.1
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	<b>1.24</b>	0.474
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	1.12	0.072
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	14.1	28.5
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	5.25	1.78
Total β – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.079
Ferrous content /total/	μg/dm <sup>3</sup>	50	200	-	-	62	<b>219</b>
Mangan. content /total/	μg/dm <sup>3</sup>	20	50	-	-	<b>68</b>	<b>59</b>
Lead content	μg/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	1.43	-
Cadmiun content	μg/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	μg/dm <sup>3</sup>	10	30	-	-	5.8	-
Copper content	μg/dm <sup>3</sup>	30	100	-	-	3	-
Zink content	μg/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	μg/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	μg/dm <sup>3</sup>	20	100	-	-	< 1	-
Cobalt content	μg/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	μg/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-16 Results for samples test from test pit No 735 (NEW).**



**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	8.1	7.9
pH	-	$\geq 6,5$ and $\leq 9,5$		-	-	-	7.58
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	503	623
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	17.7	29.8
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	53.5	90.8
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.051	< 0.003
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.01	0.021
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	5.85	15.1
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	4.15	2.46
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.099
Ferrous content /total/	$\mu$ g/dm <sup>3</sup>	50	200	-	-	< 50	153
Mangan. content /total/	$\mu$ g/dm <sup>3</sup>	20	50	-	-	<b>120</b>	28
Lead content	$\mu$ g/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.15	-
Cadmiun content	$\mu$ g/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	$\mu$ g/dm <sup>3</sup>	10	30	-	-	0.7	-
Copper content	$\mu$ g/dm <sup>3</sup>	30	100	-	-	7	-
Zink content	$\mu$ g/dm <sup>3</sup>	200	1000	-	-	< 5	-
Chrome content	$\mu$ g/dm <sup>3</sup>	5	50	-	-	< 5	-
Nikel content	$\mu$ g/dm <sup>3</sup>	20	100	-	-	3	-
Cobalt content	$\mu$ g/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	$\mu$ g/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-17 Results for samples test from test pit No P-1 (NEW).**

Monitored indicator	Unit	Limit envir.conte nt	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	10.4	10.1
pH	-	$\geq 6,5$ and $\leq 9,5$		-	-	-	7.63
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	<b>1220</b>	<b>1379</b>
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	<b>159</b>	<b>167</b>
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	<b>239</b>	<b>293</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.042	< 0.003
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	0.052	0.009
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	<b>55.7</b>	<b>69</b>
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	4.23	1.43
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.105
Ferrous content /total/	$\mu$ g/dm <sup>3</sup>	50	200	-	-	< 50	88
Mangan. content /total/	$\mu$ g/dm <sup>3</sup>	20	50	-	-	< 5	< 5
Lead content	$\mu$ g/dm <sup>3</sup>	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.162	-
Cadmiun content	$\mu$ g/dm <sup>3</sup>	1	5	-	-	< 1	-
Arsenic content	$\mu$ g/dm <sup>3</sup>	10	30	-	-	0.6	-
Copper content	$\mu$ g/dm <sup>3</sup>	30	100	-	-	7	-
Zink content	$\mu$ g/dm <sup>3</sup>	200	1000	-	-	14	-
Chrome content	$\mu$ g/dm <sup>3</sup>	5	50	-	-	23	-
Nikel content	$\mu$ g/dm <sup>3</sup>	20	100	-	-	4	-
Cobalt content	$\mu$ g/dm <sup>3</sup>	5	100	-	-	< 1	-
Mercury	$\mu$ g/dm <sup>3</sup>	0.5	2	-	-	< 0.3	-

**Table 3-18 Results for samples test from test pit No P-2 (NEW).**



**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimest re	III-rd trimest re	IV-th trimest re
Water table	m	-	-	-	-	11.2	10.5
pH	-	$\geq 6,5$ and $\leq 9,5$		-	-	-	7.84
Dissolved solids	mg/dm <sup>3</sup>	500	1000	-	-	<b>1076</b>	<b>1160</b>
Chlor-ion content	mg/dm <sup>3</sup>	30	100	-	-	47.5	60.9
Sulphat-ion content	mg/dm <sup>3</sup>	50	150	-	-	106	<b>164</b>
Nitrogen-ion content	mg/dm <sup>3</sup>	0.12	1.2	-	-	0.243	0.004
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	-	-	1.14	0.023
Nitrates content	mg/dm <sup>3</sup>	10	30	-	-	12.9	14.9
Permang.oxidation	mg/dm <sup>3</sup>	-	-	-	-	3.65	1.34
Total $\beta$ – activity	Bq/dm <sup>3</sup>	2		-	-	-	0.092
Ferrous content /total/	$\mu\text{g}/\text{dm}^3$	50	200	-	-	< 50	81
Mangan. content /total/	$\mu\text{g}/\text{dm}^3$	20	50	-	-	<b>467</b>	<b>129</b>
Lead content	$\mu\text{g}/\text{dm}^3$	30	200	-	-	< 5	< 5
Phosphate content	mg/dm <sup>3</sup>	0.1	1	-	-	0.116	-
Cadmiun content	$\mu\text{g}/\text{dm}^3$	1	5	-	-	< 1	-
Arsenic content	$\mu\text{g}/\text{dm}^3$	10	30	-	-	0.9	-
Copper content	$\mu\text{g}/\text{dm}^3$	30	100	-	-	7	-
Zink content	$\mu\text{g}/\text{dm}^3$	200	1000	-	-	9	-
Chrome content	$\mu\text{g}/\text{dm}^3$	5	50	-	-	9	-
Nikel content	$\mu\text{g}/\text{dm}^3$	20	100	-	-	6	-
Cobalt content	$\mu\text{g}/\text{dm}^3$	5	100	-	-	< 1	-
Mercury	$\mu\text{g}/\text{dm}^3$	0.5	2	-	-	< 0.3	-

**Table 3-19 Results for samples test from test pit No P-3 (NEW)**

**P16Del09Rev02\_EIA\_R – Chapter 11**

**4. SUMMARY RESULTS FROM CHEMICAL ANALYSES OF INTAKEN GROUNDWATER FOR 2008**

No	Indicator	Unit	SW “Valiata”	SW “Taney5”	SPS1	SPS2	SPS3	SPS4	SPS5	SPS6	Regulatory limit
1.	Electrical conductivity	$\mu\text{S cm}^{-1}$	1151	741	1085	681	650	939	836	767	2000
2.	General hardness	$\text{mg}\Sigma\text{qv/l}$	8.67	7.24	10.41	6.84	6.73	10.1	8.97	7.65	12
3.	Permangan.oxidation	$\mu\text{g O}_2/\text{dm}^3$	0.39	1.63	1.45	1.45	1.52	1.74	1.6	1.49	5.0
4.	pH	pH value	7.53	7.36	7.65	7.51	7.61	7.52	7.48	7.75	$\geq 6,5$ and $\leq 9,5$
5.	Ammonia-ions	$\text{mg}/\text{dm}^3$	< 0.013	< 0.013	0.158	< 0.013	< 0.013	0.125	< 0.013	< 0.013	0.50
6.	Nitrates	$\text{mg}/\text{dm}^3$	18.1	< 0.4	29.7	4.7	< 0.4	1	< 0.4	1	50.0
7.	Nitrites	$\text{mg}/\text{dm}^3$	0.017	0.96	0.019	0.016	0.015	0.017	0.015	0.016	0.50
8.	Sulphates	$\text{mg}/\text{dm}^3$	82.7	41.6	128.8	56.8	54.7	157.2	106.6	70.8	250
9.	Chlorides	$\text{mg}/\text{dm}^3$	127.8	34.8	55.4	15.6	22	29.8	26.3	22.7	250
10.	Phosphates	$\text{mg}/\text{dm}^3$	0.06	< 0.03	< 0.03	0.06	< 0.03	0.03	0.05	< 0.03	0.50
11.	Copper	$\text{mg}/\text{dm}^3$	0.0035	< 0.002	< 0.002	0.0029	0.0024	< 0.002	0.0036	0.0037	2.0
12.	Lead	$\mu\text{g}/\text{dm}^3$	< 10	< 10	< 10	< 10	10	< 10	10	11	10
13.	Iron	$\mu\text{g dm}^3$	30.4	3855	91.3	42	90.8	231.5	167.4	20.2	200
14.	Magnesium	$\text{mg dm}^3$	55.8	25.4	67	34.1	42.5	41.6	45.3	34.7	80
15.	Manganese	$\mu\text{g}/\text{dm}^3$	3	1466	5.5	20	20.4	25.6	10.4	2.5	50
16.	Boron	$\text{mg}/\text{dm}^3$	0.0534	0.0405	0.0362	0.0254	0.0182	0.0177	0.0185	0.019	1.0

## 5. SUMMARY RESULTS FROM PHYSICAL AND CHEMICAL TESTS OF WASTE AND GROUNDWATER OF THE REPOSITORY FOR CONVENTIONAL MUNICIPAL AND INDUSTRIAL WASTES (RCMIW) FOR 2006

Monitored indicator	Unit	Limit enviro.content	Contamination limit	I-st trimestre	II-nd trimestre
pH	-	7.71	7.29	7.52	-
Suspended solids	mg/dm <sup>3</sup>	166	178	101	-
Oil products content	mg/dm <sup>3</sup>	0.21	0.105	0.068	-
Ferrous /total/ content	mg/dm <sup>3</sup>	8.27	1.25	1.55	-
Copper content	mg/dm <sup>3</sup>	0.017	0.009	0.016	-
Chrome /total/ content	mg/dm <sup>3</sup>	<0.01	0.017	0.013	-
Zinc content	mg/dm <sup>3</sup>	0.085	0.066	0.076	-

**Table 5-1 Results for samples test from inspection pit (IP) – 4 (leachate).**

Monitored indicator	Unit	Limit enviro.content	Contamination limit	I-st trimestre	II-nd trimestre
pH	-	7.68	7.73	8.32	7.86
Suspended solids	mg/dm <sup>3</sup>	43	72	59	101
Oil products content	mg/dm <sup>3</sup>	0.14	0.175	0.107	0.980
Ferrous /total/ content	mg/dm <sup>3</sup>	0.69	0.423	0.49	0.47
Copper content	mg/dm <sup>3</sup>	0.012	0.008	0.007	0.007
Chrome /total/ content	mg/dm <sup>3</sup>	<0.01	<0.01	<0.01	<0.01
Zinc content	mg/dm <sup>3</sup>	0.055	0.028	0.044	0.019

**Table 5-2 Results for samples test from inspection pit (IP) – 7.**

Monitored indicator	Unit	Limit enviro.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	1.90	2.10	2.60	2.30
Temperature	°C	-	-	12.5	13.9	12.8	15.4
pH	-	≥ 6,5 and ≤ 9,5	-	7.34	8.01	8.15	8.44
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.01	0.014	0.005	<0.003
Nitrates content	mg/dm <sup>3</sup>	10	30	8.17	10.6	12.9	24.1
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.016	0.021	0.034	0.013
Dissolved solids	mg/dm <sup>3</sup>	500	1000	498	453	538	503
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	272	204	73.8	58.4
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.137	0.033	0.626	0.066
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	124	29.8	26.9	26.2
Arsenic content	µg/dm <sup>3</sup>	10	30	0.3	0.3	< 1	1.1
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	491	161	60	50
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	371	44	12	< 5
Copper content	µg/dm <sup>3</sup>	30	100	6	3	4	5
Nikel content	µg/dm <sup>3</sup>	20	100	5	4	3	3
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	20	< 5	< 5	< 5
Zink content	µg/dm <sup>3</sup>	200	1000	53	34	33	7
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 5-3 Results for samples test from test pit N 1.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	1.60	1.95	2.30	2.12
Temperature	°C	-	-	12.6	14	13	15.2
pH	-	≥ 6.5 and ≤ 9.5		7.31	7.86	7.99	7.8
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.013	0.012	< 0.003	0.003
Nitrates content	mg/dm <sup>3</sup>	10	30	1.2	0.056	0.531	0.775
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.059	0.018	0.015	0.176
Dissolved solids	mg/dm <sup>3</sup>	500	1000	501	641	669	524
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	62.7	30.5	32.8	30.5
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.08	0.006	0.196	0.012
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	43.9	47.5	47.5	48.2
Arsenic content	µg/dm <sup>3</sup>	10	30	0,7	1,6	1,1	1,7
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	431	344	130	300
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	83	104	15	66
Copper content	µg/dm <sup>3</sup>	30	100	8	3	3	6
Nikel content	µg/dm <sup>3</sup>	20	100	1	3	1	2
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	7	< 5	< 5	< 5
Zink content	µg/dm <sup>3</sup>	200	1000	10	17	39	18
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	0.4	< 0.3

**Table 5-4 Results for samples test from test pit N 2.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	1.70	1.98	2.46	2.43
Temperature	°C	-	-	10.6	12.4	12.9	15.7
pH	-	≥ 6.5 and ≤ 9.5		7.62	7.73	7.66	7.69
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0,037	0.031	0.068	0.263
Nitrates content	mg/dm <sup>3</sup>	10	30	0.258	2.09	7.09	9.08
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.051	0.037	0.178	0.309
Dissolved solids	mg/dm <sup>3</sup>	500	1000	529	577	700	584
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	42.9	277	90.1	75.2
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.409	0.117	0.948	0.029
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	35.5	20.6	27.6	33.3
Arsenic content	µg/dm <sup>3</sup>	10	30	1.7	1.7	3	4.2
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	692	246	80	130
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	59	9	196	371

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Copper content	µg/dm <sup>3</sup>	30	100	5	5	6	5
Nikel content	µg/dm <sup>3</sup>	20	100	2	2	3	9
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	6	< 5	< 5	7
Zink content	µg/dm <sup>3</sup>	200	1000	60	35	51	27
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	0.8	< 0.3

**Table 5-5 Results for samples test from test pit N 3.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	2.15	2.50	3.00	2.74
Temperature	°C	-	-	10.9	14	12.5	15.9
pH	-	≥ 6.5 and ≤ 9.5		7.19	7.57	7.63	7.53
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.005	0.23	0.117	< 0.003
Nitrates content	mg/dm <sup>3</sup>	10	30	2.05	3.16	1.63	0.353
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.014	0.083	0.019	0.176
Dissolved solids	mg/dm <sup>3</sup>	500	1000	662	869	635	619
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	133	358	85.9	59.5
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.103	0.215	0.407	0.039
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	29.1	39	41.8	39.7
Arsenic content	µg/dm <sup>3</sup>	10	30	0.6	0.9	0.5	1.3
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	293	151	60	70
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	21	76	100	33
Copper content	µg/dm <sup>3</sup>	30	100	9	3	3	6
Nikel content	µg/dm <sup>3</sup>	20	100	2	4	2	3
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	12	6	< 5	6
Zink content	µg/dm <sup>3</sup>	200	1000	33	33	44	27
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 5-6 Results for samples test from test pit N 4.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	1.87	2.10	2.40	2.30
Temperature	°C	-	-	13.1	14.4	12.7	15.4
pH	-	≥ 6.5 and ≤ 9.5		7.39	7.45	7.71	7.62
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.017	0.007	< 0.003	< 0.003
Nitrates content	mg/dm <sup>3</sup>	10	30	< 0.003	0.240	0.620	0.733
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.02	0.026	0.01	0.100
Dissolved solids	mg/dm <sup>3</sup>	500	1000	530	625	530	558

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	41.2	18.6	38.6	32.6
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.107	0.015	0.189	0.128
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	48.9	46.1	48.2	46.1
Arsenic content	µg/dm <sup>3</sup>	10	30	1.5	1.2	0.9	1.7
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	660	277	130	70
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	56	48	39	35
Copper content	µg/dm <sup>3</sup>	30	100	4	3	2	7
Nikel content	µg/dm <sup>3</sup>	20	100	2	< 1	2	1
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	< 5	< 5	< 5	6
Zink content	µg/dm <sup>3</sup>	200	1000	25	40	39	28
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 5-7 Results for samples test from test pit No 5.**

**P16Del09Rev02\_EIA\_R – Chapter 11**

**6. SUMMARY RESULTS FROM PHYSICAL AND CHEMICAL TESTS OF WASTE AND GROUNDWATER OF THE REPOSITORY FOR CONVENTIONAL MUNICIPAL AND INDUSTRIAL WASTES (RCMIW) FOR 2007**

Monitored indicator	Unit	Limit enviro.content	Contamination limit	I-st trimestre	II-nd trimestre
pH	-	7.41	7.09	8.05	7.88
Suspended solids	mg/dm <sup>3</sup>	72	84	63	30
Oil products content	mg/dm <sup>3</sup>	0.139	0.15	0.274	0.308
Ferrous /total/ content	mg/dm <sup>3</sup>	0.52	0.53	0.249	3.4
Copper content	mg/dm <sup>3</sup>	0.016	0.009	0.005	0.012
Chrome /total/ content	mg/dm <sup>3</sup>	< 0.01	0.012	< 0.01	0.011
Zinc content	mg/dm <sup>3</sup>	0.061	0.061	0.021	0.049

**Table 6-1 Results for samples test from inspection pit (IP) – 4 (leachate)**

Monitored indicator	Unit	Limit enviro.content	Contamination limit	I-st trimestre	II-nd trimestre
pH	-	7.63	7.58	8.21	8.32
Suspended solids	mg/dm <sup>3</sup>	68	63	70	36
Oil products content	mg/dm <sup>3</sup>	0.277	0.35	0.321	0.266
Ferrous /total/ content	mg/dm <sup>3</sup>	0.175	0.18	0.095	1.86
Copper content	mg/dm <sup>3</sup>	0.006	0.004	0.009	0.01
Chrome /total/ content	mg/dm <sup>3</sup>	< 0.01	< 0.01	< 0.01	< 0.01
Zinc content	mg/dm <sup>3</sup>	0.022	< 0.005	0.034	0.043

**Table 6-2 Results for samples test from inspection pit (IP) – 7 (RCMIW site)**

Monitored indicator	Unit	Limit enviro.content	Contamination limit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	2.24	2.5	2.5	2.3
Temperature	°C	-	-	9.8	16	-	-
pH	-	≥ 6,5 and ≤ 9,5	-	7.38	7.25	8.02	7.56
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.021	0.016	0.026	0.025
Nitrates content	mg/dm <sup>3</sup>	10	30	20.9	14.6	0.352	9.2
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.005	0.127	0.11	0.004
Dissolved solids	mg/dm <sup>3</sup>	500	1000	581	595	690	581
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	43.9	46.6	34.7	47.9
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.055	0.027	0.23	0.306
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	29.7	31.9	70.9	31.9
Arsenic content	µg/dm <sup>3</sup>	10	30	0.8	0.2	0.6	0.4
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	60	80	61.4	55
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	< 5	< 5	37	< 5
Copper content	µg/dm <sup>3</sup>	30	100	3	7	6	6
Nikel content	µg/dm <sup>3</sup>	20	100	2	4	4	4
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	< 5	< 5	6	< 5
Zink content	µg/dm <sup>3</sup>	200	1000	15	< 5	9	12
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 6-3 Results for samples test from test pit No 1.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	2	2.9	3	2.1
Temperature	°C	-	-	10	15.8	-	-
pH	-	≥ 6.5 and ≤ 9.5		7.44	8.55	8.18	7.48
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.079	0.043	0.056	0.02
Nitrates content	mg/dm <sup>3</sup>	10	30	1.64	9.72	< 0.003	1.41
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.008	0.011	0.034	0.052
Dissolved solids	mg/dm <sup>3</sup>	500	1000	516	550	678	511
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	17.9	29.9	77.3	17.1
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.033	< 0.001	< 0.005	0.360
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	48.2	49.6	45.4	49.6
Arsenic content	µg/dm <sup>3</sup>	10	30	2.2	0.6	2.4	2
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	< 50	220	< 50	277
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	94	57	36	28
Copper content	µg/dm <sup>3</sup>	30	100	5	3	6	6
Nikel content	µg/dm <sup>3</sup>	20	100	4	1	3	< 1
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	< 5	< 5	< 5	< 5
Zink content	µg/dm <sup>3</sup>	200	1000	15	< 5	10	29
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 6-4 Results for samples test from test pit No 2.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	2.1	-	-	-
Temperature	°C	-	-	10.7	15.7	-	-
pH	-	≥ 6.5 and ≤ 9.5		7.75	8.83	-	-
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.039	0.622	-	-
Nitrates content	mg/dm <sup>3</sup>	10	30	7.75	6.17	-	-
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.037	0.149	-	-
Dissolved solids	mg/dm <sup>3</sup>	500	1000	254	533	-	-
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	12.4	30.7	-	-
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.154	0.069	-	-
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	24.8	14.2	-	-
Arsenic content	µg/dm <sup>3</sup>	10	30	1.9	0.7	-	-
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	80	230	-	-
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	-	-
Mangan. /total/	µg/dm <sup>3</sup>	20	50	8	575	-	-



**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Copper content	µg/dm <sup>3</sup>	30	100	9	2	-	-
Nikel content	µg/dm <sup>3</sup>	20	100	2	1	-	-
Lead content	µg/dm <sup>3</sup>	30	200	< 5	7	-	-
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	< 5	< 5	-	-
Zink content	µg/dm <sup>3</sup>	200	1000	22	18	-	-
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	-	-
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	-	-

**Table 6-5 Results for samples test from test pit No 3.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	2.6	2.4	2.7	2.5
Temperature	°C	-	-	10.1	16.4	-	-
pH	-	≥ 6.5 and ≤ 9.5		7.34	8.84	8.09	8.03
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.089	0.141	< 0.003	0.01
Nitrates content	mg/dm <sup>3</sup>	10	30	0.573	3.26	4.65	14.9
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.013	0.069	0.008	0.009
Dissolved solids	mg/dm <sup>3</sup>	500	1000	602	696	497	694
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	44.2	53.5	19.4	75.7
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.046	0.019	0.021	0.35
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	40.4	37.6	53.2	45.4
Arsenic content	µg/dm <sup>3</sup>	10	30	1.2	1	1.5	1.5
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	110	110	< 50	172
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	65	204	8	97
Copper content	µg/dm <sup>3</sup>	30	100	2	2	8	6
Nikel content	µg/dm <sup>3</sup>	20	100	4	2	3	3
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	< 5	< 5	< 5	< 5
Zink content	µg/dm <sup>3</sup>	200	1000	19	7	23	14
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 6-6 Results for samples test from test pit No 4.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	2.27	2.6	2.9	2.2
Temperature	°C	-	-	10.4	17.1	-	-
pH	-	≥ 6.5 and ≤ 9.5		7.45	8.78	8.16	7.61
Amonia-ion content	mg/dm <sup>3</sup>	0.12	1.2	0.438	0.042	< 0.003	0.022
Nitrates content	mg/dm <sup>3</sup>	10	30	0.850	1.1	1.17	7.46
Nitrites content	mg/dm <sup>3</sup>	0.025	0.125	0.013	0.054	0.04	0.011
Dissolved solids	mg/dm <sup>3</sup>	500	1000	516	576	553	513

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Sulphate-ions content	mg/dm <sup>3</sup>	50	150	19.8	31	50.7	21.2
Phosphates content	mg/dm <sup>3</sup>	0.1	1	0.018	0.008	0.042	0.328
Chlorine-ions content	mg/dm <sup>3</sup>	30	100	46.1	50.3	36.2	48.9
Arsenic content	µg/dm <sup>3</sup>	10	30	1.9	1.2	1.5	2.2
Ferrous content /total/	µg/dm <sup>3</sup>	50	200	150	290	147	334
Cadmium content	µg/dm <sup>3</sup>	1	5	< 1	< 1	< 1	< 1
Mangan. /total/	µg/dm <sup>3</sup>	20	50	65	90	< 5	40
Copper content	µg/dm <sup>3</sup>	30	100	5	3	10	3
Nikel content	µg/dm <sup>3</sup>	20	100	3	2	5	7
Lead content	µg/dm <sup>3</sup>	30	200	< 5	< 5	< 5	< 5
Chrome /tot/ content	µg/dm <sup>3</sup>	5	50	< 5	< 5	< 5	< 5
Zink content	µg/dm <sup>3</sup>	200	1000	12	14	6	18
Cobalt content	µg/dm <sup>3</sup>	5	100	< 1	< 1	< 1	< 1
Mercury content	µg/dm <sup>3</sup>	0.5	2	< 0.3	< 0.3	< 0.3	< 0.3

**Table 6-7 Results for samples test from test pit No 5.**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	m	-	-	-	-	-	8.6
Temperature	-	≥ 6.5 and ≤ 9.5		-	-	-	7.69
pH	mg/dm <sup>3</sup>	0.12	1.2	-	-	-	< 0.003
Amonia-ion content	mg/dm <sup>3</sup>	10	30	-	-	-	0.009
Nitrates content	mg/dm <sup>3</sup>	0.025	0.125	-	-	-	32.9
Nitrites content	mg/dm <sup>3</sup>	500	1000	-	-	-	869
Dissolved solids	mg/dm <sup>3</sup>	50	150	-	-	-	39.3
Sulphate-ions content	mg/dm <sup>3</sup>	0.1	1	-	-	-	0.327
Phosphates content	mg/dm <sup>3</sup>	30	100	-	-	-	9.93
Chlorine-ions content	mg/dm <sup>3</sup>	-	-				1.77
Arsenic content	Bq/ dm <sup>3</sup>	2					0.130
Ferrous content /total/	µg/dm <sup>3</sup>	10	30	-	-	-	1
Cadmium content	µg/dm <sup>3</sup>	50	200	-	-	-	< 50
Mangan. /total/	µg/dm <sup>3</sup>	1	5	-	-	-	< 1
Copper content	µg/dm <sup>3</sup>	20	50	-	-	-	< 5
Nikel content	µg/dm <sup>3</sup>	30	100	-	-	-	4
Lead content	µg/dm <sup>3</sup>	20	100	-	-	-	3
Chrome /tot/ content	µg/dm <sup>3</sup>	30	200	-	-	-	< 5
Zink content	µg/dm <sup>3</sup>	5	50	-	-	-	7
Cobalt content	µg/dm <sup>3</sup>	200	1000	-	-	-	12
Mercury content	µg/dm <sup>3</sup>	5	100	-	-	-	< 1

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Limit envir.content	Contamination limit	I-st trimestr e	II-nd trimestr e	III-rd trimestr e	IV-th trimestr e
Water table	µg/dm <sup>3</sup>	0.5	2	-	-	-	< 0.3

**Table 6-8 Results for samples test from test pit No 944 (comparative, new) .**

## 7. SUMMARY RESULTS FROM PHYSICAL AND CHEMICAL TESTS OF WASTE AND GROUNDWATER OF THE REPOSITORY FOR CONVENTIONAL MUNICIPAL AND INDUSTRIAL WASTES (RCMIW ) FOR 2008

Indicators	Unit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
pH	-	7.57	7.15	7.31	8.22
Suspended solids	mg/dm <sup>3</sup>	24	250	145	47
Oil products	mg/dm <sup>3</sup>	0.3	0.32	0.14	0.7
Ferrous /total/ content	mg/dm <sup>3</sup>	0.471	1.86	1.06	2.83
Copper content	mg/dm <sup>3</sup>	0.0071	0.0107	0.0129	0.0084
Chrome /total/ content	mg/dm <sup>3</sup>	< 0.001	< 0.001	< 0.001	< 0.001
Zink content	mg/dm <sup>3</sup>	0.043	0.024	0.14	0.046

**Table 7-1 Results for samples test from inspection pit (IP) – 4 (leachate).**

Indicators	Unit	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
pH	-	7.42	7.76	7.8	7.73
Suspended solids	mg/dm <sup>3</sup>	41	57	68	40
Oil products	mg/dm <sup>3</sup>	0.55	0.24	0.1	1.25
Ferrous /total/ content	mg/dm <sup>3</sup>	1.76	0.245	0.182	0.989
Copper content	mg/dm <sup>3</sup>	0.0052	0.0054	0.0085	0.0081
Chrome /total/ content	mg/dm <sup>3</sup>	0.012	< 0.001	< 0.001	< 0.001
Zink content	mg/dm <sup>3</sup>	0.026	< 0.005	0.059	0.067

**Table 7-2 Results for samples test from inspection pit (IP) – 7 (RCMIW site).**

Monitored indicator	Unit	Quality standard setpoint	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	2.3	2.5	2.8	2.7
Temperature	-	≥ 6.5 and ≤ 9.5	7.38	8.47	7.35	8.13
pH	mg/dm <sup>3</sup>	0.50	0.016	0.09	0.002	< 0.0075
Amonia-ion content	mg/dm <sup>3</sup>	50	12.7	12.4	19.9	14.2
Nitrates content	mg/dm <sup>3</sup>	0.5	0.01	0.023	0.103	0.024
Nitrites content	mg/dm <sup>3</sup>	-	721	541	1181	505
Dissolved solids	mg/dm <sup>3</sup>	250	48.3	53.4	67.9	50.4
Sulphate-ions content	mg/dm <sup>3</sup>	0.5	0.058	0.099	0.009	0.014
Phosphates content	mg/dm <sup>3</sup>	250	34	26.8	28.4	26.2
Chlorine-ions content	μg/dm <sup>3</sup>	50	0.6	0.7	0.7	0.6
Arsenic content	μg/dm <sup>3</sup>	200	91.8	22	68.4	189
Ferrous content /total/	μg/dm <sup>3</sup>	5	< 1	< 1	< 1	< 1
Cadmium content	μg/dm <sup>3</sup>	50	< 5	< 5	8.1	< 5
Mangan. /total/	μg/dm <sup>3</sup>	200	3.5	4	5.2	4.5
Copper content	μg/dm <sup>3</sup>	20	2.7	4	3.9	13
Nikel content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Lead content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Chrome /tot/ content	μg/dm <sup>3</sup>	500	30	11	58	80
Zink content	μg/dm <sup>3</sup>	-	1.9	< 1	< 1	< 1
Cobalt content	μg/dm <sup>3</sup>	1	< 0.3	< 0.3	< 0.3	< 0.3

**Table 7-3 Results for samples test from test pit No 1.**

Monitored indicator	Unit	Quality standard setpoint	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	1.9	2.3	3.15	2.5

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Quality standard setpoint	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Temperature	-	$\geq 6.5$ and $\leq 9.5$	7.23	8.36	7.68	7.85
pH	mg/dm <sup>3</sup>	0.50	0.035	0.163	0.122	0.078
Amonia-ion content	mg/dm <sup>3</sup>	50	4.72	1.9	2.67	0.874
Nitrates content	mg/dm <sup>3</sup>	0.5	0.017	0.036	0.104	0.024
Nitrites content	mg/dm <sup>3</sup>	-	536	487	1064	475
Dissolved solids	mg/dm <sup>3</sup>	250	41.1	21	39.5	18.8
Sulphate-ions content	mg/dm <sup>3</sup>	0.5	0.028	0.095	0.064	0.007
Phosphates content	mg/dm <sup>3</sup>	250	46.1	52.1	53.9	51.7
Chlorine-ions content	μg/dm <sup>3</sup>	50	1.3	1.6	3.2	1.1
Arsenic content	μg/dm <sup>3</sup>	200	430	763	745	271
Ferrous content /total/	μg/dm <sup>3</sup>	5	< 1	< 1	< 1	< 1
Cadmium content	μg/dm <sup>3</sup>	50	123	60	146	29.1
Mangan. /total/	μg/dm <sup>3</sup>	200	2.6	3	1.8	4.6
Copper content	μg/dm <sup>3</sup>	20	3.1	2	2.1	< 1
Nikel content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Lead content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Chrome /tot/ content	μg/dm <sup>3</sup>	500	20	7	65	62
Zink content	μg/dm <sup>3</sup>	-	< 1	< 1	< 1	< 1
Cobalt content	μg/dm <sup>3</sup>	1	< 0.3	< 0.3	< 0.3	< 0.3

**Table 7-4 Results for samples test from test pit No 2.**

Monitored indicator	Unit	Quality standard setpoint	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	2.5	2.6	2.8	3.0
Temperature	-	$\geq 6.5$ and $\leq 9.5$	7.01	8.87	7.83	7.84
pH	mg/dm <sup>3</sup>	0.50	0.018	0.54	0.02	0.514
Amonia-ion content	mg/dm <sup>3</sup>	50	6.44	1.51	2.69	12
Nitrates content	mg/dm <sup>3</sup>	0.5	0.008	0.018	0.077	0.014
Nitrites content	mg/dm <sup>3</sup>	-	265	432	1222	542
Dissolved solids	mg/dm <sup>3</sup>	250	81.5	35.1	74.2	43.5
Sulphate-ions content	mg/dm <sup>3</sup>	0.5	0.046	0.099	0.024	0.026
Phosphates content	mg/dm <sup>3</sup>	250	36.8	15.8	38.9	41.8
Chlorine-ions content	μg/dm <sup>3</sup>	50	0.9	1.9	1	1.3
Arsenic content	μg/dm <sup>3</sup>	200	115	387	118	202
Ferrous content /total/	μg/dm <sup>3</sup>	5	< 1	< 1	< 1	< 1
Cadmium content	μg/dm <sup>3</sup>	50	67	97	4.2	35.6
Mangan. /total/	μg/dm <sup>3</sup>	200	3.4	8.6	1.7	4.3
Copper content	μg/dm <sup>3</sup>	20	4.4	3.8	3.4	< 1
Nikel content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Lead content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Chrome /tot/ content	μg/dm <sup>3</sup>	500	23	< 5	100	42
Zink content	μg/dm <sup>3</sup>	-	< 1	< 1	< 1	< 1
Cobalt content	μg/dm <sup>3</sup>	1	< 0.3	< 0.3	< 0.3	< 0.3

**Table 7-5 Results for samples test from test pit No 4.**

**P16Del09Rev02\_EIA\_R – Chapter 11**

Monitored indicator	Unit	Quality standard setpoint	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	2.1	2.2	2.95	2.3
Temperature	-	≥ 6.5 and ≤ 9.5	7.04	8.28	7.4	7.93
pH	mg/dm <sup>3</sup>	0.50	0.049	0.155	0.26	0.576
Amonia-ion content	mg/dm <sup>3</sup>	50	3.28	< 0.013	1.81	3.59
Nitrates content	mg/dm <sup>3</sup>	0.5	0.001	0.05	0.6	0.012
Nitrites content	mg/dm <sup>3</sup>	-	348	529	1138	498
Dissolved solids	mg/dm <sup>3</sup>	250	38.1	11.6	38.2	22.1
Sulphate-ions content	mg/dm <sup>3</sup>	0.5	0.055	0.07	0.055	0.016
Phosphates content	mg/dm <sup>3</sup>	250	51	55.3	54.6	55.3
Chlorine-ions content	μg/dm <sup>3</sup>	50	1.4	1.8	2.8	1.5
Arsenic content	μg/dm <sup>3</sup>	200	364	464	354	1164
Ferrous content /total/	μg/dm <sup>3</sup>	5	< 1	< 1	< 1	< 1
Cadmium content	μg/dm <sup>3</sup>	50	106	51	113	11.1
Mangan. /total/	μg/dm <sup>3</sup>	200	2.1	2.8	3.1	5
Copper content	μg/dm <sup>3</sup>	20	< 1	< 1	4.6	< 1
Nikel content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Lead content	μg/dm <sup>3</sup>	10	< 5	< 5	< 5	< 5
Chrome /tot/ content	μg/dm <sup>3</sup>	500	12	< 5	3.1	29
Zink content	μg/dm <sup>3</sup>	-	< 1	< 1	< 1	< 1
Cobalt content	μg/dm <sup>3</sup>	1	< 0.3	< 0.3	< 0.3	< 0.3

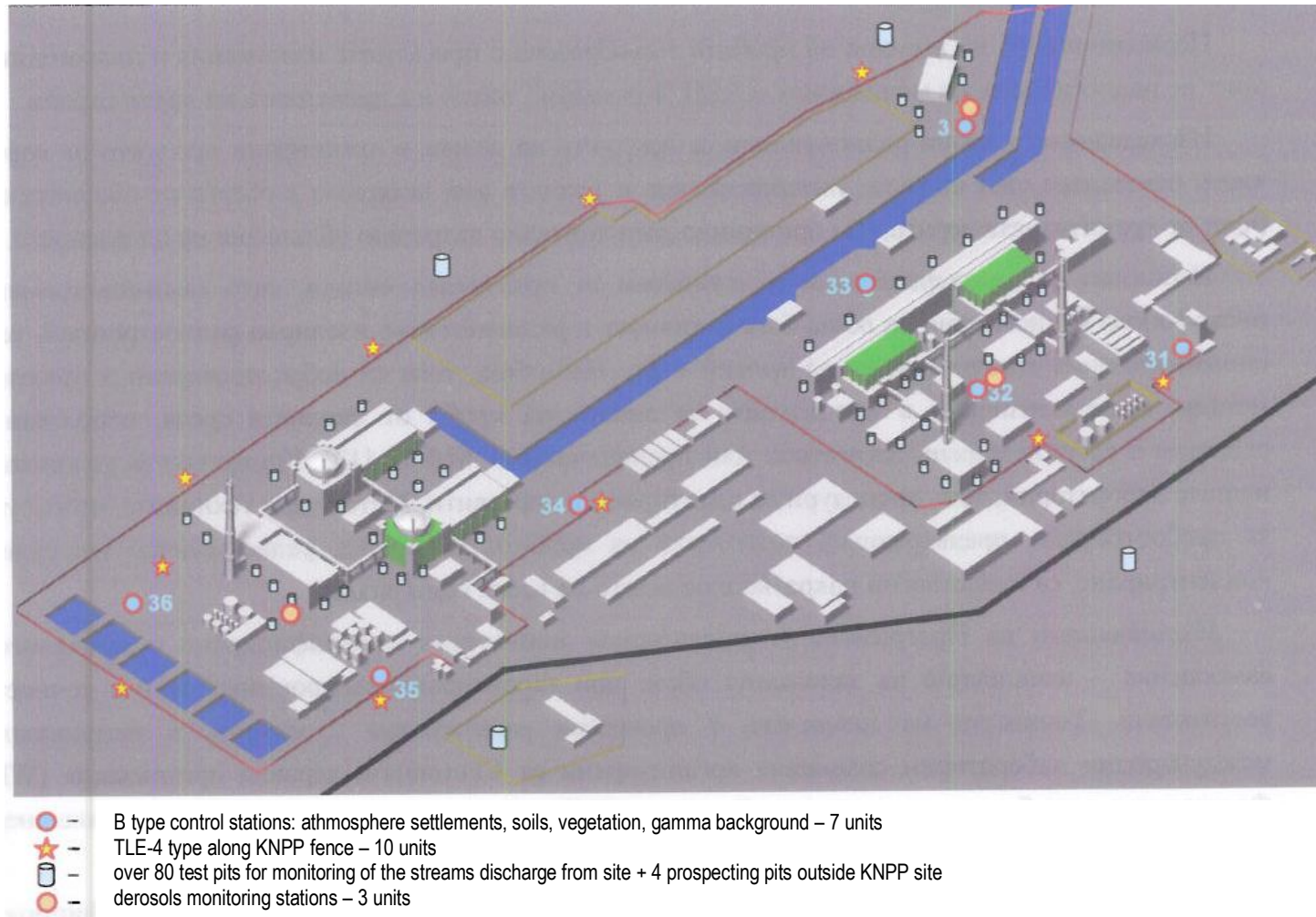
**Table 7-6 Results for samples test from test pit No 5.**

Monitored indicator	Unit	Quality standard setpoint	I-st trimestre	II-nd trimestre	III-rd trimestre	IV-th trimestre
Water table	m	-	-	9.0	-	9.2
Temperature	-	≥ 6.5 and ≤ 9.5	-	7.82	7.84	7.94
pH	mg/dm <sup>3</sup>	0.5	-	0.032	0.073	0.101
Amonia-ion content	mg/dm <sup>3</sup>	50	-	29.2	8.2	40.5
Nitrates content	mg/dm <sup>3</sup>	0.5	-	0.007	0.134	0.009
Nitrites content	mg/dm <sup>3</sup>	-	-	857	1695	777
Dissolved solids	mg/dm <sup>3</sup>	250	-	35.6	55.1	35.3
Sulphate-ions content	mg/dm <sup>3</sup>	0.5	-	0.036	0.021	0.025
Phosphates content	mg/dm <sup>3</sup>	250	-	14.2	10.6	13.5
Chlorine-ions content	μg/dm <sup>3</sup>	50	-	0.9	0.9	0.9
Arsenic content	μg/dm <sup>3</sup>	200	-	< 20	74.3	135
Ferrous content /total/	μg/dm <sup>3</sup>	5	-	< 1	< 1	< 1
Cadmium content	μg/dm <sup>3</sup>	50	-	< 5	< 5	< 5
Mangan. /total/	μg/dm <sup>3</sup>	200	-	2.4	6.1	6.1
Copper content	μg/dm <sup>3</sup>	20	-	< 1	2.2	< 1
Nikel content	μg/dm <sup>3</sup>	10	-	< 5	< 5	< 5
Lead content	μg/dm <sup>3</sup>	10	-	7.8	7	5.8
Chrome /tot/ content	μg/dm <sup>3</sup>	500	-	< 5	2.7	58
Zink content	μg/dm <sup>3</sup>	-	-	< 1	< 1	< 1
Cobalt content	μg/dm <sup>3</sup>	1	-	< 0.3	< 0.3	< 0.3

**Table 7-7 Results for samples test from test pit No 944 (comparative, new).**



## 8. RADIATION MONITORING CHECK POINTS FOR KOZLODUY NPP SITE



***Attachment 11.3.2 Vertebrates, inhabiting the region of Kozloduy NPP and Rare or endangered animal species habituating on the site and next to Kozloduy Nuclear Power Plant***



**Table 1 Vertebrates, inhabiting the region of Kozloduy NPP.**

Class	Bulgarian name	SPECIES	Latin name
1. Fishes	Chub	<i>Leuciscus cephalus</i>	
	Russian sturgeon	<i>Acipenser guldenstedtii</i>	
	Starry sturgeon	<i>acipenser stellatus</i>	
	hausen	<i>Huso huso</i>	
	Danube herring	<i>Alosa kessleri pontica</i>	
2. Amphibians	Great crested newt	<i>Triturus cristatus</i>	
	European Green Toad	<i>Bufo viridis</i>	
	Common Toad	<i>Bufo bufo</i>	
	Common tree frog	<i>Hyla arborea</i>	
	Yellow-bellied toad	<i>Bombina variegata</i>	
3. Reptiles	Caspian whipsnake	<i>Coluber jugularis</i>	
	Four-lined skane	<i>Elaphe quatuorlineata</i>	
	Aesculapian snake	<i>Elaphe longissima</i>	
	beorellia lucitaniae and green lizards	<i>Lacerta viridis, Lacerta muralis</i>	
	Podarcis taurica	<i>Lacerta taurica</i>	
	grass snake	<i>Natrix natrix</i>	
	Viper	<i>Vipera ammodites</i>	
4. Birds	House sparrow	<i>Passer domesticus</i>	
except the species	Turtle-dove	<i>Streptopelia decaococto</i>	
in item 4.7.1.			
	Magpie	<i>Pica pica</i>	
	Jay	<i>Garrulus glandarius</i>	
	Field-lark	<i>Alauda arvensis</i>	
	Crested-lark	<i>Galerida cristata</i>	
	Chaffinch	<i>Fringila coelebs</i>	
	Goldfinch	<i>Carduelis carduelis</i>	
	Blackbird	<i>Turdus merula</i>	
	Great Tit	<i>Parus major</i>	
	the Bird of Minerva	<i>Athena noctua</i>	
	Quail	<i>Coturnix coturnix</i>	
	Partridge	<i>Perdix perdix</i>	
5. Mammalian	Hedgehog	<i>Erinaceus concolor</i>	
	Molehill	<i>Talpa earopea</i>	
	Field-mouse	<i>Apodemus agrarius</i>	
	Common vole	<i>Microtus arvalis</i>	
	Hamster	<i>Citellus citellus</i>	
	Water vole	<i>Arvicola terrestris</i>	
	Wild rabbit	<i>Lepus europaeus</i>	
	fox	<i>Vulpes vulpes</i>	
	Marten	<i>Martes martes</i>	
	Jackal	<i>Canis aureus</i>	
	Weasel	<i>Mustela nivalis</i>	
	Black polecat	<i>Putorius putorius</i>	
	Wild-boar	<i>Sus scrofa</i>	
	Greater mouse-eared bat	<i>Myotis myotis</i>	
	Noctule bat	<i>Nyctalus noctula</i>	

**Table 2 Rare or endangered animal species habituating on the site and next to Kozloduy NPP.**

No	Categories	Animal species		Habitats
		Bulgarian name	Latin name	
1.	Rare	Common barn owl	<i>Benthophilus stellatus</i>	Danube Danube river
2.	Endangered	Fringebarble sturgeon	<i>Tyto alba</i>	village Orsoya
		Burbot	<i>Accipenser nudiiventris</i>	Danube Danube river
		Southern ninespine stickleback	<i>Lota lota</i>	Danube Danube river
		Three-spined stickleback	<i>Pungitius platigaster</i>	Danube Danube river
		Bighead goby	<i>Gasterosteus aculeatus</i>	Danube Danube river
		Aesculapian snake	<i>Neogobius kessleri</i>	Danube Danube river
		Glossy Ibis	<i>Elaphe longissima</i>	Kozloduy, Oryahovo
		Ferruginous duck	<i>Plegadis falcinellus*</i>	village Island, village Orsoya
		White-tailed eagle	<i>Aythya nyroca</i>	village Orsoya
		Lesser-spotted eagle	<i>Haliaeetus albicilla*</i>	village Dolni Tsibur, village Orsoya
		Saker Falcon	<i>Aquila pomarina</i>	Kozloduy
		Great Bustard	<i>Falco cherrug*</i>	village Island
		Collard Pratincole	<i>Otis tarda*</i>	Vulchedrum, village Zlatia, village Gorni Tsibur
		Little Turn	<i>Glareola pratincola</i>	village Orsoya, village Ostrov
		European Otter	<i>Sterna albifrons</i>	village Dolni Tsibur
			<i>Lutra lutra**</i>	Kozloduy

\* Birds included in "Endangered birds in Europe"

\*\* Included in "Endangered mammalian in Europe"

***Attachment 11.3.3 Characteristics of the soils in the 30-km area of Kozloduy Nuclear Power Plant site***

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
0	A.1pl.k	25	2.86	0.76	7.1	7.7	5.1	0	2.5	7.1	15.3	16.5	16.4	37.1	70	10/YR/2/1	Meadow-marsh slight clayey	A.1pl.k/25_A.2pl.k.g/50_A.3pl.k.g/80_4pl.k/110_	60	GLOJENE
1	A.2pl.k.g	50	2.56	1.28	7.1	7.7	6.6	0	3.5	8.2	16.6	12.8	15.5	36.8	65.1	10/YR/3/2			60	GLOJENE
2	A.3pl.k.g	80	2.09	0.76	7.2	7.8	6.7	0	4.7	17.5	6	12.7	15	37.4	65.1	10/YR/4/2			60	GLOJENE
3	4pl.k	110	1.28	2.29	7.2	7.8	6.3	2.8	6	8.1	17.3	13.8	15.8	29.9	59.5	10/YR/3/4			60	GLOJENE
4	A`.orn	28	2.8	0	6.4	7	4	0	0	33.3	34.3	5.2	4.6	18.6	28.4	10/YR/3/1	Black-earth typical slight sandy-clay	A`.orn/28_A`/45_AB.k/71_BC.k/93_C1.k/122_C2.k/152_	557	GORNI VADIN
5	A``	45	2.85	0	7	7.6	4.1	0	0	37.6	33.8	4.8	3.5	16.2	24.5	10/YR/3/2			557	GORNI VADIN
6	AB.k	71	1.97	4.81	7.7	8.3	9.2	0	0	31.8	34	6	5.9	13.1	25	10/YR/3/3			557	GORNI VADIN
7	BC.k	93	1.4	12.95	7.9	8.5	20.6	0	0	28.3	30.4	4.8	3	12.9	20.7	10/YR/4/3			557	GORNI VADIN
8	C1.k	122	0	16.32	7.9	8.5	25.1	0	0	31.6	26.3	2.9	4	10.1	17	10/YR/6/4			557	GORNI VADIN
9	C2.k	152	0	20.12	8	8.6	14.4	0	0	39.6	29.9	4.4	2.2	9.5	16.1	10/YR/6/4			557	GORNI VADIN

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 01	0,0 1- 0,0 05	0,0 5- 0,0 01	< 0,001 mm	< 0,01 mm					
10	A`.k.orn	28	2.94	7.76	7.5	8.1	15	0	0	23.9	10.5	8.5	12.7	29.4	50.6	10/YR/3/4	Black-earth carbonate heavy sandy-clayey	A`.k.orn/28_A`.k/45_A``.k/70_BC.k/100_C.k/120_	1	HARLEC
11	A``.k	45	2.83	8.25	7.5	8.1	14.5	0	0	21.3	9.8	8.2	19.5	26.7	54.4	10/YR/3/4			1	HARLEC
12	A```.k	70	2.54	11.09	7.5	8.1	16.9	0	0	14.4	14.4	9.8	17.6	26.9	54.3	10/YR/4/4			1	HARLEC
13	BC.k	100	1.42	11.58	7.6	8.2	20.2	0	0	21.9	33.4	6.9	4.9	12.7	24.5	10/YR/5/8			1	HARLEC
14	C.k	120	0	18.22	7.6	8.2	23.2	0	0	21.2	31.9	8.7	2.9	12.1	23.7	10/YR/5/8			1	HARLEC
15	A.1pl.k.orn	25	3.05	3.81	7	7.6	9	0	0	5.8	19.5	17.3	14.1	34.3	65.7	10/YR/4/4	Alluvial slight clayey	A.1pl.k.orn/25_A.2pl.k/53_A.3pl.k.g/70_A.4pl.k.g/95_	17	HARLEC
16	A.2pl.k	53	3.47	0.76	6.8	7.4	5.9	0	0	5.5	16.5	14.3	18.4	39.4	72.1	10/YR/4/4			17	HARLEC
17	A.3pl.k.g	70	3.24	0.41	6.8	7.4	6.9	0	0	11.4	34.6	18.6	10.7	17.8	47.1	10/YR/4/4			17	HARLEC
18	A.4pl.k.g	95	1.58	0.76	7	7.6	9.4	0	0	6.5	33.9	11	7.8	31.4	50.2	10/YR/4/4			17	HARLEC
19	A.1pl.k.orn	27	2.28	1.79	7.4	8	7.1	0	12.4	52	9.5	7.9	5.4	5.7	19	10/YR/3/4	Deluvial clayey-sandy	A.1pl.k.orn/27_A.2pl.k/53_A.3pl.k/81_A.4pl.k/105_5pl.k/125_	28	HARLEC
20	A.2pl.k	53	1.95	3.81	7.5	8.1	8.6	0	13.6	51.1	7.4	6.6	3.9	8.8	19.3	10/YR/3/4		A.1pl.k.orn/27_A.2pl.k/53_A.3pl.k/81_A.4pl.k/105_5pl.k/125_	28	HARLEC
21	A.3pl.k	81	1.78	5.81	7	8	10.2	0	14.2	44	11	7.5	2.5	9.6	19.6	10/YR/		A.1pl.k.orn/27_A.2pl.k/53_A.3pl.k/81_A.4pl.k/105_5pl.k/125_	28	HARLEC

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 05	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
					5	1				6	4					4/4				
22	A.4pl.k	105	1.42	6.31	7. 6	8. 2	8.6	0	13.6	44. 8	15. 4	4.9	2.9	9.8	17.6	10/YR/ 5/6		A.1pl.k.orn/27_A.2pl.k/53_A.3pl.k/81_A.4pl.k/105_5pl.k/125_	28	HARLEC
23	5pl.k	125	0	6.79	7. 7	8. 3	10.4	0	4.7	57. 3	7.4	8.4	1.6	10.2	20.2	10/YR/ 5/6		A.1pl.k.orn/27_A.2pl.k/53_A.3pl.k/81_A.4pl.k/105_5pl.k/125_	28	HARLEC
24	A`. (k).o rn	25	1.87	0.41	7. 3	7. 9	3.8	0	3.5	44. 4	31. 5	2.6	4.1	10.1	16.8	10/YR/ 3/3	Black- earth typical clayey- sandy	A`. (k).orn/25_AB.k/52_C.k/73_	10	KOZLODUY
25	AB.k	52	1.57	4.81	7. 6	8. 2	8.8	0	3	56. 3	17	2.7	2.2	10	14.9	10/YR/ 4/3		A`. (k).orn/25_AB.k/52_C.k/73_	10	KOZLODUY
26	C.k	73	0	12.5 3	7. 8	8. 4	18.6	0	2.9	51. 2	15. 5	2.7	1.7	7.4	11.8	10/YR/ 5/4		A`. (k).orn/25_AB.k/52_C.k/73_	10	KOZLODUY
27	A`.1pl.k .orn	28	1.53	6.79	7. 4	8	15.5	0	0	41. 9	26. 2	2.8	2.2	11.4	16.4	10/YR/ 3/3	Deluvia l- meado w clayey- sandy	A`.1pl.k.orn/28_A`.2pl.k/56_A`.3pl.k/78_A`.4pl.k/102_A` `` `.5pl.k/130_A` `` ``.6pl.k/160_	9	KOZLODUY
28	A`.2pl. k	56	1.3	9.68	7. 6	8. 2	18.6	0	0	38. 2	26. 6	4.8	3.6	8.2	16.6	10/YR/ 3/3		A`.1pl.k.orn/28_A`.2pl.k/56_A`.3pl.k/78_A`.4pl.k/102_A` `` `.5pl.k/130_A` `` ``.6pl.k/160_	9	KOZLODUY
29	A`.3pl. k	78	1.62	4.31	7. 4	8	11	0	0	45. 6	27. 3	3.4	3.2	9.5	16.1	10/YR/ 3/4		A`.1pl.k.orn/28_A`.2pl.k/56_A`.3pl.k/78_A`.4pl.k/102_A` `` `.5pl.k/130_A` `` ``.6pl.k/160_	9	KOZLODUY
30	A`.4pl. .k	102	1.89	3.3	7. 4	8	9.7	0	2.6	36. 5	31. 9	4.1	2.9	12.3	19.3	10/YR/ 3/4		A`.1pl.k.orn/28_A`.2pl.k/56_A`.3pl.k/78_A`.4pl.k/102_A` `` `.5pl.k/130_A` `` ``.6pl.k/160_	9	KOZLODUY
31	A` ``.5 pl.k	130	1.87	0.76	7. 4	8	5.2	0	8	50	20. 6	1.6	4.8	9.8	16.2	10/YR/ 3/3		A`.1pl.k.orn/28_A`.2pl.k/56_A`.3pl.k/78_A`.4pl.k/102_A` `` `.5pl.k/130_A` `` ``.6pl.k/160_	9	KOZLODUY
32	A` `` ``.6 pl.k	160	1.18	1.28	7. 5	8. 1	5.5	0	10.6	53. 2	14. 9	2.4	3.6	9.8	15.8	10/YR/ 3/3		A`.1pl.k.orn/28_A`.2pl.k/56_A`.3pl.k/78_A`.4pl.k/102_A` `` `.5pl.k/130_A` `` ``.6pl.k/160_	9	KOZLODUY

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
33	A`.1pl.k .orn	27	3.3	1.79	7. 3	7. 9	4.4	0	0	6.2	53	5.8	9.3	21.3	36.4	10/YR/ 3/1	Deluvia l- meado w mediu m sandy- clayey	A`.1pl.k.orn/27_A`.2pl.k/57_A`.3pl/80_A`.4pl/110_A`.5p l/140_	150	KOZLODUY
34	A`.2pl. k	57	3.38	0.76	7. 1	7. 7	4.3	0	0	16. 5	43. 8	8.5	12.6	14.3	35.4	10/YR/ 3/2		A`.1pl.k.orn/27_A`.2pl.k/57_A`.3pl/80_A`.4pl/110_A`.5p l/140_	150	KOZLODUY
35	A`.3pl	80	2.59	0	6. 6	7. 2	4.3	0	0	15. 1	45. 5	8	15.4	11.7	35.1	10/YR/ 3/3		A`.1pl.k.orn/27_A`.2pl.k/57_A`.3pl/80_A`.4pl/110_A`.5p l/140_	150	KOZLODUY
36	A`.4pl	110	2.08	0	6. 5	7. 1	2.5	0	0	24. 3	42. 5	8.8	10.2	11.7	30.7	10/YR/ 3/4		A`.1pl.k.orn/27_A`.2pl.k/57_A`.3pl/80_A`.4pl/110_A`.5p l/140_	150	KOZLODUY
37	A`.5 pl	140	1.8	0	6. 5	7. 1	3.8	0	0	21. 1	44	6.7	10.2	14.2	31.1	10/YR/ 3/4		A`.1pl.k.orn/27_A`.2pl.k/57_A`.3pl/80_A`.4pl/110_A`.5p l/140_	150	KOZLODUY
38	AC.f	30	2.49	0	5. 2	6	0.9	6.8	19.1	20. 5	16. 4	6.1	7.6	22.6	36.3	10/YR/ 4/4	Black- earth mediu m sandy- clayey	AC.f/30_d/_	11	KRUCHOVI CA
39	d	0	0	0	0	0	0	0	0	0	0	0	0	0	0			AC.f/30_d/_	11	KRUCHOVI CA
40	A`.k.orn	30	3.78	3.87	7. 2	7. 8	7.1	0	2.7	12. 7	36. 3	6.4	5.1	29.7	41.2	10/YR/ 5/1	Meadow black- earth carbon ate mediu	A`.k.orn/30_A`.k/58_AB.k/84_Bc.k/110_C.k/140_	168	KRUCHOVI CA

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy											Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell					
																m sandy- clayey					
41	A``.k	58	2.28	7.88	7.4	8	10.8	0	2.9	14.8	37.6	3	4.8	26.1	33.9	10/YR/ 5/1		A`.k.orn/30_A``.k/58_AB.k/84_Bc.k/110_C.k/140_	168	KRUCHOVI CA	
42	AB.k	84	1.69	13.68	7.6	8.2	18.2	0.4	3.1	13.9	28.9	6.9	9	19.6	35.5	10/YR/ 4/3		A`.k.orn/30_A``.k/58_AB.k/84_Bc.k/110_C.k/140_	168	KRUCHOVI CA	
43	Bc.k	110	1.14	21.88	7.7	8.3	28	0.4	2.5	11.1	27.6	6.1	6	18.3	30.4	10/YR/ 5/3		A`.k.orn/30_A``.k/58_AB.k/84_Bc.k/110_C.k/140_	168	KRUCHOVI CA	
44	C.k	140	0.57	29.28	7.9	8.5	36.6	0.9	2	8.7	33	7.4	4.4	7	18.8	10/YR/ 8/3		A`.k.orn/30_A``.k/58_AB.k/84_Bc.k/110_C.k/140_	168	KRUCHOVI CA	
45	AB.k.orn	25	2.04	5.34	7.3	7.9	10	0	5.1	18.8	36.3	4.4	6.9	18.8	30.1		Black- earth mediu m sandy- clayey	AB.k.orn/25_Bc.k/57_C1.k/91_C2.k/119_	130	KRUCHOVI CA	
46	Bc.k	57	1.27	15.55	7.4	8	22.2	0	2.4	16.8	33.8	4	3.9	16.9	24.8			AB.k.orn/25_Bc.k/57_C1.k/91_C2.k/119_	130		
47	C1.k	91	0	19.47	7.4	8	24.9	0	2.2	18.6	32.3	3.9	4.5	13.6	22			AB.k.orn/25_Bc.k/57_C1.k/91_C2.k/119_	130		
48	C2.k	119	0	20.42	7.4	8	25.5	0	2.4	14	36.1	5.7	3	13.3	22			AB.k.orn/25_Bc.k/57_C1.k/91_C2.k/119_	130		
49	A`.orn	28	1.85	0	6.3	6.9	1.4	0	0	13	44.4	6.2	8.3	26.7	41.2	10/YR/ 3/2	Black- earth leache d slight leache d mediu m	A`.orn/20_aB1/39_B2/69_C1.k/92_C2.k/124_C3.k/150_	3	KRUCHOVI CA	



**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm					
																sandy- clayey				
50	AB	52	1.43	0	5.9	6.7	1.3	0	0	13.6	43.8	8.6	6.2	26.5	41.3	10/YR/ 4/4		A`.orn/20_aB1/39_B2/69_C1.k/92_C2.k/124_C3.k/150_	3	KRUCHOVI CA
51	B1.k	70	1.01	0.61	6.9	7.5	5.7	0	0	15.7	39	6.3	9.5	23.8	39.6	10/YR/ 4/4		A`.orn/20_aB1/39_B2/69_C1.k/92_C2.k/124_C3.k/150_	3	KRUCHOVI CA
52	Bc.k	92	0.75	12.33	7.3	7.9	16.6	0	0	13.5	37.5	7.8	8.8	15.8	32.4	10/YR/ 6/4		A`.orn/20_aB1/39_B2/69_C1.k/92_C2.k/124_C3.k/150_	3	KRUCHOVI CA
53	C1.k	132	0	18.59	7.5	8.1	24.7	0	0	11.7	35.8	9	8.9	9.9	27.8	10/YR/ 6/4		A`.orn/20_aB1/39_B2/69_C1.k/92_C2.k/124_C3.k/150_	3	KRUCHOVI CA
54	A`.orn	30	2.75	0	5.8	6.6	1.2	0	0	17.4	41.2	8.7	6.8	24.7	40.2	10/YR/ 3/2	Black- earth leache d mediu m leache d mediu m sandy- clayey	A`.orn/25_Ab/49_B.k/73_bc.k/95_C.k/120_	23	KRUCHOVI CA
55	AB	44	1.54	0	5.4	6.2	1	0	0	20.1	37.1	8	10.2	23.6	41.8	10/YR/ 4/3		A`.orn/25_Ab/49_B.k/73_bc.k/95_C.k/120_	23	KRUCHOVI CA
56	B1	77	1.45	0	6.1	6.9	0.9	0	0	20.7	36	13.7	5.4	23.3	42.4	10/YR/ 4/4		A`.orn/25_Ab/49_B.k/73_bc.k/95_C.k/120_	23	KRUCHOVI CA
57	BC1.k	107	1.2	17.47	7.3	7.9	20.7	1.6	0	14	36.9	5.7	5.2	15.9	26.8	10/YR/ 5/6		A`.orn/25_Ab/49_B.k/73_bc.k/95_C.k/120_	23	KRUCHOVI CA
58	C2.k	152	0	17.94	7.4	8	22.7	0	0	13.5	34.2	10.5	3.5	15.6	29.6	10/YR/ 6/6		A`.orn/25_Ab/49_B.k/73_bc.k/95_C.k/120_	23	KRUCHOVI CA
59	A.1pl.k.	25	2.84	1.79	7	7.	4.9	0	1.1	6.5	11	12.	13.3	50.8	76.5		Alluvial	A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k	33	KRUCHOVI

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
	orn					6						4					- meado w clayey	/167_7pl.k/207_		CA
60	A.2pl.k	47	2.43	0.97	7	7.6	3	0	0.2	11.2	10.1	12	15.6	47.9	75.5			A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k/167_7pl.k/207_	33	KRUCHOVI CA
61	A.3pl	73	1.1	0	7	7.6	3.6	0	1.4	6.7	9.9	12.3	16.6	49.5	78.4			A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k/167_7pl.k/207_	33	KRUCHOVI CA
62	4pl.k	107	0.4	0.77	7.4	8	6.3	0	3.6	2.6	12.7	9.3	16.6	48.9	74.8			A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k/167_7pl.k/207_	33	KRUCHOVI CA
63	5pl.k	133	0.07	3.5	7.6	2	7.3	0	3.5	9.3	14.8	7.6	10.7	46.8	65.1			A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k/167_7pl.k/207_	33	KRUCHOVI CA
64	6pl.k	167	0.14	8.06	7.7	3	9.5	0	7.2	14.1	12.2	8.7	19.2	29.1	57			A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k/167_7pl.k/207_	33	KRUCHOVI CA
65	7pl.k	207	0.55	5.61	7.7	3	7.4	0	13.2	16.8	17.2	6.6	7.1	31.7	45.4			A.1pl.k.orn/25_A.2pl.k/47_A.3pl/73_4pl.k/107_5pl.k/133_6pl.k/167_7pl.k/207_	33	KRUCHOVI CA
66	A`orn	22	1.77	0	4.7	5.5	1.2	0	1	12.6	37.7	11.5	7.9	28.1	47.5	5/YR/3 /3	Black- earth leache d heavy leache d slight sandy- clayey	A.orn/21_aB/39_B1/62_B2/88_C.k/111_	41	MANASTIR ISHTTE
67	B1	43	1.14	0	5.2	6	1.4	0	0.9	13.4	34.3	9.3	8	32.7	50	5/YR/4 /4		A.orn/21_aB/39_B1/62_B2/88_C.k/111_	41	MANASTIR ISHTTE
68	B2	61	0.72	0	5.2	6	1.2	0	0.9	15.3	35.6	7.9	6.9	32.2	47	5/YR/4 /4		A.orn/21_aB/39_B1/62_B2/88_C.k/111_	41	MANASTIR ISHTTE
69	B3	82	0.58	0	5.2	6	1.7	0	0.9	16	33.4	8.9	7.2	31.9	48	5/YR/4 /4		A.orn/21_aB/39_B1/62_B2/88_C.k/111_	41	MANASTIR ISHTTE
70	B4	105	0.48	0	5.	6.	1.8	0	0.9	16.	34	10	6.8	29.7	46.5	5/YR/5		A.orn/21_aB/39_B1/62_B2/88_C.k/111_	41	MANASTIR

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
					4	2				8						/6				ISHTe
71	C.k	140	0	12.9 7	7. 2	7. 8	16.7	0	1.3	13. 8	30. 1	9.1	5.4	23.6	38.1	5/YR/5 /8		A'.orn/21_aB/39_B1/62_B2/88_C.k/111_	41	MANASTIR ISHTe
OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_HCl	> 1m m	1- 0,25 mm	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
72	A'.orn	26	1.2	0	7	7. 6	1.3	2.6	23.3	23. 7	22. 4	7.2	6.3	13.2	26.7	5/YR/3/ 2	Mead ow black- earth mediu m leache d slight sandy- clayey	A'.orn/26_B1/46_B2/76_B3/102_C1/122_	4	MANASTIR ISHTe
73	B1	46	1.07	0	6. 5	7. 1	1.4	0	20.9	31. 7	20. 4	7.2	5.3	13.1	25.6	5/YR/3/ 2		A'.orn/26_B1/46_B2/76_B3/102_C1/122_	4	MANASTIR ISHTe
74	B2	76	0.59	0	6. 7	7. 3	1.2	3.1	20.1	39	16. 6	6	4.3	9.7	20	5/YR/4/ 3		A'.orn/26_B1/46_B2/76_B3/102_C1/122_	4	MANASTIR ISHTe
75	B3	102	0.64	0	7	7. 6	2.1	2.7	33.6	34. 2	11. 4	5	4.2	6.8	16	5/YR/5/ 4		A'.orn/26_B1/46_B2/76_B3/102_C1/122_	4	MANASTIR ISHTe
76	C1	122	0	0	7. 8	8. 4	0.2	58. 5	34.3	5.2	0.9	0.2	0.3	0.4	0.9	5/YR/5/ 6		A'.orn/26_B1/46_B2/76_B3/102_C1/122_	4	MANASTIR ISHTe

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
77	A`.k.orn	24	1.84	1.43	7. 1	7. 7	6.8	0	4.9	25. 5	25. 9	7.3	8.5	21.1	36.9	7,5/YR/ 3/2	Black- earth typical mediu m sandy- clay	A`.k.orn/24_B.k/50_C1.k/80_C2.k/115_	16	MIHAILOV O
78	B.k	50	1.08	1.63	7. 2	7. 8	7.3	0	4.8	25. 5	23. 4	5.8	7.3	25.4	38.5	7,5/YR/ 4/4		A`.k.orn/24_B.k/50_C1.k/80_C2.k/115_	16	MIHAILOV O
79	C1.k	80	0.9	18.2 2	7. 5	8. 1	23.4	0	3.5	20. 3	23. 2	5.7	5	18.9	29.6	7,5/YR/ 5/4		A`.k.orn/24_B.k/50_C1.k/80_C2.k/115_	16	MIHAILOV O
80	C2.k	115	0.46	24.5 4	7. 7	8. 3	29	0	1.9	18. 4	29. 6	8.1	4	9	21.1	7,5/YR/ 5/6		A`.k.orn/24_B.k/50_C1.k/80_C2.k/115_	16	MIHAILOV O
81	A`.ch.k	15	1.41	8.35	7. 6	8. 2	14	0	15	46	13. 3	4.2	2.7	4.8	11.7	7,5/YR/ 4/4	Alluvia l- meado w clayey- sandy	A`.ch.k/15_1pl.k/38_2pl.k/60_3pl.k/85_4pl.k/118_	46	MIHAILOV O
82	1pl.k	38	1.36	2.58	7. 4	8	6.6	0	7.5	39. 4	26. 6	5.5	4.4	10	19.9	7,5/YR/ 5/4		A`.ch.k/15_1pl.k/38_2pl.k/60_3pl.k/85_4pl.k/118_	46	MIHAILOV O
83	2pl.k	60	1.23	3.47	7. 4	8	6.7	0	5.8	38. 8	28. 5	6	3.7	10.5	20.2	7,5/YR/ 5/4		A`.ch.k/15_1pl.k/38_2pl.k/60_3pl.k/85_4pl.k/118_	46	MIHAILOV O
84	3pl.k	85	1.08	4.07	7. 6	8. 2	7.6	0	2.6	41. 9	28	5.2	4.8	9.9	19.9	7,5/YR/ 6/6		A`.ch.k/15_1pl.k/38_2pl.k/60_3pl.k/85_4pl.k/118_	46	MIHAILOV O
85	4pl.k	118	0.29	2.28	7. 6	8. 2	4.5	0	23	59	4.7	1.5	4	3.3	8.8	7,5/YR/ 6/6		A`.ch.k/15_1pl.k/38_2pl.k/60_3pl.k/85_4pl.k/118_	46	MIHAILOV O
86	A`.ch	18	3.17	0.5	7. 2	7. 8	3.1	0	3.5	17. 6	34. 3	8.6	6.2	26.7	41.5	7,5/YR/ 3/2	Mead ow black- earth	A`.ch/18_A`/37_A`/k/55_A`/78_C1.k/100_C2.k/126_	5	MIHAILOV O

**P16Del09Rev02\_EIA\_R – Chapter 11**

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							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell					
																	typical carbon ate mediu m sandy- clayey				
87	A``	37	2.79	0.5	7	7.6	3.6	0.5	4.7	17.1	28.8	8.2	6.7	30.4	45.3	7,5/YR/ 3/2		A`.ch/18_A``/37_A``.k/55_A````/78_C1.k/100_C2.k/126_	5	MIHAILOV O	
88	A``.k	55	2.41	1.88	7.2	7.8	5.7	0	5.7	18.1	27.5	6.3	7.3	29.5	43.1	7,5/YR/ 4/4		A`.ch/18_A``/37_A``.k/55_A````/78_C1.k/100_C2.k/126_	5	MIHAILOV O	
89	A````	78	1.94	5.68	7.3	7.9	8.9	0	6.1	19.1	22.8	7.2	7.9	28	43.1	7,5/YR/ 5/4		A`.ch/18_A``/37_A``.k/55_A````/78_C1.k/100_C2.k/126_	5	MIHAILOV O	
90	C1.k	100	1.39	11	7.4	8	16.1	0	7.5	14.9	22	8.3	6	25.2	39.5	7,5/YR/ 5/4		A`.ch/18_A``/37_A``.k/55_A````/78_C1.k/100_C2.k/126_	5	MIHAILOV O	
91	C2.k	126	1.05	10.24	7.4	8	12.4	0	7.2	19.9	25.2	7.7	6.4	21.2	35.3			A`.ch/18_A``/37_A``.k/55_A````/78_C1.k/100_C2.k/126_	5	MIHAILOV O	
92	A`.orn	27	2.72	0	6.8	7.4	4.3	0	6.1	8.4	19.8	13.3	11.7	36.4	61.4	7,5/YR/ 3/2	Mead ow black- earth mediu m leache d slight clayey	A`.orn/27_A``/51_A````/79_B/110_C.k/142_	44	MIHAILOV O	
93	A``	51	2.56	0	6.5	7.1	2.1	0	5.5	12.6	20.4	12.5	12.8	34.1	59.4	7,5/YR/ 3/2		A`.orn/27_A``/51_A````/79_B/110_C.k/142_	44	MIHAILOV O	
94	A``	79	1.52	0	6.8	7.4	1.7	0	4.4	14.8	20.8	12.6	11.7	34.1	58.4	7,5/YR/ 4/4		A`.orn/27_A``/51_A````/79_B/110_C.k/142_	44	MIHAILOV O	
95	B	110	1.26	0	6.7		2.6	0	4.1	14.19	19.11	12.6	35.6	60.1	7,5/YR/			A`.orn/27_A``/51_A````/79_B/110_C.k/142_	44	MIHAILOV	

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
					4					1	1	9				4/4				O
96	C.k	142	1.1	0.96	7.1	7.7	5.1	0	4.8	14.1	21.1	12.5	11.1	31.3	54.9			A`.orn/27_A``/51_A``/79_B/110_C.k/142_	44	MIHAILOV O
97	A`.k.orn	28	1.9	7.14	7.3	7.9	11.5	0	0	24.9	45.7	3.3	11.4	3.2	17.9	10/YR/3/2	Black- earth carbon ate clayey- sandy	A`.k.orn/28_AB.k/44_BC.k/75_C1.k/105_C2.k/130_	87	MIZIA
98	AB.k	44	1.54	9.63	7.3	7.9	14.6	0	0	25.4	36.4	6.4	14	3.2	23.6	10/YR/4/3		A`.k.orn/28_AB.k/44_BC.k/75_C1.k/105_C2.k/130_	87	MIZIA
99	BC.k	75	1.11	16.24	7.4	8.4	21	0	0	21.1	36.4	8	8.7	4.8	21.5	10/YR/4/3		A`.k.orn/28_AB.k/44_BC.k/75_C1.k/105_C2.k/130_	87	MIZIA
100	C1.k	105	0.72	20.01	7.5	8.1	25.4	0	0	23.1	42.7	5	1.6	2.2	8.8	10/YR/5/4		A`.k.orn/28_AB.k/44_BC.k/75_C1.k/105_C2.k/130_	87	MIZIA
101	C2.k	130	0	21.16	7.5	8.1	26.6	0	0	31	33	6.1	0.7	2.6	9.4	10/YR/5/4		A`.k.orn/28_AB.k/44_BC.k/75_C1.k/105_C2.k/130_	87	MIZIA
102	A.1pl.k. orn	40	3.46	4.41	7.2	7.8	8.4	0	3.2	17	29.8	8.4	8.5	24.7	41.6	10/YR/3/2	Alluvia l- meado w mediu m sandy- clayey	A.1pl.k.orn/40_A.2pl.k/76_A.3pl.k/112_A.4pl.k/151_A.5pl.k/190_	40	MIZIA
103	A.2pl.k	76	2.07	4.61	7.3	7.9	7.9	0	5.2	19.2	26.4	7	7.9	26.4	41.3	10/YR/3/2		A.1pl.k.orn/40_A.2pl.k/76_A.3pl.k/112_A.4pl.k/151_A.5pl.k/190_	40	MIZIA
104	A.3pl.k	112	1.01	9.3	7.4	8.4	13.1	0	2.1	18.4	29.6	7.7	5.9	23.2	36.8	10/YR/4/3		A.1pl.k.orn/40_A.2pl.k/76_A.3pl.k/112_A.4pl.k/151_A.5pl.k/190_	40	MIZIA
105	A.4pl.k	151	1.73	13.58	7.6	8.2	17.6	0	7.5	16.6	19	7.8	7.8	23.7	39.3	10/YR/5/3		A.1pl.k.orn/40_A.2pl.k/76_A.3pl.k/112_A.4pl.k/151_A.5pl.k/190_	40	MIZIA

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy											Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell					
10 6	A.5pl.k	190	1.33	10.4 4	7. 5	8. 1	14.4		0	2.2	8.7	25. 5	9.4	10.3	29.5	49.2	10/YR/5 /3		A.1pl.k.orn/40_A.2pl.k/76_A.3pl.k/112_A.4pl.k/151_A.5pl.k/190_	40	MIZIA
10 7	A.1pl.k. orn	30	3.1	0.21	6. 8	7. 4	4.4		0	0	11. 5	25. 3	17. 7	11.3	29.8	58.8		Alluvia l- meado w heavy sandy- clayey	A.1pl.k.orn/30_A.2pl.k/62_A.3pl.k/98_A.4pl.k/132_A.5pl.k/170_	140	MIZIA
10 8	A.2pl.k	62	2.64	0.62	6. 8	7. 4	4.2		0	0	9.6	26. 7	14. 9	16	28.6	59.5			A.1pl.k.orn/30_A.2pl.k/62_A.3pl.k/98_A.4pl.k/132_A.5pl.k/170_	140	MIZIA
10 9	A.3pl.k	98	1.5	0.62	6. 9	7. 5	3.4		0	0	16. 1	27. 5	12. 9	16.5	23.6	53			A.1pl.k.orn/30_A.2pl.k/62_A.3pl.k/98_A.4pl.k/132_A.5pl.k/170_	140	MIZIA
11 0	A.4pl.k	132	1.31	0.62	6. 9	7. 5	4.4		0	0	8.7	31. 6	12	13.3	30	55.3			A.1pl.k.orn/30_A.2pl.k/62_A.3pl.k/98_A.4pl.k/132_A.5pl.k/170_	140	MIZIA
11 1	A.5pl.k	170	1.32	1.28	7. 1	7. 7	6.2		0	0	7.2	25. 7	15. 1	15	30.8	60.9			A.1pl.k.orn/30_A.2pl.k/62_A.3pl.k/98_A.4pl.k/132_A.5pl.k/170_	140	MIZIA
11 2	A.1pl.k. orn	30	2.31	2.8	7. 3	7. 9	7.5		0	0	3.5	28. 7	16. 1	13.8	30.4	60.3	10/YR/3 /3	Alluvia l- meado w slight clayey	A.1pl.k.orn/30_A.2pl.k/55_A.3pl.k/75_A.4pl/110_5pl/150_	248	ORIAHOVO
11 3	A.2pl.k	55	2.48	1.28	7. 3	7. 9	4.6		0	0	11. 5	22. 9	11. 7	11.4	37.9	61	10/YR/3 /3		A.1pl.k.orn/30_A.2pl.k/55_A.3pl.k/75_A.4pl/110_5pl/150_	248	ORIAHOVO
11 4	A.3pl.k	75	2.08	0.41	7. 2	7. 8	4.3		0	0	15. 2	22	13. 8	13	31.7	58.5	10/YR/3 /3		A.1pl.k.orn/30_A.2pl.k/55_A.3pl.k/75_A.4pl/110_5pl/150_	248	ORIAHOVO
11 5	A.4pl	110	1.45	0	7. 1	7. 7	3.4		0	0	15. 9	25. 3	14. 3	11.3	29.8	55.4	10/YR/4 /3		A.1pl.k.orn/30_A.2pl.k/55_A.3pl.k/75_A.4pl/110_5pl/150_	248	ORIAHOVO
11 6	5pl	150	0	0	7	7. 6	3.6		0	0	16. 6	27. 2	13. 4	11.1	28.1	52.6	10/YR/4 /3		A.1pl.k.orn/30_A.2pl.k/55_A.3pl.k/75_A.4pl/110_5pl/150_	248	ORIAHOVO

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 05	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
11 7	4pl.k	108	1.1	14.4 2	7. 9	8. 5	18.9	0	0	29	30. 6	5	2.3	14.2	21.5		Alluvia l- meado w slight sandy- clayey	A.1pl.orn.k/28_A.2pl.k/50_3pl.k/78_4pl.k/108_5pl.k/134_	490	OSTROV
11 8	5pl.k	134	0.93	20.1 2	8. 1	8. 7	26.5	0	0.7	17	26. 2	5.5	5	19.1	29.6			A.1pl.orn.k/28_A.2pl.k/50_3pl.k/78_4pl.k/108_5pl.k/134_	490	OSTROV
11 9	AC1.chi m	22	1.57	17.7 5	8. 1	8. 7	22.5	0	0	24. 9	36. 6	2.9	3.1	10	16		Black- earth clayey- sandy	AC1.chim/22_C2.k/46_	373	OSTROV
12 0	C2.k	46	0.43	21.0 7	8. 2	8. 8	25.2	0	1.6	17. 5	43. 2	3.6	2.1	6.8	12.5			AC1.chim/22_C2.k/46_	373	OSTROV
12 1	A.1pl.or n.k	28	2.25	0.76	7. 5	8. 1	3.9	0	0.3	36. 1	33. 7	5.1	2.7	18.2	26		Alluvia l- meado w slight sandy- clayey	A.1pl.orn.k/28_A.2pl.k/50_3pl.k/78_4pl.k/108_5pl.k/134_	490	OSTROV
12 2	A.2pl.k	50	1.54	5.31	7. 7	8. 3	8.4	0	1.3	36	30. 4	4	4.5	15.4	23.9			A.1pl.orn.k/28_A.2pl.k/50_3pl.k/78_4pl.k/108_5pl.k/134_	490	OSTROV
12 3	3pl.k	78	1.18	9.98	7. 9	8. 5	13.1	0	0	35. 9	29. 6	4	3	14.4	21.4			A.1pl.orn.k/28_A.2pl.k/50_3pl.k/78_4pl.k/108_5pl.k/134_	490	OSTROV
12 4	A.orn	22	2.01	0	5. 3	6. 1	2.8	0	3.3	11. 4	34. 5	7.7	11.3	29	48	10/YR/3 /2	Black- earth leache	A.orn/22_aB1/42_B2/62_C1.k/83_C2.k/108_C3.k/132_	117	ROGOZEN



**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm					
																d slight leache d slight sandy- clayey				
12 5	aB1	42	1.3	0	5. 6	6. 4	2.9	0	1.6	12. 3	32. 7	7.7	8.9	33.9	50.5	10/YR/4 /2		A.orn/22_aB1/42_B2/62_C1.k/83_C2.k/108_C3.k/132_	117	ROGOZEN
12 6	B2	62	0.99	0	5. 6	6. 4	3	0	1.4	12. 9	33. 5	9.1	6.3	33.8	49.2	10/YR/4 /3		A.orn/22_aB1/42_B2/62_C1.k/83_C2.k/108_C3.k/132_	117	ROGOZEN
12 7	C1.k	83	0.88	5.73	5. 7	6. 5	10.9	0	1.6	4.8	34. 1	9.1	7.7	31.8	48.6	10/YR/4 /4		A.orn/22_aB1/42_B2/62_C1.k/83_C2.k/108_C3.k/132_	117	ROGOZEN
12 8	C2.k	108	0.94	7.41	7. 1	7. 7	9.9	0	1.9	12. 2	30. 6	10	10.2	25.2	45.4	10/YR/5 /6		A.orn/22_aB1/42_B2/62_C1.k/83_C2.k/108_C3.k/132_	117	ROGOZEN
12 9	C3.k	132	0.54	8.67	7. 3	7. 9	11.9	0	1.5	14	33. 6	15. 9	12.1	11	39	10/YR/5 /6		A.orn/22_aB1/42_B2/62_C1.k/83_C2.k/108_C3.k/132_	117	ROGOZEN
13 0	A`.orn	22	2	0	5. 6	6. 4	2.4	0	0	14. 8	33. 4	10. 6	5.8	33.3	49.7	5/YR/3/ 2	Black- earth leache d mediu m leache d slight sandy- clayey	A`.orn/22_A`/46_B1/68_B2/88_C1.k/110_C2.k/130_	95	ROGOZEN
13 1	A``	46	1.51	0	5. 7	6. 5	2.4	0	0	18. 1	31	8.1	7.7	32.7	48.5	5/YR/3/ 3		A`.orn/22_A``/46_B1/68_B2/88_C1.k/110_C2.k/130_	95	ROGOZEN
13 2	B1	68	0.91	0	5. 8	6. 6	2.6	0	0.5	12. 5	36	8.2	8.5	31.7	48.4	5/YR/4/ 4		A`.orn/22_A`/46_B1/68_B2/88_C1.k/110_C2.k/130_	95	ROGOZEN

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy											Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell					
13 3	B2	88	0.5	0	6. 2	7	2.2		0	0.5	12. 4	37. 6	9.6	7.5	30.2	47.3	5/YR/4/ 4		A`.orn/22_A``/46_B1/68_B2/88_C1.k/110_C2.k/130_	95	ROGOZEN
13 4	C1.k	110	0.71	0	6. 4	7	2.5		0	0.6	14. 9	36. 1	9.9	6.1	29.9	45.9	5/YR/4/ 6		A`.orn/22_A``/46_B1/68_B2/88_C1.k/110_C2.k/130_	95	ROGOZEN
13 5	C2.k	130	0.55	13.7 1	7. 3	7. 9	17.8		0	0.8	12. 4	31. 7	8.2	6.9	22.2	37.3	5/YR/5/ 6		A`.orn/22_A``/46_B1/68_B2/88_C1.k/110_C2.k/130_	95	ROGOZEN
13 6	A`.orn	30	2.31	0	4. 7	5. 5	1.6		0	0.8	18. 4	32. 2	9.6	7.2	30.2	47	7,5/YR/ 3/2	Dark gray mediu m sandy- clayey	A`.orn/30_B1.g/56_B2.g/84_B3.g/115_C.k/150_	5	ROGOZEN
13 7	B1.g	56	1.25	0	4. 7	5. 5	2.2		0	0.9	13. 2	30. 3	8.3	7.3	37.8	53.4	7,5/YR/ 4/4		A`.orn/30_B1.g/56_B2.g/84_B3.g/115_C.k/150_	5	ROGOZEN
13 8	B2.g	84	1.25	0	4. 7	5. 5	2		0	0.6	16. 7	29. 4	7.9	8.2	35.2	51.3	7,5/YR/ 4/4		A`.orn/30_B1.g/56_B2.g/84_B3.g/115_C.k/150_	5	ROGOZEN
13 9	B3.g	115	0.88	0	4. 8	5. 6	1.9		0	0.8	17. 6	30. 7	8.3	7.9	32.8	49	7,5/YR/ 4/4		A`.orn/30_B1.g/56_B2.g/84_B3.g/115_C.k/150_	5	ROGOZEN
14 0	C.k	150	0.6	13.5	7	7. 6	16.6		0	0.9	13. 6	25. 8	8.6	6.2	28.3	43.1	7,5/YR/ 6/8		A`.orn/30_B1.g/56_B2.g/84_B3.g/115_C.k/150_	5	ROGOZEN
OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy											Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_HCl	> 1m m	1- 0,25 mm	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell					
14 1	A`.orn	21	2.45	1.78	6. 9	7. 5	4.9		0	0	16	37. 3	8.1	6.4	27.3	41.8	5/YR/3/ 1	Alluvia l	A`.orn/21_A`.k/44_1pl/68_2pl/91_3pl/115_	121	ROGOZEN

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm					
																(deluvi al) meado w slight sandy- clayey				
14 2	A``.k	44	2.45	1.25	6. 7	7. 3	4.8	0	0	15. 8	33. 2	10. 4	6	29.8	46.2	5/YR/3/ 2		A`.orn/21_A``.k/44_1pl/68_2pl/91_3pl/115_	121	ROGOZEN
14 3	1pl	68	2.09	0	6. 7	7. 3	4.4	0	0	15. 7	29. 8	9.8	7.2	33.1	50.1	5/YR/3/ 3		A`.orn/21_A``.k/44_1pl/68_2pl/91_3pl/115_	121	ROGOZEN
14 4	2pl	91	1.46	0	6. 6	7. 2	3.9	0	0	17. 1	25. 2	12. 5	5.1	36.2	53.8	5/YR/3/ 4		A`.orn/21_A``.k/44_1pl/68_2pl/91_3pl/115_	121	ROGOZEN
14 5	3pl	115	1.16	0	6. 7	7. 3	4.2	0	0	6.9	38. 7	17. 8	16.1	16.3	50.2	5/YR/3/ 4		A`.orn/21_A``.k/44_1pl/68_2pl/91_3pl/115_	121	ROGOZEN
14 6	A`.pl.k. orn	30	2	4.31	7. 5	8. 1	8.6	0	0	31. 1	26. 4	6.4	10.4	17.1	33.9	10/YR/3/ 2	Alluvia l (deluvi al) meado w mediu m sandy- clayey	A`.pl.k.orn/30_A``.pl.k/54_A``.pl.k/76_A``.pl.k/100_A``.pl.k/130_A``.pl.k/160_	184	SELANOVCI
14 7	A``.pl.k	54	0	2.8	7. 4	8	4.9	0	2.8	22. 4	33. 7	9.2	11	16	36.2	10/YR/3/ 1		A`.pl.k.orn/30_A``.pl.k/54_A``.pl.k/76_A``.pl.k/100_A``.pl.k/130_A``.pl.k/160_	184	SELANOVCI
14 8	A``.pl.k	76	0	3.3	7. 5	8. 1	6.4	0	2.4	24. 7	31. 8	7.8	11.7	15.2	34.7	10/YR/3/ 3		A`.pl.k.orn/30_A``.pl.k/54_A``.pl.k/76_A``.pl.k/100_A``.pl.k/130_A``.pl.k/160_	184	SELANOVCI
14 9	A``.pl. k	100	0	4.31	7. 5	8. 1	7.6	0	4.9	20. 4	37. 9	6.1	6.5	16.6	29.2	10/YR/4/ 3		A`.pl.k.orn/30_A``.pl.k/54_A``.pl.k/76_A``.pl.k/100_A``.pl.k/130_A``.pl.k/160_	184	SELANOVCI
15	A``.pl	130	1.13	5.81	7. 8	8	9.5	0	1.1	22.	36.	5.4	7.4	17.6	30.4	10/YR/5		A`.pl.k.orn/30_A``.pl.k/54_A``.pl.k/76_A``.pl.k/100_A``.pl.k	184	SELANOVCI

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
0	.k				4					5	5					/3		/130_A'''''.pl.k/160_		
15 1	A'''''.p l.k	160	0	2.8	7. 3	7. 9	5.8	0	1.5	17. 5	38. 1	9.3	7.5	19.9	36.7	10/YR/4 /4		A`.pl.k.orn/30_A``.pl.k/54_A``.pl.k/76_A'''''.pl.k/100_A'''''.pl.k/130_A'''''.pl.k/160_	184	SELANOVCI
15 2	A`.k.orn	28	1.89	2.8	7. 5	8. 1	7.5	0	0	27	33. 3	8.9	7.5	15.8	32.2	10/YR/3 /2	Black- earth carbon ate mediu m sandy- clay	A`.k.orn/28_AB.k/50_BC.k/80_C1.k/104_C2.k/130_	180	SELANOVCI
15 3	AB.k	50	1.85	6.79	7. 6	8. 2	11.4	0	0	23. 6	40. 6	7	2	15.4	24.4	10/YR/3 /3		A`.k.orn/28_AB.k/50_BC.k/80_C1.k/104_C2.k/130_	180	SELANOVCI
15 4	BC.k	80	1.23	15.3 7	7. 8	8. 4	18.6	0	0	23. 1	34. 1	6.5	4.2	13.5	24.2	10/YR/4 /3		A`.k.orn/28_AB.k/50_BC.k/80_C1.k/104_C2.k/130_	180	SELANOVCI
15 5	C1.k	104	0.81	20.1 2	7. 8	8. 4	26	0	0	23. 6	30. 6	5.1	3.4	11.3	19.8	10/YR/5 /3		A`.k.orn/28_AB.k/50_BC.k/80_C1.k/104_C2.k/130_	180	SELANOVCI
15 6	C2.k	130	0	23.9 7	7. 9	8. 5	31.7	0	0	19. 2	31. 8	5.8	2.8	8.7	17.3	10/YR/6 /4		A`.k.orn/28_AB.k/50_BC.k/80_C1.k/104_C2.k/130_	180	SELANOVCI
15 7	A.1pl.or n	28	3.73	0	6. 9	7. 5	4.2	0	0	7.2	40. 9	13. 1	12.7	21.9	47.7		Deluvi al- meado w heavy sandy- clayey	A.1pl.orn/28_A.2pl/54_A.3pl/78_A.4pl/102_A.5pl/128_	14	SELANOVCI
15 8	A.2pl	54	3.16	0	6. 7	7. 3	3.4	0	0	14. 8	40. 6	11	6.3	23.9	41.2			A.1pl.orn/28_A.2pl/54_A.3pl/78_A.4pl/102_A.5pl/128_	14	SELANOVCI
15 9	A.3pl	78	2.46	0	6. 3	6. 9	2.2	0	0	17. 8	38	10. 3	10.3	21.6	42.2			A.1pl.orn/28_A.2pl/54_A.3pl/78_A.4pl/102_A.5pl/128_	14	SELANOVCI
16	A.4pl	102	0	0	0	0	0	0	0	0	0	0	0	0	0			A.1pl.orn/28_A.2pl/54_A.3pl/78_A.4pl/102_A.5pl/128_	14	SELANOVCI

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
0																				
16 1	A.5pl	128	0	0	6. 1	6. 9	2.1	0	0	16	38. 9	8.6	6.6	27.8	43			A.1pl.orn/28_A.2pl/54_A.3pl/78_A.4pl/102_A.5pl/128_	14	SELANOVCI
16 2	1pl.k	30	0.53	18.7 1	8. 1	8. 7	23.2	0	10.4	38. 8	7.1	10. 6	2.7	7.2	20.5	10/YR/3 /1	Alluvia l- meado w alkalin e slight sandy- clayey	1pl.k/30_A.2pl.k/56_A.3pl.k/96_4pl.k/130_	191	SELANOVCI
16 3	A.2pl.k	56	1.19	7.28	7. 9	8. 5	11	0	5.4	47. 6	12. 3	4.4	4.3	15	23.7	10/YR/3 /2			191	SELANOVCI
16 4	A.3pl.k	96	2.32	3.81	7. 6	8. 2	7.1	0	3.8	51. 2	15. 2	3.9	4.7	14.2	22.8	10/YR/6 /4			191	SELANOVCI
16 5	4pl.k	130	0.56	21.0 7	8. 1	8. 7	25.5	0	13.1	32. 6	18. 2	3.8	2.1	4.7	10.6	10/YR/7 /4			191	SELANOVCI
16 6	A.1pl.k	20	3.5	6.3	7. 5	8. 1	11.9	0	0	14. 4	38. 8	6.6	7.9	20.4	34.9	10/YR/3 /1	Alluvia l- meado w alkalin e mediu m sandy- clayey	A.1pl.k/20_A.2pl.k/44_	185	SELANOVCI
16 7	A.2pl.k	44	4.2	6.79	7. 3	7. 9	12.9	0	0	6.3	22. 9	9.8	15.3	32.8	57.9	10/YR/3 /1			185	SELANOVCI

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
16 8	Ab.k	12	4.72	6.79	7. 4	8	13.6	0	0	19. 5	39. 2	6.5	4.8	16.4	27.7	10/YR/3 /3	Black- earth slight sandy- clay	Ab.k/12_BC.k/40_C.k/74_	71	SELANOVCI
16 9	BC.k	40	3.24	9.68	7. 6	8. 2	17.1	0	0	16. 3	39. 9	6.8	4.4	15.5	26.7	10/YR/4 /3			71	SELANOVCI
17 0	C.k	74	1.67	15.8 5	7. 6	8. 2	22.7	0	0	15. 8	39. 1	5.1	3.5	13.8	22.4	10/YR/6 /4			71	SELANOVCI
17 1	A.k	12	1.78	15.8 7	7. 3	7. 9	20.2	0.9	1.8	34. 5	23. 4	7.4	11.1	11.8	30.3	5/YR/4/ 4	Black- earth carbon ate slight sandy- clay	A.k/12_C1.k/30_C2.k/50_C3.k/78_	93	SOFRONIE VO
17 2	C1.k	30	0.92	16.5 3	7. 4	8	18.3	0.6	1.2	10. 3	25	10. 9	11.9	21.8	44.6	5/YR/5/ 6			93	SOFRONIE VO
17 3	C2.k	50	0.79	18.0 8	7. 4	8	14.1	0	0	14. 4	24. 4	9.9	11.6	25.6	47.1	5/YR/5/ 8			93	SOFRONIE VO
17 4	C3.k	78	0.63	20.1 4	7. 3	7. 9	21.2	0	0	11. 6	27	6.6	10.4	23.2	40.2	5/YR/5/ 8			93	SOFRONIE VO
17 5	A`.k.orn	22	1.2	3.87	7. 2	7. 8	6	0	3.1	42. 3	29	7.3	4.2	8.1	19.6	5/YR/5/ 3	Alluvia l clayey- sandy	A`.k.orn/22_A`.k/45_1pl.k/69_2pl.k/92_3pl.k/120_4pl.k/151_	71	SOFRONIE VO
17 6	A``.k	45	1.17	4.76	7. 3	7. 9	6.9	0	2.4	36. 1	33. 1	5.6	4.4	11.5	21.5	5/YR/5/ 3			71	SOFRONIE VO
17 7	1pl.k	69	1.03	3.77	7. 3	7. 9	5.8	0	7.6	40. 7	20. 9	9.1	4.1	11.8	25	5/YR/5/ 4			71	SOFRONIE VO
17	2pl.k	92	1.38	4.86	7.	7.	7.3	0	7.4	15.	35.	11.	7.3	15.7	34.5	5/YR/5/			71	SOFRONIE

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm	Color by Munsell				
8					2	8				6	2	5				6				VO
17 9	3pl.k	120	0.92	3.07	7. 4	8	4.7	0	20.5	33. 3	26. 9	4.6	3.5	6.5	14.6	5/YR/5/ 6			71	SOFRONIE VO
18 0	4pl.k	151	0.43	1.87	7. 5	8. 1	2.1	0	37.6	50. 7	4.6	1.6	1.8	1.6	5	5/YR/5/ 8			71	SOFRONIE VO
18 1	A`.chim	21	2.38	0	6	6. 8	2.2	0	25.1	18	19. 6	10. 2	7.3	17.6	35.1	5/YR/5/ 2	Alluvia l mediu m sandy- clayey	A`.chim/21_A`/48_1pl/74_2pl/102_3pl/136_4pl/167_	68	SOFRONIE VO
18 2	A``	48	1.95	0	6. 4	7	2.1	0	24.5	18	21. 8	6	5.7	21.9	33.6	5/YR/5/ 2			68	SOFRONIE VO
18 3	1pl	74	1.22	0	6. 5	7. 1	1.3	3.9	36.2	26. 8	11. 5	4.4	5.3	10.6	20.3	5/YR/5/ 4			68	SOFRONIE VO
18 4	2pl	102	1.08	0	6. 8	7. 4	1	2.5	41.9	28	10. 4	4.2	3.4	8.6	16.2	5/YR/5/ 4			68	SOFRONIE VO
18 5	3pl	136	0.94	0	6. 7	7. 3	1.1	6.3	46.6	25. 1	8.9	3	2.2	6.8	12	5/YR/5/ 6			68	SOFRONIE VO
18 6	4pl	167	0.51	0	6. 8	7. 4	0.6	12	49.8	24. 7	5.3	1.8	1.5	4.3	7.6				68	SOFRONIE VO
18 7	A`.orn	22	2.9	0	6. 7	7. 3	2.9	0	6.4	17. 9	23. 5	13. 4	8.8	27.1	49.3	5/YR/3/ 2	Mead ow black- earth mediu m leache d heavy sandy-	A`.orn/22_A`/42_aB/63_B1/92_B2/116_B3/143_C.k/173_	51	SOFRONIE VO

**P16Del09Rev02\_EIA\_R – Chapter 11**

OI D	Code of the horizon	Dep th	Hum us	CaC O3	p H K Cl	pH H2 O	Mechanical composition by Kachinskiy										Soil units	Structure of the soil profile	№ of prof ile	Lands
							Loss_ HCl	> 1mm	1- 0,25m m	0,2 5- 0,0 5	0,0 5- 0,0 1	0,0 1- 0,0 05	0,00 5- 0,00 1	< 0,001 mm	< 0,01 mm					
																clayey				
18 8	A``	42	2.76	0	6. 8	7. 4	2.7	0	6.1	18. 5	23. 5	14. 4	8.9	25.9	49.2	5/YR/4/ 2		51	SOFRONIE VO	
18 9	aB	63	2.4	0	6. 9	7. 5	2.8	0	5.7	19. 2	22. 6	14. 4	10.4	24.9	49.7	5/YR/4/ 2		51	SOFRONIE VO	
19 0	B1	92	2.05	0	6. 8	7. 4	2.7	0	4.7	20. 3	21. 7	15. 7	10.7	24.2	50.6	5/YR/4/ 3		51	SOFRONIE VO	
19 1	B2	116	1.36	0	6. 8	7. 4	2.3	0	5.1	21. 2	26. 2	18. 5	4.2	22.5	45.2	5/YR/4/ 4		51	SOFRONIE VO	
19 2	B3	143	1.25	0	7 6	7. 6	2.5	0	3.6	15. 8	32. 1	14. 7	8.2	23.1	46	5/YR/4/ 6		51	SOFRONIE VO	
19 3	C.k	173	1.34	1.27	7 6	7. 6	5	0	3.4	14. 4	29. 2	14. 1	8.8	25.1	48	5/YR/5/ 6		51	SOFRONIE VO	



### ***Attachment 11.3.4 Cultural heritage sites in the 30-km area around Kozloduy Nuclear Power Plant***

**TABLE 1**

**District: VRATSA/municipality: KOZLODUY/populated area: town of KOZLODUY.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		Square	Plot	Pl. N					
1.	Place, where the Botev Group landed on the Danube bank, 3 km to the west					SG issue18 dated 1979.		Historical	National
2.	Historicl area „Mateev geran”, 2 km to the south					SG issue18 dated 1979.		Historical	Local
3.	Roman forest – Regana, 2 km to the east					SG issue 90 from 1965		Architectural and construction from the Ancient ages and Middle Ages	National
4.	Late antic age forest Chatate, 6 km to the west					SG issue 90 from 1965		Architectural and construction from the Ancient ages and Middle Ages	Local

*Group historical cultural monument of category „national importance” /SG issue.99/93/: Memorial complex “ Botev Way”, including the route of the marching order of the Botev group from the Kozloduy Bank to the Vrtsa Balkan together with the historical cultural monuments situated there announced in SG issue18/79г.: Kozloduy banz, Mateev geran, Popovo hanche, Milin kamuk, place of death of David Todorov, Boteva poliana „Veslets”, Okoltchitsa peak, Yolkovitsa hollow - place of death of Hristo Botev*

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 2**

**District: VRATSA/municipality: KOZLODUY/populated area: village of HURLETS**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		Square	Plot	Pl. N					
1.	Kaleto next to the village of Hurlets  Roman forest, Kaleto area next to the village  Antic forest Augusta, Kaleto area					SG issue.69 from 1927.  SG issue 90 from 1965  RBCM N14 from 25.06.1984		National antiquity  Architectural and construction /local/  Archaeological reserve	National
2.	the Assumption church	37		565	Letter N 687 from 04 July 1995			Architectural and Art	Local /preliminary cat./

**TABLE 3.**

**District: VRATSA/municipality: MIZIA/populated area: town of MIZIA**  
**/old name BUKYOVTSI/**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		Square	Plot	Pl. N					
1.	Early Middle Age Settlement and necropolis, end of the village					SG issue 25 from 1969.		Archaeological;	Local
2.	Middle age settlement /XII-XIV century/, area Selishteto, end of the village, to the south					SG issue 25 from 1969.		Archaeological;	Local
3.	the Ascension church				List from 1978			Art	

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 4.**

**District: VRATSA/municipality: MISIA/populated area: village of LIPNITSA**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		Square	Plot	Pl. N					
1.	Place of the battle on 28 April 1944 and place of death of partisans and their supporters, area Pripeka, 1 km to the south					SG issue 19 from 1969		Historical	Local
2.	Gurbovia bridge, 0.3 km to the south-east Territory includes the bridge itself with 0.5 ha of the land of the village					SG issue 18 dated 1979.  SG issue 99 from 1993		Historical	Local

**TABLE 5.**

**District: VRATSA/municipality: KOZLODUY/populated area: village of BUTAN**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Place of death of Vladimir Kirkov and Marko Petrov, Lukata area, 3 km north-east Written off					SG issue 19 from 1969	SG issue 91 from 1992	Historical	For information only
2.	Place of death of participants in the September uprising next to the village					SG issue 19 from 1969		Historical	Local
3.	House of Peter and Marko Petrovi	159	IV	239		SG issue 19 from 1969		Historical	Local
4.	Popovoto hanche	105	III	351		SG issue 18 dated 1979.		Historical	Local
5.	Small school	120				SG issue 18 dated 1979.		Historical	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
6.	the Ascension church				List from 1977			Art	

**TABLE 6.**

**District: VRATSA/municipality: ORYAHOVO/populated area: town of ORYAHOVO**

N	SITE /address, location/	cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Place of battle, 1923area Dolnite losia”, 5 km to the east written of					SG issue 19 from 1969	SG issue 91 from 1992	Historical	For information only
2.	House of Srebryo Stoinovski	38		1106		SG issue18 dated 1979.		Historical	Local
3.	Prehistoric /early bronze/ settlement and Antic forest, Kaleto area, 3 km to the east					SG issue 91 from 1979		Archaeological;	Local
4.	Stone next to Oryahovo  Ancient forest Kaleto /Kamuka/, 1 km to the west					SG issue.69 from 1927.  SG issue 90 from 1965		National antiquity  Architectural and construction from the Ancient ages and Middle Ages	National

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
5.	Architectural group - church Saint George  Church Saint George				List from 9 December 1980.  List from 1978			Architectural- construction  Art	
6.	Old Turkish bath next to Oryahovo					SG issue.69 from 1927.		National antiquity	
7.	House with an yard of (Cultural Monuments Act - CMA) hero of the socialist labour Diko Iliev, 49, 9 september Str.	64		1269	Letter N2994 from 26 May 1987			Historical	
8.	Saint Virgin Marry Church	110		814	List from 19 December 1980.			Architectural- construction	
9.	BNB /House of the Pioneers/,8, Letnitsa Str.	53		1010	List from 19 December 1980.			Architectural- construction	
10.	Town museum, 14/16, Vassil Levski Str.	33		863	List from 19 December 1980.			Architectural- construction	
11.	House of Angel and Diana Petrovi, 5 St.st Kiril and Metodyi Str.	38		1113	List from 19 December 1980.			Architectural- construction	
12.	House of Dora Ilieva, 7 St. st Kiril and Metodyi Str.	38		1114	List from 19 December 1980.			Architectural- construction	
13.	House of Ivanka Ivanova, 9, St.st. Kiril and Metodyi Str.	38		1114	List from 19 December 1980.			Architectural- construction	
14.	House of Ivanka and Maria Merrodanski, 11 St.st Kiril and	38		1115	List from 19 December 1980.			Architectural- construction	

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
	Metodyi Str.								
15.	House of Semko M. Semkov, 13, St.st. Kiril and Metodyi Str.	38		1116	List from 19 December 1980.			Architectural- construction	
16.	House of Vassil Mladenov, 3, Rakovski str.	38		1110	List from 19 December 1980.			Architectural- construction	
17.	House of Boyanka D. Popova, 5, Rakovski Str.	38		1111	List from 19 December 1980.			Architectural- construction	
18.	House of Borislav Ninov, 7, Rakovski Str.	38		1112	List from 19 December 1980.			Architectural- construction	
19.	House of Anka Romanova, 16, Latinka Str.	38		1105	List from 19 December 1980.			Architectural- construction	
20.	Commercial building of Georgy Achev, Kliment and Danko Petrovi, 6 G. Dimitrov Str.	48		908	List from 19 December 1980.			Architectural- construction	
21.	Commercial building of Georgy Dzhustov and P. Bizov, 4 G. Dimitrov Str.	48		903	List from 19 December 1980.			Architectural- construction	
22.	Commercial building of Tsonio Dimitrov and V. Mermerski, 2 G. Dimitrov Str.	48		903	List from 19 December 1980.			Architectural- construction	
23.	Commercial building of TPK Progress, SP "Turgovia", 2 G. Dimitrov Str.	48		903	List from 19 December 1980.			Architectural- construction	
24.	Commercial building of SP "Turgovia", 34 G. Dimitrov Str.	37		1007	List from 19 December 1980.			Architectural- construction	

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
25.	Commercial building of Paisyi Rusalov, 36 Al. Stambolyiski Str.	37		1006	List from 19 December 1980.			Architectural-construction	
26.	Commercial building of Lyuben Tsv. Marinov and St. Mrinov 38, Al. Stambolyiski Str.	37		1007	List from 19 December 1980.			Architectural-construction	
27.	Commercial building of Obro T. Patrino and Ivan T. Krustev, 27, Al. Stambolyiski Str.	33		253	List from 19 December 1980.			Architectural-construction	
28.	Commercial building of Ivan V. Ochkov, 29 Al. Stambolyiski Str.	33		253	List from 19 December 1980.			Architectural-construction	
29.	Commercial building of APK, 31 Al. Stambolyiski Str.	33		874	List from 19 December 1980.			Architectural-construction	
30.	Commercial building of Printing materials, 33 Al. Stambolyiski Str.	33		878	List from 19 December 1980.			Architectural-construction	
31.	Commercial building of d-r L. Stamenov, 1, Letnisha Str.	33		1003	List from 19 December 1980.			Architectural-construction	
32.	Commercial Building of Stefanka Tsekova, 3, Letnisha Str.	37		1004	List from 19 December 1980.			Architectural-construction	
33.	Commercial shop SP „Zurneni hrani” – 5 shops, 20 G. Dimitrov Str.	104		368, 369, 370, 371, 372	List from 19 December 1980.			Architectural-construction	
34.	Commercial shops /old/ ribarska sreshta SD Commerce, 2, al. Stambolyiski Str.	103		302	List from 19 December 1980.			Architectural-construction	



**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
35.	Commercial Building of Todor petrov, 4, V. Levski Str. Str.	36		883	List from 19 December 1980.			Architectural-construction	
36.	Commercial Building of Petur Mankov, 6, V. Levski Str. Str.	36		884	List from 19 December 1980.			Architectural-construction	
37.	Commercial Building of DSC and Drug store N1, 8, V. Levski Str. Str.	36		865	List from 19 December 1980.			Architectural-construction	
38.	Commercial Building of Ivan P. Lazarov , 9, V. Levski Str. Str.	33		865	List from 19 December 1980.			Architectural-construction	
39.	Commercial building of Petko M. Chulevb, 11, V. Levski Str.	33		864	List from 19 December 1980.			Architectural-construction	
40.	Residential building of Vassil Paskalev, 2, 9 September Str	114		469	List from 19 December 1980.			Architectural-construction	
41.	Building of Nadezhda community centre, Lenin square	38		171	List from 19 December 1980.			Architectural-construction	
42.	School St.St Cyril and Metodyi ”, 1, Belasitsa Str.	56		1933	List from 19 December 1980.			Architectural-construction	

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 7.**

**District: VRATSA/municipality: ORYAHOVO/populated area: village of OSTROV.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		Square	Plot	Pl. N					
1.	Trench between Ostrov and Vranyak ancient Bulgarian bank /Ostrovski/, next to the village					SG issue.69 from 1927.  SG issue 90 from 1965		National antiquity  Architectural and construction from the Ancient ages and Middle Ages	National
2.	Ancient forest next to the village, North-East					SG issue 25 from 1969.		Archaeological;	Local

**TABLE 8**

**District: VRATSA/municipality: ORYAHOVO/populated area: village of DOLNI VADIN.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		Square	Plot	Pl. N					
1.	Roman forest Valeriana next to the village					SG issue 90 from 1965 Protocol form 25 October 2005. – limits and regimes		Architectural and construction from the Ancient ages and Middle Ages	National

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 9**

**District: VRATSA/municipality: MIZIA/populated area: village of KRUSHOVITSA.**

N	SITE /address, location/	Cadastrе data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Thracian and antique settlement, Briasta area next to the village, to the west					SG issue 25 from 1969.		Archaeological;	Local
2.	Thracian and antique settlement, Buzovitch area 4 km to the east					SG issue 25 from 1969.		Archaeological;	Local
3.	Early Middle Age settlement next to Stublata, 2 km south-east					SG issue 25 from 1969.		Archaeological;	Lo cal
4.	Early middle age settlement, 3-4 km south-east					SG issue 25 from 1969.		Archaeological;	Local
5.	Late ancient settlement, Lozata area /Trustenik/, 2.5 km					SG issue 91 from 1979		Archaeological;	Local
6.	Prehistorical settlement, Chukata area, 1.5 km south-east					SG issue 91 from 1979		Archaeological;	Local
7.	Prehistorical forest Burvanska mogila, 1.5 km to the west					SG issue 90 from 1965		Architectural- construction	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 10**

**District: VRATSA/municipality: MIZIA/populated area: village of SOFRONIEVO.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Middle age church St. Nikola, necropolis –south end of the village  St. Nikolay church					SG issue 91 from 1979  SG issue 86 from 1979		Archaeological;  Art	Local  National
2.	Prehistorical settlement, Deneva mogila area, 4 km to the west					SG issue 91 from 1979		Archaeological;	Local
3.	Middle Age forest in the village					SG issue 90 from 1965		Architectural and construction from the Ancient ages and Middle Ages	Local

**TABLE 11**

**District: VRATSA/municipality: ORYAHOVO/populated area: village of LESKOVETS.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Roman forest Valeriana, next to the village/in SG – village of Dolni Vaden/					SG issue 90 from 1965. Protocol form 25 October 2005. – limits and regimes		Architectural and construction from the Ancient ages and Middle Ages	National

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 12**

**District: VRATSA/municipality: ORYAHOVO populated area: village of SELANOVTSI.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Native house of Todor Kostov Nelev, 1.5 km north-east					SG issue 19 from 1969		Historical	Local
2.	Ancient antique village, Manastira area, 3 km to the east					SG issue 91 from 1979		Archaeological;	Local
3.	Roman forest, 4 km to the north					SG issue 90 from 1965		Architectural-construction	Local
4.	Roman forest Valeriana, next to the village/in SG – village of Dolni Vaden/					SG issue 90 from 1965 Protocol form 25 October 2005. – limits and regimes		Architectural and construction from the Ancient ages and Middle Ages	National

**TABLE 13**

**District: VRATSA/municipality: HAYREDIN/populated area: town of HAYREDIN.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Place of death of partisan supporters - south-east end					SG issue 19/ 1969		Historical	Local
2.	Native house of Vassil Vodenicharski	46	I	843					
3.	Prehistorical and middle age settlement - area Popovia kamuk – 0.5 km to the north					SG issue 91/ 1979		Archaeological Architectural and	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
4.	Antique workshop for millstones – 1 km to the east					SG issue 90/1965		construction from the Ancient ages and middle ages	National
5.	ancient Bulgarian bank – Hayredinski trench Trench between Kozloduy and Hayredin					SG issue 90/1965		Architectural and construction from the Ancient ages and middle ages	National
6.	Six mounds					SG issue 69/1927 DCM N 1711 from 22 October 1962.		National antiquity Archaeological	National
7.	St. Paraskeva church and grave crosses next to the church				List of 1978			Art	

**TABLE 14**

**District: VRATSA / municipality: HAYREDIN / populated area: Botevo village.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Native house of Lazar Yordanov Draychev	13	47	7		SG issue 19/1969	SG issue 91/1992	Historical	For information only
2.	Mound– Northern from the village					DCM N 1711 from 22 October 1962.		Archaeological	National
3.	Three mounds – in the area "Nad Krivia vir"					"		"	National

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 15**

**District: VRATSA/municipality: BYALA SLATINA/populated area: village of GALICHE.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Antique village, Karamelov geran area, 3 km to the east					SG issue 25 from 1969.		Archaeological;	Local
2.	Early Middle Age Settlement and necropolis – area Bosovite kamuni - next to the village					SG issue 25 from 1969.		Archaeological;	Local
3.	Middle age settlement /XII-XIV centuries./ next to the Starata cheshma and Stublata water source					SG issue 25 from 1969.		Archaeological;	Local
4.	Middle age monastery, Manastira area, 2 km to the south-west					SG issue 91 from 1979		Archaeological;	Local

**TABLE 16**

**District: VRATSA/municipality: BYALA SLATINA/populated area: ALTIMIR village.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Prehistorical settlement, Ulovitsa area next to the Stublata water source					SG issue 25 from 1969.		Archaeological;	Local
2.	Middle age settlement, Selishteto area, on the left bank of the Skut river					SG issue 25 from 1969.		Archaeological;	Local
3.	Place of death - Stoyanov grave, Gorni praper area, 2.5 km from the road Altimir -Lipnitsa					SG issue 18 dated 1979.		Historical	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
4.	Forest next to the village  Roman forest – Kaleto, 1.5 km to the north					SG issue.69 from 1927.  SG issue 90 from 1965 Protocol from 10 May 2001. - borders and regimes		National antiquity  Architectural and construction from the Ancient ages and Middle Ages	Local
5.	Prehistorical settlement, Bresta area, next to the village					SG issue 90 from 1965 Protocol from 10 May 2001. - borders and regimes		Architectural and construction from the Ancient ages and Middle Ages	Local
6.	Roman settlement and basilica, Horosania area /Orozanian/, next to the village					SG issue 90 from 1965 Protocol from 10 May 2001. - borders and regimes		Architectural and construction from the Ancient ages and Middle Ages	Local
7.	St. Paraskeva church				List from 1977			Art	



**TABLE 17**

**District: VRATSA/municipality: HAYREDIN/populated area: village of MIHAYLOVO.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Native house of Mihail Ivanov Kunchev	74	I	127		SG issue 19/ 1969		Historical	Local
2.	Middle age settlement - Solinar area – 4.5 km to the south					SG issue 91/ 1979		Archaeological	Local
3.	Prehistorical settlement - on the bank of Ogosta Eastern from the village					“		“	“
4.	Early Bulgarian necropolis - south-east part of the village					“		“	“
5.	Three mounds to the north of the village					DCM N 1711 from 22 October 1962		“	
6.	Mound Dupkata - to the south of the village					” ”		“	
7.	Mound– north-east from the village							“	

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 18**

**District: VRATSA/municipality: HAYREDIN/populated area: village of MANASTIRISHTE.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Place of battle in 1923 –south-west					SG issue 19/ 1969	SG issue 91/ 1992	Historical	For information

**TABLE 19**

**District: MONTANA/municipality: BULCHEDRUM/populated area: village of GORNI TSIBUR.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Ancient forest Kamistra, Keler bair area, 5-6 km to the east					SG N 98 from 1971		Archaeological;	National
2.	Ancient forest next to Keler bair area, 5-6 km to west					SG N 98 from 1971		Archaeological;	Local
3.	Prehistorical settlement next to the village					SG N 98 from 1971		Archaeological;	Local
4.	Place of death of participants in the September uprising, Adadzjika area, 3 km North-East					SG issue 5 from 1973		Historical	Local
5.	Monument-oussary					SG issue 5 from 1973		Historical	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 20**

**District: MONTANA/municipality: BULCHEDRUM/populated area: village of DOLNI TSIBUR.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Ancient forest Tsebrus, in the village					SG N 98 from 1971		Archaeological;	National
2.	Historical area - place of battle, next to the village					SG N 98 from 1971		Historical	Local
3.	Gurlo Bridge				Letter N 2836 from 13 August 1976			Architectural-construction	
4.	Dzamiata				Letter N 2836 from 13 August 1976			Architectural-construction	

**TABLE 21**

**District: VRATSA/municipality: BYALA SLATINA/populated area: village of BURDARSKI GERAN.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Early middle age settlement, area Bratino selishte, 2-3 km to the north					SG issue 25 from 1969.		Archaeological;	Local

**District: VRATSA/municipality: BYALA SLATINA/populated area: village of TURNAVA.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Native house of Vulka Nikolova Tashovska	54	XIV	481		SG issue 19 from 1969		Historical	Local
2.	Partisan camp, Bresnic area /Karaguevska koshara/, 3 km south-west written of					SG issue 19 from 1969	SG issue 91 from 1992	Historical	For information only
3.	Partisan camp, Lekovit kladenets area /Petreshkovski shumak/, 3 km south-west written off					SG issue 19 from 1969	SG issue 91 from 1992	Historical	For information only

**District: VRATSA/municipality: BORO VAN/populated area: village of DOBROLEVO..**

N	SITE /address, location/	Cadastré data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	church St.st. Cyril and Metodyi				List of 14.12.1971			Art	

**P16Del09Rev02\_EIA\_R – Chapter 11**

**TABLE 24**

**District: VRATSA/municipality: KRIVODOL/populated area: village of FUREN.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPDM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Prehistorical and Middle Age foest, 3 km to the west					SG issue 90 from 1965		Architectural and construction from the Ancient ages and Middle Ages	Local
2.	House of Tano Genov				Letter N 392 from 3 February 1976			Architectural- construction	
3.	House of Nikola Panov Kardovski				Letter N 392 from 3 February 1976			Architectural- construction	

**TABLE 25**

**District: MONTANA/municipality: BOICHINOVTSI/populated area: village of BELI BROD.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPDM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Antique forest, Ribene river, right bank, 2 km to the south					SG N 98 from 1971		Archaeological;	Local
2.	Ceramic ovens, Ribene river, right bank, 2 km to the south					SG N 98 from 1971		Archaeological;	Local
3.	Antique settlement, Ribene river, right bank, 2 km to the south					SG N 98 from 1971		Archaeological;	Local
4.	Antique and Middle Age Settlement, Ribene river, left bank, -3-4 km to the south					SG N 98 from 1971		Archaeological;	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
5.	Saint Virgin Marry Church				Letter N 2836 from 13 August 1976 Letter N 2585 from 5 July 1979.			Architectural- construction  Art	

**TABLE 26**

**District: MONTANA/municipality: VULCHEDRUM.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Place of death of participants in the September uprising, ChernovrusWest					SG issue 5 from 1973		Historical	National

**TABLE 27**

**District: MONTANA/municipality: BULCHEDRUM/populated area: town of VULCHEDRUM.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Prehistorical settlement, Dzukata area of Peshino pladnishte, 800 m north-east					SG N 98 from 1971		Archaeological;	Local
2.	Prehistorical village, Nemolia area, 500 m to the east					SG N 98 from 1971		Archaeological;	Local
3.	Prehistorical settlement in the yard of agricultural farm					SG N 98 from 1971		Archaeological;	Local
4.	Prehistorical village, Armaluy area, 500 m to the south-east					SG N 98 from 1971		Archaeological;	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
5.	Antique settlement, Kyosina cheshma, 1 km to the south-east					SG N 98 from 1971		Archaeological;	Local
6.	Antique settlement, Tsiklina cheshma, 2,5 km to the north-east					SG N 98 from 1971		Archaeological;	Local
7.	Antique necropolis, Tsiklina cheshma, 2,5 km to the north-east					SG N 98 from 1971		Archaeological;	Local
8.	Slavonic settlement, Pchelina mogila area, 800 m north-east					SG N 98 from 1971		Archaeological;	Local
9.	Slavonic settlement, Armaluy area, 500 m south-east					SG N 98 from 1971		Archaeological;	Local
10.	House of T. Tsenkov	71	8	663		SG issue 5 from 1973		Historical	Local
11.	Place of death of Kosta Bakurdzhiev					SG issue 5 from 1973		Historical	Local
12.	Semyonovata vodenitsa				Letter N 2836 from 13 August 1976			Architectural-construction	

**TABLE 28**

**District: MONTANA / municipality: BULCHEDRUM / populated area: village of RASGRAD.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Prehistorical settlement, Dola, 3 km north-east					SG N 98 from 1971		Archaeological;	Local

**P16Del09Rev02\_EIA\_R – Chapter 11**

2.	Prehistorical settlement, next to Rasgrad station 1 km in the village					SG N 98 from 1971		Archaeological;	Local
3.	Antique necropolis, next to the first agricultural yard					SG N 98 from 1971		Archaeological;	Local

**TABLE 29**

**District: MONTANA / municipality: LOM / populated area: village of STANEVO.**

N	SITE /address, location/	Cadastre data			Declared with:	Announced: in SG issue/year /Protocol of the NCPCM	Written of with:	Type	Category
		square	plot	pl. N					
1.	Antique forest - Pomodiana – Mal tepe area – 0.5 km to the east					SG issue 98 from 1971		Archaeological	National
2.	Slavonic settlement-reinforced, area Mal tepe – 0.3 km to the east					SG issue 98 from 1971		Archaeological	Local



### ***Attachment 11.3.5 Visual data and maps related to section 3.13***

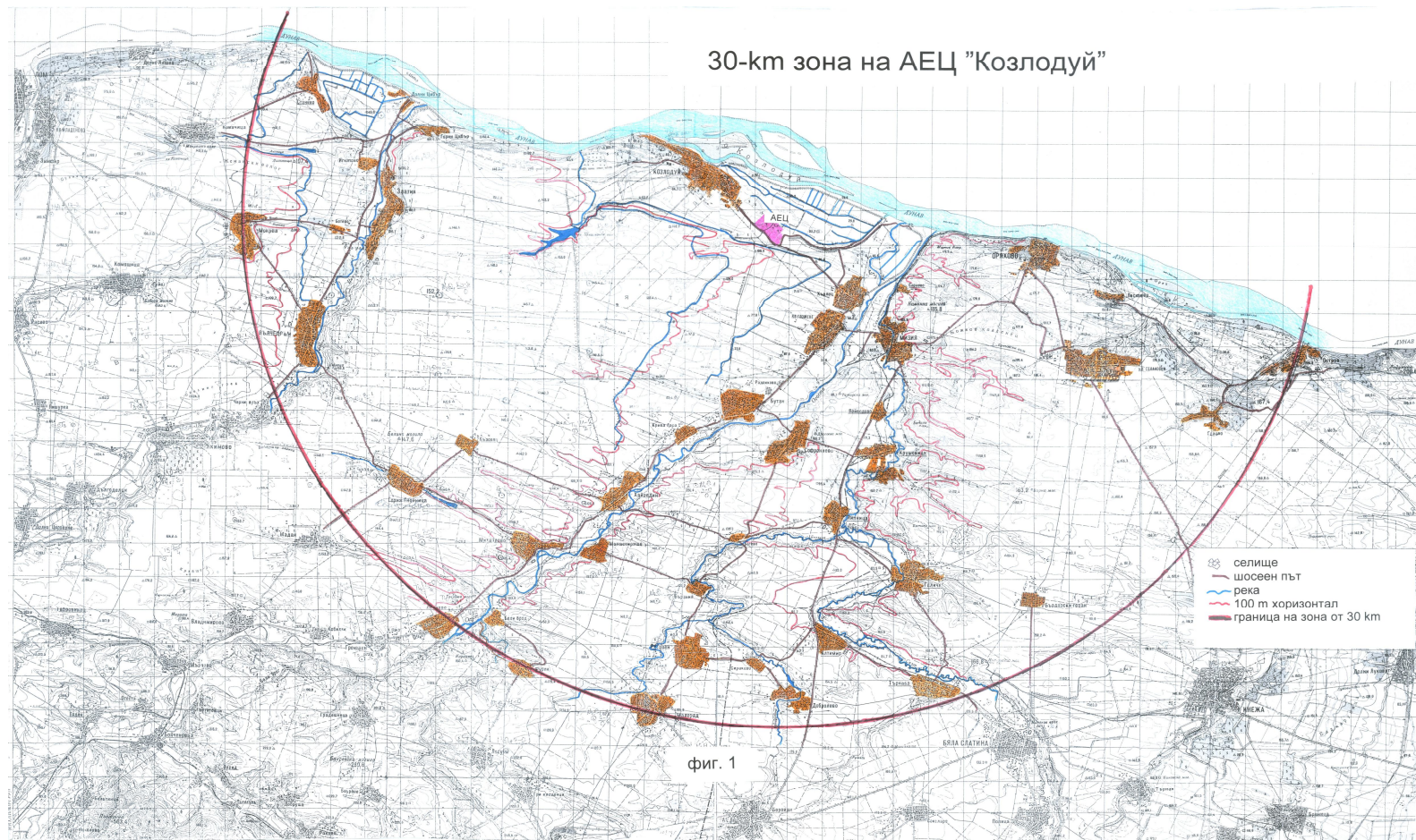


Fig. 1 30-km zone of Kozloduy NPP site



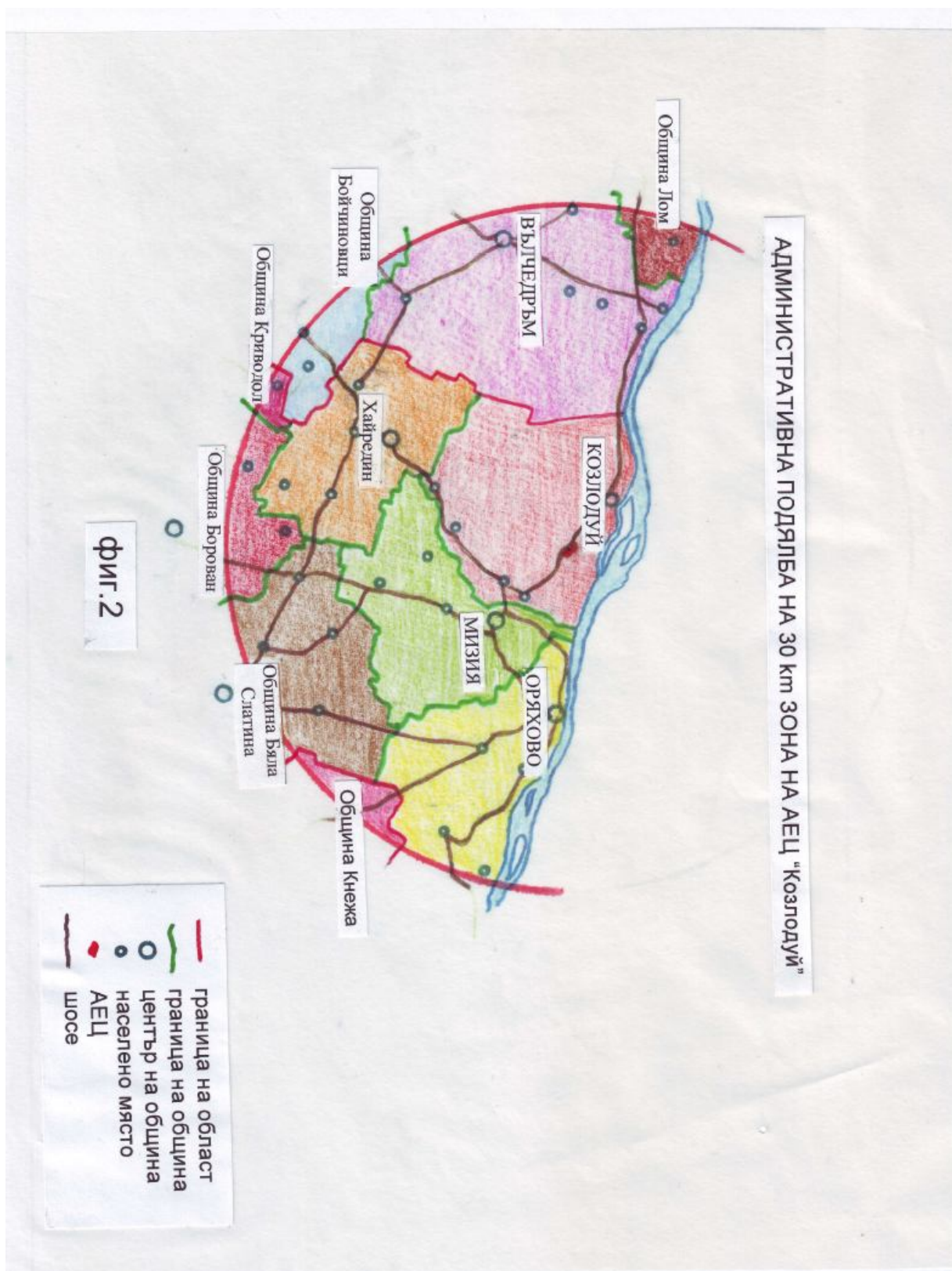


Fig. 2 Administrative regioning of the 30-km zone around Kozloduy NPP site

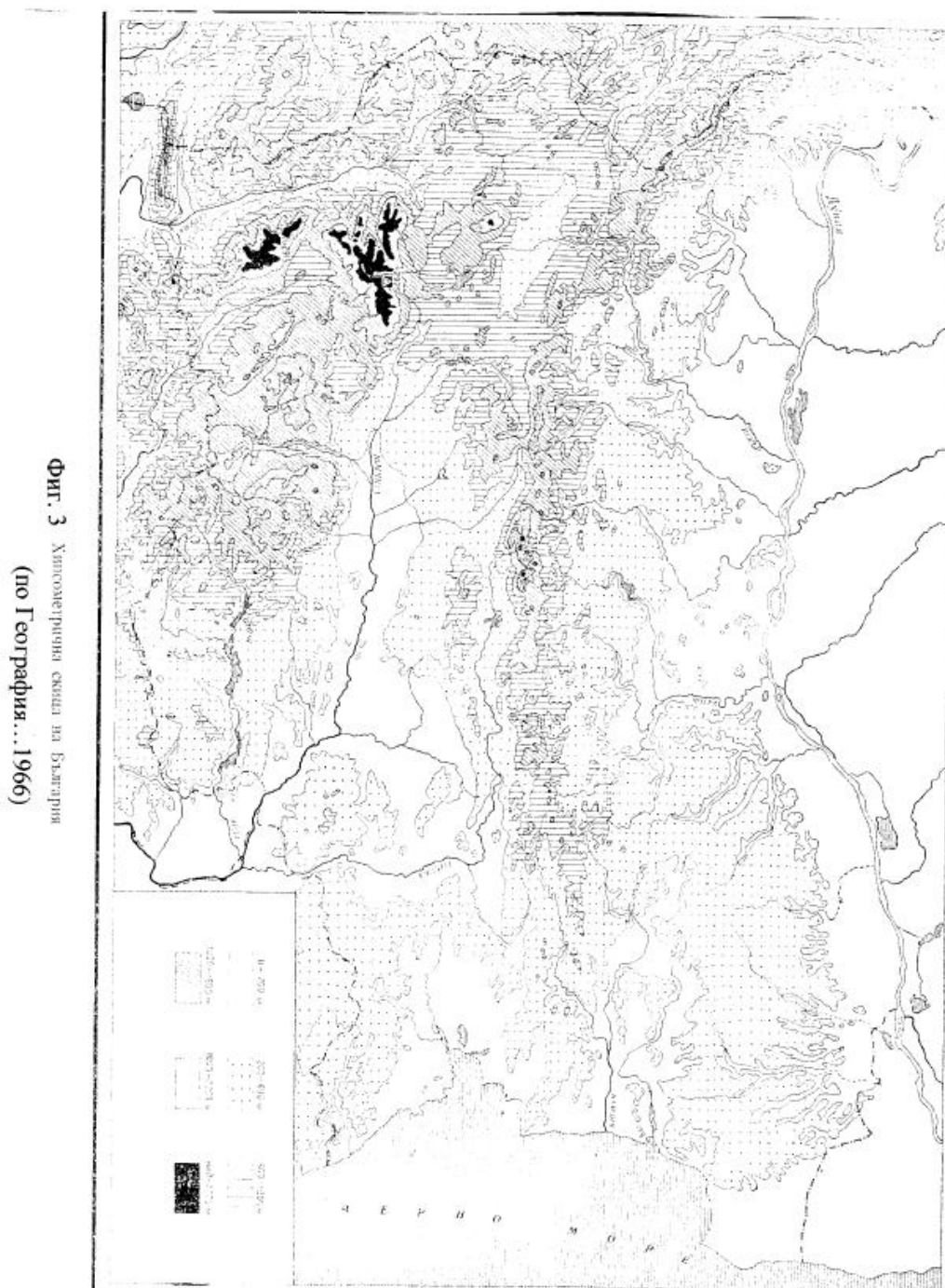
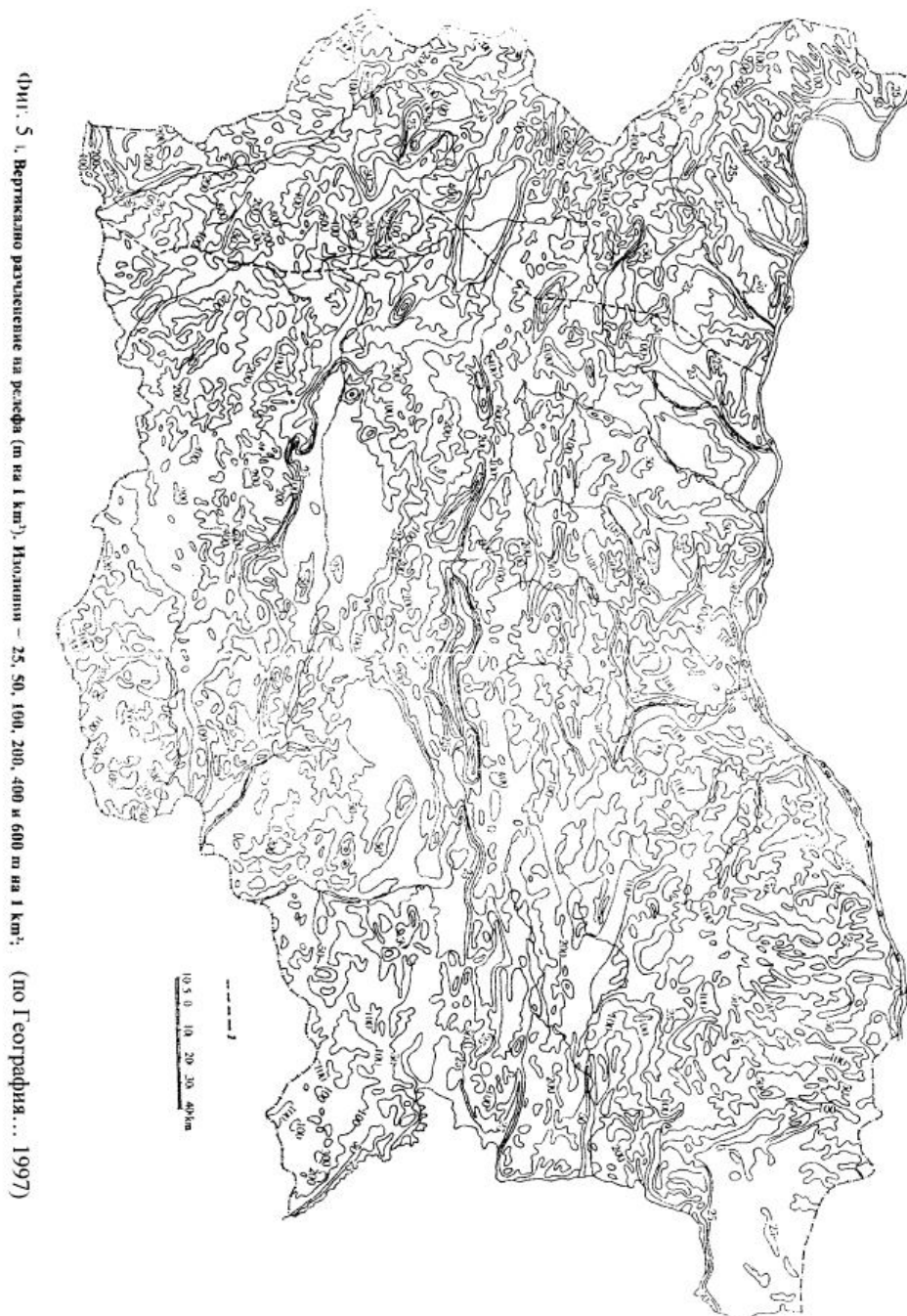


Fig. 3 Bulgaria's hypsometric map





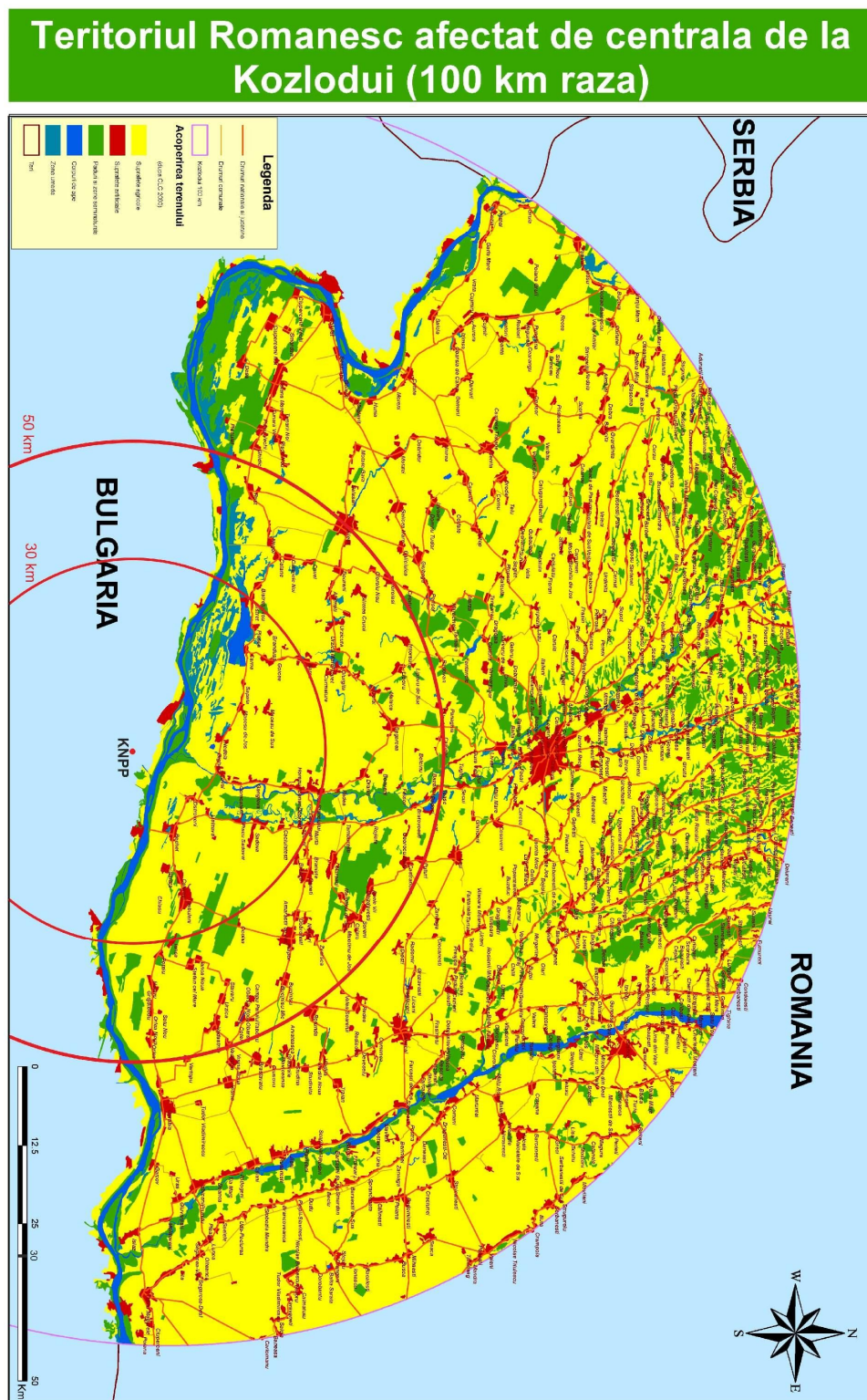


Fig. 5 Map of the Romanian territory around KNPP