



Belgrade, April 2021

INTRODUCTION.....	9
I PUBLIC ENTERPRISE “ELECTRIC POWER INDUSTRY OF SERBIA“	10
COAL PRODUCTION IN PE EPS	10
ELECTRICITY GENERATION IN PE EPS	11
FUEL CONSUMPTION IN PE EPS THERMAL POWER PLANTS.....	11
EMISSION OF SUBSTANCES FROM THERMAL POWER PLANTS AFFECTING THE AIR QUALITY	13
WORK INJURIES IN PE EPS	13
PE EPS EMPLOYEES’ HEALTH PROTECTION	14
1. “KOLUBARA” MINE BASIN BRANCH.....	15
A KOLUBARA MB BRANCH – “OPEN CAST MINES” OU	15
1.1. OVERVIEW AND STATUS OF PERMITS.....	15
1.2. MONITORING AND ENVIRONMENTAL IMPACTS	16
1.2.1. Air Quality Measurements	16
1.2.2. Emission Measurements of Matters Affecting Water Quality	17
1.2.3. Emission Measurements of Matters Affecting Soil Quality	17
1.2.4. Environmental Noise Measurement.....	20
1.2.5. Waste	20
B. MB KOLUBARA BRANCH – “PRERADA” BRANCH AND “KOLUBARA METAL” BRANCH.....	24
B.1. “PRERADA” BRANCH.....	24
1.1. OVERVIEW AND STATUS OF PERMITS.....	24
1.2. MONITORING AND ENVIRONMENTAL IMPACT	25
1.2.1. Air Quality Measurements	25
1.2.2. Emission Measurements of Matters Affecting Air Quality.....	25
1.2.3. Emission Measurements of Substances Affecting Water Quality	26
1.2.4. Emission Measurements of Substances Affecting Soil Quality.....	27
1.2.5. Environmental Noise Measurements.....	28
1.2.6. Waste	28
B.2.“KOLUBARA-METAL” BRANCH.....	29
1.1. OVERVIEW AND STATUS OF PERMITS.....	29
1.2. MONITORING AND ENVIRONMENTAL IMPACT	29
1.2.1. Emission Measurements of Substances Affecting Air Quality	29
1.2.2. Emission Measurements of Substances Affecting Water Quality	30
1.2.3. Waste	32
1.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY.....	39
1.3.1. Working Environment Monitoring.....	40
1.3.2. Occupational Safety	40
1.3.3. Health.....	41
1.4. PUBLIC COMPLAINTS	41

2. BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES	42
2.1. OVERVIEW AND STATUS OF PERMITS.....	42
2.2. MONITORING AND ENVIRONMENTAL IMPACT	42
2.2.1. Air Quality Measurements	42
2.2.2. Emission Measurements of Matters Affecting Water Quality.....	43
2.2.3. Emission Measurements of Matters Affecting Soil Quality	44
2.2.4. Environment Noise Measurements.....	49
2.2.5. Waste	49
2.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY	53
2.3.1. Working Environment Monitoring.....	53
2.3.2. Occupational Safety	53
2.3.3. Health Protection	54
2.4. PUBLIC COMPLAINTS	54
3. NIKOLA TESLA THERMAL POWER PLANT BRANCH	55
3.1. PERMITS OVERVIEW AND STATUS	55
3.2. MONITORING AND ENVIRONMENTAL IMPACT	55
3.2.1. Air Quality Measurements	55
3.2.2. Emission Measurements of Matters Affecting Air Quality.....	59
3.2.3. Emission Measurements of Matters Affecting Water Quality.....	65
3.2.4. Emission Measurements of Matters Affecting Soil Quality	73
3.2.5. Environmental Noise Measurement.....	76
3.3. WORKING ENVIRONMENT MONITORING, SAFETY AND HEALTH.....	86
3.3.1. Working Environment Monitoring.....	86
3.3.2. Occupational Safety	88
3.3.3. Health.....	89
3.4. PUBLIC COMPLAINTS.....	89
4. KOSTOLAC TPPS & OCMS BRANCH	90
4.1. OVERVIEW AND STATUS OF PERMITS.....	90
4.2. MONITORING AND ENVIRONMENTAL IMPACT	91
4.2.1. Air Quality Measurements	91
4.2.2. Emission Measurements of Matters Affecting Air Quality.....	93
4.2.3. Emission Measurements of Matters Affecting Water Quality.....	97
4.2.4. Emission Measurements of Matters Affecting Soil Quality	102
4.2.5. Environmental Noise Measurements.....	104
4.2.6. Waste	105
4.3. WORKING ENVIRONMENT MONITORING, SAFETY AND HEALTH.....	108
4.3.1. Working Environment Monitoring.....	108
4.3.2. Occupational safety.....	108
4.3.3. Health.....	109

4.4. PUBLIC COMPLAINTS.....	109
5. PANONSKE CHPPS BRANCH	110
5.1. OVERVIEW AND STATUS OF PERMITS.....	110
5.2. MONITORING AND ENVIRONMENTAL IMPACT	110
5.2.1. Air quality measurements.....	110
5.2.2. Emission Measurements of Matters Affecting Air Quality.....	111
5.2.3. Emission Measurements of Matters Affecting Water Quality.....	114
5.2.4. Measuring the concentration of pollutants, harmful and hazardous substances in the soil.....	118
5.2.5. Environmental Noise Measurements.....	119
5.2.6. Waste	120
5.3. WORKING ENVIRONMENT MONITORING, SAFETY AND HEALTH.....	121
5.3.1. Working Environment Monitoring.....	121
5.3.2. Occupational Safety	122
5.3.3. Health.....	123
5.4. PUBLIC COMPLAINTS.....	123
6. DJERDAP HPPS BRANCH.....	124
6.1. OVERVIEW AND STATUS OF PERMITS.....	124
6.2. MONITORING AND ENVIRONMENTAL IMPACT	124
6.2.1. Identified Negative Impact on the Flow and Ecological System under the Accumulation.....	124
6.2.2. Water.....	124
6.2.3. Waste	130
6.2.4. Environmental Noise Measurement.....	134
6.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL SAFETY AND HEALTH PROTECTION	134
6.3.1. Working Environment Monitoring.....	134
6.3.2. Occupational Safety	134
6.3.3. Health Protection	135
6.4. PUBLIC COMPLAINTS	135
7. DRINSKO-LIMSKE HPPS BRANCH.....	136
7.1. OVERVIEW AND STATUS OF PERMITS.....	136
7.2. MONITORING AND ENVIRONMENTAL IMPACT	137
7.2.1. Identified Negative Impacts on the Flow and Ecological System below the Accumulation.....	137
7.2.2. Water.....	137
7.2.3. Waste	143
7.2.4. Environmental Noise Measurement.....	144
7.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL SAFETY AND HEALTH PROTECTION	144
7.3.1. Working Environment Monitoring.....	144
7.3.2. Occupational Safety	144
7.3.3. Health protection	146

7.4. PUBLIC COMPLAINTS.....	146
8. RENEWABLE ENERGY SOURCES BRANCH.....	147
8.1. OVERVIEW AND STATUS OF PERMITS.....	147
8.2. MONITORING AND ENVIRONMENTAL IMPACT	147
8.2.1. Identified Negative Impacts on the Flow and Ecological System below the Accumulation.....	147
8.2.2. Water.....	148
8.2.3. Waste	148
8.2.4. Environmental Noise Measurement.....	148
8.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL SAFETY AND HEALTH PROTECTION	148
8.3.1. Working Environment Monitoring.....	149
8.3.2. Occupational Safety	149
8.3.3. Health protection	149
8.4. PUBLIC COMPLAINTS.....	149
9. TECHNICAL CENTER BEOGRAD	150
9.1. OVERVIEW AND STATUS OF PERMITS.....	150
9.2. MONITORING AND ENVIRONMENTAL IMPACT	150
9.2.1. Electromagnetic Fields	150
9.2.2. Living Environment Noise Measurements	150
9.2.3. Waste	150
9.2.4. Surface, Ground Waters and Soil Monitoring.....	150
9.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL SAFETY AND HEALTH PROTECTION	150
9.3.1. Working Environment Monitoring.....	150
9.3.2. Occupational Safety	151
9.3.3. Health protection	151
9.4. PUBLIC COMPLAINTS.....	152
10. TECHNICAL CENTER NOVI SAD.....	153
10.1. OVERVIEW AND STATUS OF PERMITS.....	153
10.2. MONITORING AND ENVIRONMENTAL IMPACT	153
10.2.1. Electromagnetic Fields	153
10.2.2. Environment Noise Measurements.....	153
10.2.3. Waste	155
10.2.4. Surface, Ground Waters and Soil Monitoring.....	159
10.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL SAFETY AND HEALTH PROTECTION	159
10.3.1. Working Environment Monitoring.....	159
10.3.2. Occupational Safety	159
10.3.3. Health.....	162
10.4. PUBLIC COMPLAINTS.....	163
11. TECHNICAL CENTER KRALJEVO	164

11.1. OVERVIEW AND STATUS OF PERMITS.....	164
11.2. MONITORING AND ENVIRONMENTAL IMPACT	164
11.2.1. Electromagnetic Fields	164
11.2.2. Living Environment Noise Measurements	164
11.2.3. Waste	164
11.2.4. Surface, Ground Waters and Soil Monitoring	164
11.3. WORKING ENVIRONMENT MONITORING, HEALTH AND SAFETY.....	164
11.3.1. Working Environment Monitoring.....	164
11.3.2. Occupational Safety	165
11.3.3. Health.....	166
11.4. PUBLIC COMPLAINTS.....	166
12. TECHNICAL CENTER KRAGUJEVAC.....	167
12.1. OVERVIEW AND STATUS OF PERMITS.....	167
12.2. MONITORING AND ENVIRONMENTAL IMPACT	167
12.2.1. Electromagnetic Fields	167
12.2.2. Noise	167
12.2.3. Waste	167
12.2.4. Surface, Ground waters and Soil Monitoring.....	167
12.3. WORKING ENVIRONMENT MONITORING, HEALTH AND SAFETY.....	167
12.3.1. Working Environment Monitoring.....	168
12.3.2. Occupational safety.....	168
12.3.3. Health.....	169
12.4. PUBLIC COMPLAINTS.....	169
13. TECHNICAL CENTER NIŠ.....	170
13.1. OVERVIEW AND STATUS OF PERMITS.....	170
13.2. MONITORING AND ENVIRONMENTAL IMPACT	170
13.2.1. Electromagnetic Fields	170
13.2.2. Environmental Noise	170
13.2.3. Waste	170
13.2.4. Surface, Ground Waters and Soil Monitoring	170
13.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY.....	170
13.3.1. Working Environment Monitoring.....	170
13.3.2. Occupational Safety	173
13.3.3. Health.....	175
13.4. PUBLIC COMPLAINTS.....	176
14. PE EPS HQ.....	177
14.1. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY.....	177
14.1.1. Working Environment Monitoring.....	177

14.1.2. Occupational Safety	177
14.1.3. Health	177
14.2. PUBLIC COMPLAINTS.....	177
15. EPS SNABDEVANJE BRANCH	178
15.1. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY	178
15.1.1. Working Environment Monitoring.....	178
15.1.2. Occupational Safety	178
15.1.3. Health.....	178
15.2. PUBLIC COMPLAINTS.....	178
III DISTRIBUTION SYSTEM OPERATOR “EPS DISTRIBUCIJA“	179
1. DISTRIBUTION AREA BELGRADE.....	179
1.1. OVERVIEW AND STATUS OF PERMITS.....	180
1.2. MONITORING AND ENVIRONMENTAL IMPACT	181
1.2.1. Electromagnetic Fields	181
1.2.2. Environmental Noise	181
1.2.3. Waste	181
1.2.4. Surface, Ground Waters and Soil Monitoring	183
1.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY	183
1.3.1. Working Environment Monitoring.....	183
1.3.2. Occupational Safety	183
1.3.3. Health.....	184
1.4. PUBLIC COMPLAINTS.....	184
2. DISTRIBUTION AREA NOVI SAD.....	185
2.1. OVERVIEW AND STATUS OF PERMITS.....	186
2.2. MONITORING AND IMPACT TO ENVIRONMENT	201
2.2.1. Electromagnetic Fields	201
2.2.2. Noise in Environment.....	201
2.2.3. Waste	201
2.2.4. Surface, Ground Waters and Soil Monitoring	205
2.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY	229
2.3.1. Working Environment Monitoring.....	229
2.3.2. Occupational Safety	231
2.3.3. Health.....	232
2.4. PUBLIC COMPLAINTS	232
3. DISTRIBUTION AREA KRALJEVO	233
3.1. OVERVIEW AND PERMITS STATUS	234
3.2. MONITORING AND ENVIRONMENTAL IMPACT	257
3.2.1. Electromagnetic fields	257

3.2.2. Noise in the environment.....	258
3.2.3. Waste	258
3.2.4. Surface, ground waters and soil monitoring	262
3.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY	262
3.3.1. Working Environment Monitoring.....	262
3.3.2. Occupational safety.....	262
3.3.3. Healthcare	264
3.4. PUBLIC COMPLAINTS.....	264
4. DISTRIBUTION AREA KRAGUJEVAC.....	265
4.1. OVERVIEW AND STATUS OF PERMITS	265
4.2. MONITORING AND ENVIRONMENTAL IMPACT	271
4.2.1. Electromagnetic fields	271
4.2.2 . Environmental noise	271
4.2.3. Waste	271
4.2.4. Surface, Ground Waters and Soil Monitoring	274
4.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY.....	274
4.3.1. Working environment monitoring.....	274
4.3.2. Occupational safety.....	274
4.3.3. Healthcare	275
4.4. PUBLIC COMPLAINTS.....	275
5. DISTRIBUTION AREA NIS.....	276
5.1. OVERWIEV AND STATUS OF PERMITS.....	277
5.2. MONITORING AND ENVIRONMENTAL IMPACT	281
5.2.1 Electromagnetic Fields	281
5.2.2. Environmental noise	281
5.2.3. Waste	281
5.2.4. Surface, Ground Waters and Soil Monitoring	284
5.3. WORKING ENVIRONMENT MONITORING, OCCUPATIONAL HEALTH AND SAFETY	284
5.3.1. Working Environment Monitoring.....	284
5.3.2. Occupatinal Safety	284
5.3.3. Health.....	287
5.4. PUBLIC COMPLAINTS.....	287
APPENDIX 1.....	288
APPENDIX 2.....	290
APPENDIX 3.....	298

INTRODUCTION

Public Enterprise “Electric Power Industry of Serbia” 2020 Environmental Report was prepared on the basis of the recommendations regarding the contents and form – report template provided by the European Bank for Reconstruction and Development ([APPENDIX 1.](#)) as well as on the basis of data on environment status monitoring submitted by the responsible persons of PE EPS Organizational units.

Hazardous and harmful substances air emission data have been provided on the basis of calculation based on measured mass concentrations, i.e. their flows and units’ (boilers) operating hours in 2020.

Outline of Serbian environmental legislation used to evaluate and compare the measured pollutant values and other parameters with the permissible values is provided in [APPENDIX 2.](#)

Abbreviations used in the Report are provided in [APPENDIX 3.](#)

I PUBLIC ENTERPRISE “ELECTRIC POWER INDUSTRY OF SERBIA“

Public Enterprise "Electric Power Industry of Serbia" Belgrade is a vertically organized enterprise, 100% state-owned. PE EPS is the founder and sole owner of two subsidiaries as follows:

- Distribution System Operator “EPS Distribucija” Ltd. Belgrade, for the performance of activities of electricity distribution and distribution system operation in the Republic of Serbia, and
- “EPS Trgovanje” Ltd. Ljubljana for the performance of activities of electricity trading abroad in order to optimize the use of its own resources.

PE EPS has founder's rights in three public companies in Kosovo and Metohija. Since June 1999, PE EPS has been unable to manage its capacities in Kosovo.

Until July 1st 2015, PE EPS operated through 13 subsidiaries, and after conducting status changes, an acquisition of 11 subsidiaries was made by the parent-controlling company.

The main activity of Public Enterprise “Electric Power Industry of Serbia” is energy activity: supply of electricity, industry code 35.14 – Electricity trading.

Coal Production in PE EPS

In PE EPS coal is produced by the following Organisational units of PE EPS: Branch MB “Kolubara”, “Kostolac” TPPs-OCMs Branch and PE “Kosovo” OCMs**. Amounts of produced raw and dried coal (except for Kosovo OCMs**) in 2020 are given in Table 1.

Table 1

PUBLIC ENTERPRISE “ELECTRIC POWER INDUSTRY OF SERBIA”						
COAL PRODUCTION IN 2020						
Organizational unit	Coal production (t)			Overburden removal (m ³ čm)		
	Planned	Achieved	%	Planned	Achieved	%
BRANCH MB “KOLUBARA” – OPEN CAST MINES						
Field B	3.290.000	3.000.054	91,18	15.600.000	10.357.640	66,39
Field D	8.603.000	8.455.790	98,29	6.850.000	4.430.960	64,68
Field G	5.535.000	6.462.207	116,75	5.500.000	6.985.709	127,01
Tamnava – West Field	12.330.000	12.105.506	98,18	30.300.000	27.595.017	91,07
Radljevo				4.800.000	3.455.548	71,99
Field E				10.850.000	7.359.016	67,82
TOTAL (RAW COAL*):						
BRANCH MB “KOLUBARA” – OPEN CAST MINES	29.758.000	30.023.557	100,89	73.900.000	60.183.890	81,43
Kolubara Prerada (dried coal)	With dust	538.000	398.623	74,09		
	Without dust	490.000	377.680	77,08		
TPPs-OCMs “KOSTOLAC” – OPEN CAST MINES						
Drmno	9.225.000	9.063.984	98,25	45.200.000	47.006.801	104,00
TOTAL:						
“KOSTOLAC” TPPS-OCMS BRANCH – OPEN CAST MINES	9.225.000	9.063.984	98,25	45.200.000	47.006.801	104,00
TOTAL: OPEN CAST MINES						
PE EPS	38.983.000	39.087.541	100,27	119.100.000	107.190.691	90,00

* Total raw coal amount, partially used for dried coal production

** As of June 1999, PE EPS does not operate its Kosovo and Metohija capacities

Electricity Generation in PE EPS

In PE EPS electricity is generated by the following thermal power plants: “Nikola Tesla” TPPs, “Kostolac” TPPs-OCMs, “Panonske” CHP, PE “Kosovo” TPPs*, and by the following hydropower plants: “Đerdap” HPP and “Drinsko – Limske” HPPs. Electricity generation data (except for PE “Kosovo” TPPs*) in 2020 are given in Table 2.

Table 2

PUBLIC ENTERPRISE “ELECTRIC POWER INDUSTRY OF SERBIA”			
ELECTRICITY GENERATION IN 2020			
Branch	Unit	Electricity generation (GWh)	
		at the generator	sent to grid
NIKOLA TESLA TPPs			
NIKOLA TESLA A TPP	A1 - A2	2.041,80	1.850,50
	A3 - A5	5.820,50	5.328,25
	A6	2.107,00	1.896,95
NIKOLA TESLA B TPP	B1 - B2	8.453,70	7.960,86
KOLUBARA A TPP	A1 - A4	218,60	208,09
	A5	384,00	352,15
MORAVA TPP	A	538,50	491,93
TOTAL: NIKOLA TESLA TPPs		19.564,10	18.088,73
“KOSTOLAC” TPPs-OCMs			
“KOSTOLAC” A TPP	A1	586,50	547,04
	A2	1.215,80	1.124,03
“KOSTOLAC” B TPP	B1	2.523,50	2.259,80
	B2	2.556,60	2.311,93
УКУПНО: “KOSTOLAC” TPPs-OCMs		6.882,40	6.242,80
“PANONSKE” PPs			
NOVI SAD CHPP		210,40	192,19
ZRENJANIN CHPP		0,00	0,00
SREMSKA MITROVICA CHPP		0,00	0,00
TOTAL: “PANONSKE” POWER PLANTS		210,40	192,19
TOTAL: TPPs and CHPs		26.656,90	24.523,72
HYDROPOWER PLANTS			
“ĐERDAP” HPPs		6.728,06	6.691,78
“DRINSKO-LIMSKA” HPPs		2.784,71	2.775,00
SMALL HPPs		18,30	18,30
TOTAL: HYDRO POWER PLANTS		9.531,07	9.485,08
PE “ELEKTROKOSMET”**		-	-
TOTAL: PE EPS (exclusive of K&M)		36.187,97	34.008,80

* As of June 1999, PE EPS does not operate its Kosovo and Metohija capacities

Fuel Consumption in PE EPS Thermal Power Plants

Table 3 shows the solid, liquid and gaseous fuel consumption data by PE EPS TPPs and CHPs in 2020.

Table 3

PUBLIC ENTERPRISE “ELECTRIC POWER INDUSTRY OF SERBIA”						
FUEL CONSUMPTION IN 2020						
Organizational unit	Unit /boiler	Fuel				
		Coal	Heavy fuel oil	Oil	Gas	Biomass
		t	t	t	Stm³	t
BRANCH “NIKOLA TESLA” TPPs“						
“NIKOLA TESLA” A TPP	A1	1.391.850	3.903	-	-	-
	A2	1.811.135	4.588	-	-	-
	A3	2.954.507	2.814	-	-	-
	A4	3.178.885	2.728	-	-	-
	A5	3.073.984	1.821	-	-	-
	A6	3.261.663	3.619	-	-	-
“NIKOLA TESL”A B TPP	B1	6.064.787	6.503	-	-	-
	B2	6.723.519	5.300	-	-	-
“KOLUBARA” A TPP	K1	88.952	-	437	-	-
	K2	-	-	-	-	-
	K3	44.320	-	63	-	-
	K4	150.158	-	197	-	-
	K5	109.984	-	158	-	-
	K6	639.681	-	987	-	-
“MORAVA” TPP	A1	637.329	608	237	-	-
TOTAL: “BRANCH NIKOLA” TESLA TPPs		30.130.754	31.884	2.079	-	-
BRANCH “KOSTOLAC” TPPs-OCMs						
“KOSTOLAC” A TPP	A1	879.894	-	1.563	-	-
	A2	1.552.884	-	1.064	-	-
“KOSTOLAC” B TPP	B1	2.742.700	2.645	-	-	-
	B2	2.810.524	2.157	-	-	-
TOTAL: BRANCH “KOSTOLAC” TPPS-OCMS		7.986.002	4.802	2.627	-	-
BRANCH MB “KOLUBARA” – ORGANIZATIONAL UNIT „PRERADA“						
VREOCI HEATING PLANT	K1 and K2	214.563	154,60	-	-	-
TOTAL: BRANCH MB KOLUBARA		214.563	154,60	-	-	-
BRANCH “PANONSKA” CHPs						
“NOVI SAD” CHP	A1 (K1 and K2)	-	-	-	-	-
	A2 (K3)	-	-	-	-	-
	Stack, both units – continuous measurements	-	-	-	74.592,032	-
“ZRENJANIN” CHP	A1	-	-	-	-	-
	A2	-	-	-	115,698	-
“SREMSKA MITROVICA” CHP	A3 (K3 and K4)	-	-	-	-	-
	S2400 1-3	-	-	-	773,936	-
	Biomass boiler	-	-	-	65,417	5,241
TOTAL: BRANCH “PANONSKA” CHPs		-	-	-	75.547,083	5,241
TOTAL: PUBLIC ENTERPRISE “ELECTRIC POWER INDUSTRY OF SERBIA		38.331.319	36.840,60	4.706	75.547,083	5,241

Emission of Substances from Thermal Power Plants Affecting the Air Quality

Data on complete emission of substances from thermal power plants affecting the air quality in 2020 for PE EPS organizational units (except for PE Kosovo TPPs*) are given in Table 4.

Table 4

PUBLIC ENTERPRISE "ELECTRIC POWER INDUSTRY OF SERBIA"				
AMOUNTS OF EMISSION OF SUBSTANCES FROM THERMAL POWER PLANTS AFFECTING THE AIR QUALITY IN 2020				
Organizational unit	t / year			
	Particulate matter	SO ₂	NO _x (NO ₂)	CO ₂
"NIKOLA TESLA" TPPs BRANCH	7.870,68	217.597,21	30.712,23	21.199.901,00
"KOSTOLAC" TPPs-OCMs BRANCH	1.617,93	137.515,20	8.876,77	7.040.213,97
"PANONSKE" CHP BRANCH	1,77	0,29	290,87	140.500,38
"KOLUBARA" MB BRANCH - ORGANIZATIONAL UNIT PRERADA	44,41	421,78	190,21	25.621,40
TOTAL: PUBLIC ENTERPRISE "ELECTRIC POWER INDUSTRY OF SERBIA"	9.534,79	355.534,48	40.070,08	28.639.236,75

Work Injuries in PE EPS

Table 5 shows data on the number of work injuries in 2020 for PE EPS Organizational units.

Table 5

PUBLIC ENTERPRISE "ELECTRIC POWER INDUSTRY OF SERBIA"						
WORK INJURIES IN 2020						
Organizational unit	Number of employees	Injuries - number of employees ratio				
		Minor	Severe	Fatal	Total	%
"KOLUBARA" MB BRANCH	11.593	144	48	0	192	1,66
"KOSTOLAC" TPPs-OCMs BRANCH – OPEN CAST MINES	2.104	12	5	0	17	0,81
OPEN CAST MINES	13.697	156	53	0	209	1,53
"NIKOLA TESLA" TPPs BRANCH	2.269	23	4	0	27	1,19
"KOSTOLAC" TPPs-OCMs BRANCH – THERMAL POWER PLANTS	734	2	1	0	3	0,41
"PANONSKE" CHPs BRANCH	371	5	0	0	5	1,35
THERMAL POWER PLANTS:	3.374	30	5	0	35	1,04
"ĐERDAP" HPPs BRANCH	769	6	0	0	6	0,78
"DRINSKO-LIMSKE" HPPs BRANCH	398	3	1	0	4	1,01
"RENEWABLE ENERGY RESOURCES" BRANCH	55	0	1	0	1	1,82
HYDRO POWER PLANTS:	1.222	9	2	0	11	0,90
TC "BEOGRAD"	834	10	5	0	15	1,80
TC "NOVI SAD"	1.039	21	3	0	24	2,31
TC "KRALJEVO"	1.553	15	2	1	18	1,16
TC "KRAGUJEVAC"	522	8	2	0	10	1,92
TC "NIŠ"	947	4	0	0	4	0,42
TECHNICAL CENTERS:	4.895	58	12	1	71	1,45
PE EPS HQ	786	3	2	0	5	0,64
BRANCH "EPS SUPPLY"	1.140	2	1	0	3	0,26
DA "BEOGRAD"	902	7	1	0	8	0,89
DA "NOVI SAD"	752	14	1	0	15	1,99
DA "KRALJEVO"	886	12	5	0	17	1,92
DA "KRAGUJEVAC"	296	2	1	0	3	1,01
DA "NIŠ"	564	2	1	0	3	0,53

DISTRIBUTION SYSTEM OPERATOR	3.400	37	9	0	46	1,35
TOTAL: PUBLIC ENTERPRISE "ELECTRIC POWER INDUSTRY OF SERBIA"	28.514	295	84	1	380	1,33

Note: Relevant data on fatalities are given in the Section relating to the relevant PE EPS Organizational unit.

PE EPS Employees' Health Protection

Table 6 presents data on employee's health protection, which includes obligatory medical examination prior to employment, as well as periodical examinations with the aim of determining employees' work ability, conducted during 2020 in PE EPS Organizational units.

Table 6

PUBLIC ENTERPRISE "ELECTRIC POWER INDUSTRY OF SERBIA"											
EMPLOYEE'S WORK ABILITY IN 2020											
Organizational unit	Number of employees	Periodic examinations				For work					
		Referred to examination		Examined		Able		Limited ability		Disabled	
		no.	%	no.	%	no.	%	no.	%	no.	%
"KOLUBARA" MB BRANCH	11.593	8.163	70,41	7.283	89,22	5.176	71,07	1.933	26,54	174	2,39
"KOSTOLAC" TPPs-OCMs BRANCH - OCM	2.104	745	35,41	729	97,85	647	88,75	68	9,33	14	1,92
OPEN CAST MINES:	13.697	8.908	65,04	8.012	89,94	5.823	72,68	2.001	24,98	188	2,35
"NIKOLA TESLA" TPPs BRANCH	2.269	1.851	81,58	1.800	97,24	1.653	91,83	116	6,44	31	1,72
"KOSTOLAC" TPPs-OCMs BRANCH	734	107	14,58	107	100,00	97	90,65	10	9,35	0	0,00
"PANONSKA" CHPs BRANCH	371	281	75,74	278	98,93	136	48,92	142	51,08	0	0,00
THERMAL POWER PLANTS:	3.374	2.239	66,36	2.185	97,59	1.886	86,32	268	12,27	31	1,42
"ĐERDAP" HPPs BRANCH	769	583	75,81	581	99,66	577	99,31	4	0,69	0	0,00
"DRINSKO-LIMSKE" HPPs BRANCH	398	181	45,48	173	95,58	143	82,66	28	16,18	2	1,16
"RENEWABLE ENERGY RESOURCES" BRANCH	55	37	67,27	37	100,00	37	100,00	0	0,00	0	0,00
HYDRO POWER PLANTS:	1.222	801	65,55	791	98,75	757	95,7	32	4,05	2	0,25
TC "BEOGRAD"	834	426	51,08	426	100,00	409	96,01	12	2,82	5	1,17
TC "NOVI SAD"	1.039	605	58,23	604	99,83	520	86,09	78	12,91	6	0,99
TC "KRALJEVO"	1.553	921	59,30	884	95,98	760	85,97	123	13,91	1	0,11
TC "KRAGUJEVAC"	522	303	58,05	303	100,00	289	95,38	14	4,62	0	0,00
TC "NIŠ"	947	514	54,28	512	99,61	432	84,38	73	14,26	7	1,37
TECHNICAL CENTERS:	4.895	2.769	56,57	2.729	98,56	2.410	88,31	300	10,99	19	0,70
PE EPS HQ	786	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
BRANCH "EPS SUPPLY"	1.140	20	1,75	20	100,00	20	100,00	0	0,00	0	0,00
DA "BEOGRAD"	902	335	37,14	335	100,00	334	99,70	0	0,00	1	0,30
DA "NOVI SAD"	752	310	41,22	310	100,00	291	93,87	15	4,84	4	1,29
DA "KRALJEVO"	886	450	50,79	441	98,00	409	92,74	28	6,35	4	0,91
DA "KRAGUJEVAC"	296	128	43,24	128	100,00	102	79,69	23	17,97	3	2,34
DA "NIŠ"	564	284	50,35	282	99,30	255	90,43	26	9,22	1	0,35
DSO	3.400	1.507	44,32	1.496	99,27	1.391	92,98	92	6,15	13	0,87
TOTAL: PE EPS	28.514	16.244	56,97	15.233	93,78	12.287	80,66	2.693	17,68	253	1,66

1. “KOLUBARA” MINE BASIN BRANCH

The core activities of “Kolubara” MB Branch comprise mining, processing and transportation of coal. Organizationally, it is comprised of the Head Office and four organizational units:

1. Open Cast Mines
2. Prerada
3. Projekt and
4. Metal.

Organizational unit “Open Cast Mines –Baroševac” has five active open cast mines:

1. “Field B/C”
2. “Field D”
3. “Tamnava West Field”
4. “Field G” and
5. “Field E

The Sector for Environmental Protection and Improvement deals with environmental tasks and its role is to prevent, control, mitigate and remediate all forms of environmental pollution. This Sector comprises the following four Divisions:

1. Environment Protection and Enhancement Division – the organizational unit “Open Cast Mines – Baroševac”;
2. Biological Reclamation Division;
3. Waste and Hazardous Substances Division; and
4. Environment Protection and Enhancement Division - organizational unit “Prerada” – Vreoci.

A KOLUBARA MB BRANCH – “OPEN CAST MINES” OU

1.1. Overview and Status of Permits

Overview and status of permits, licenses and other necessary approvals realized in 2020 are shown in Table 7

Table 7

MB KOLUBARA BRANCH – “OPEN CAST MINES” OU			
Overview and status of permits in 2020			
Open cast mine	Permits, licenses and other necessary approvals obtained in 2020 Project name and status	Applications for new or extension of existing permits	Note
Field B/C	Approval on performing mining works according to SMD Field C on the exploitation field 321 of the book of the cadastre of exploitation fields, on the territory of the city municipality of Lazarevac no. 310-02-01085 / 2015-02 dated 28.11.2018. Decision on the use and utilization of the IVECS system on OCM Field C No. 310-02-00002 / 2019-02 dated March 6, 2020.	-	The collection of documentation that is accompanying the request for obtaining approval for mining works under the Supplementary Mining Project OCM Field C (prepared in 2019) is in progress.
Field D			

Field E	-	-	The collection of documentation that is accompanying the request for obtaining approval for mining works under the Main Mining Project OCM Field C (prepared in 2019) is in progress.
Veliki Crljeni	-	Request for withdrawal of Request for obtaining approval for mining works no. 04.02-219377 / 1-17 dated 04.05.2017 according to the Supplementary Mining Project for the Expansion of the Open Cast Mine Veliki Crljeni, no. 04.02-553855 / 1-20 dated 10.11.2020	-
Tamnava West Field	Approval for trial operation mobile bench drive head station with belt B=1600 mm no. 310-02-01974 / 2020-02 dated 23.12.2020	Request for obtaining approval for trial operation of mining facilities - mobile distribution station MDS 1800 (31.12.2020) Request for obtaining approval for the use of mining facilities - use permit for the Spreader 12000 RA200 2400 / 2200-15 + 55 + 60 with loading trolley no. E 04.02-597602 / 1-20 dated 2.12.2020	-
Field G	-	-	-
Radljevo - North	Decision on approval for the project holder JP EPS of the Study on Environmental Impact Assessment of the project of opening and construction of the open cast mine Radljevo no. 353-02-1483 / 2012-02 from 12.12.2012. Decision on approval of the use and utilization of the mining facilities of I ECS system at OCM Radljevo – North no.310-02-01600/2019-02 dated 17.08.2020	-	-

1.2. Monitoring and Environmental Impacts

1.2.1. Air Quality Measurements

During 2020, air quality was measured only with own capacities, i.e. using automatic analyzers PM₁₀, PM_{2.5}, SO₂, NO/ NO₂/ NO_x, CO and O₃, and in accordance with the annual sampling plan. Due to the extraordinary working conditions caused by the COVID-19 pandemic, the air laboratory was shut down during 8 months of

2020. As obtaining accreditation according to ISO 17025: 2017 is expected by the end of February 2021, after which a request will be submitted to the Ministry of Environmental Protection for authorization to measure air quality, the obtained data have the status of internal monitoring and, from the aspect of Serbian legislation, they have no legitimacy of official data.

1.2.2. Emission Measurements of Matters Affecting Water Quality

▪ Dewatering System Water

Water originating from the preliminary dewatering and dewatering systems represents a technological part of the coal exploitation system. Waters pumped (mining wastewaters) from these systems are discharged without treatment over a sedimentation tank into the surrounding recipients, as follows:

- OCM "Field B/C", Baroševac into the river Peštan and into the river Turija;
- OCM "Field D", Medoševac into the river Peštan;
- OCM "Tamnava West Field" into the river Kolubara, and
- OCM "Field G" into the river Kolubara.

In accordance with the law, the quality control of the recipients is carried out by the authorized laboratory.

Table 8 shows the pumped water quality results from open cast mines (from the sedimentation tank into the recipient) in 2020.

Table 8

KOLUBARA MB BRANCH –“OPEN CAST MINES“ OU				
Water quality in 2020				
Parameters	OCM “Field G”	OCM “Field B/C”, Baroševac	OCM “Field D” Medoševac	OCM “Tamnava West Field
Electrical conductivity (µs/cm)	453 - 567	466 - 601	713 - 775	458 – 564
pH	7.4 - 7.9	7.2 - 7.7	7.2 – 7.7	7.2 - 7.7

▪ Sanitary water

Open cast mines are supplied with drinking water from five regional water supply systems: Medoševac, Kalenić, Junkovac, and Tamnava - East Field.

Table 9 shows the data on the quantities of wastewater generated from the drainage of mines and quantities of drinking water used in 2020. The amount of generated sanitary wastewater can be estimated on the basis of the quantity of the supplied drinking water.

Table 9

KOLUBARA MB BRANCH –“OPEN CAST MINES“ OU		
Water quantity in 2020 (m³/year)		
Open cast mine	Total amounts of pumped water (m³)	Supplied drinking water (m³)
Field B/C + mines HQ	2.786.245,00	59.440
Field D	4.498.702,32	133.225
Field G	2.136.683,00	196.555
Tamnava West Field	2.136.683,00	196.555
Radljevo	172.121,47	-
Auxiliary machinery	-	51.094

1.2.3. Emission Measurements of Matters Affecting Soil Quality

Due to the issues with public procurements in 2020, no soil quality tests were performed in the area of MB "Kolubara". The contract with the external laboratory is expected to be signed during March 2021.

▪ Overview of Expropriated and Reclaimed Areas

Maintenance of reclaimed areas is foreseen by the Branch Business Plan, together with temporary reclamation measures on new areas. Final reclamation measures are carried out after completion of mining operations, based on the adopted Kolubara Region Spatial Plan.

Within Biological Reclamation Division, Forestry Office manages 611.30 ha of reclaimed areas (forests and forestry land). Within the Management Basis, within Field "D", there are 49.28 ha of expropriated forests and forestry land.

Within Biological Reclamation Division, Agriculture Office conducts the biological reclamation measures on 88.20 ha of reclaimed area. In 2020, infrastructural and mining works were conducted on reclaimed area of 19.20 ha, so this area was not cultivated. Moreover, regular agricultural production is conducted on expropriated lots of 14.50 ha.

A review of expropriated and reclaimed areas prior to 2020 is shown in Table 10. Table 11 shows the expropriated areas at the active mines in 2020.

Table 10

KOLUBARA MB BRANCH – BRANCH “OPEN CAST MINES” BAROŠEVAC																			
Review of reclaimed areas prior to 2020																			
Open cast mine /Facilities	Expropriated areas (ha)	Land area registered in the cadastre (ha)		Land area whose use has been changed (ha)		Land containing buildings (ha)		Dump site areas (ha)				Reclaimed areas (ha)							
		until 2019	in 2020	until 2019	in 2020	until 2019	in 2020	Inside		Outside		Forests		Arable land		Orchards		Nurseries	
								until 2019	in 2020	until 2019	in 2020	until 2019	in 2020	until 2019	in 2020	until 2019	in 2020	until 2019	in 2020
Field D	2.330,22	2.284.11	34,31	811.61	-8,64	20.82	-0,55	1.232.56	7,61	0,00	0,00	430,44	0,00	51,00	0,00	7,00	0,00	0,00	0,00
Field B	1.177,92	1.165.58	7,35	507.58	13,42	19,31	0,00	461.81	-0,17	0,00	0,00	111,65	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Auxiliary machinery	3,98	5,38	-1,40	1,95	-1,41	3.98	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Mines HQ	18,10	17.96	0,00	1.29	0,00	17,65	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
South Field	422,48	420.35	1,68	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Field G	268,83	260.49	6,00	0,09	0,00	0,00	0,00	0,00	65,33	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Field E	696,52	548.49	127,69	10,44	-3,37	20,80	-7,62	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Tamnava East Field	2.127,51	1.944.64	0,00	82,67	0,00	94,04	0,00	792,39	-284,44	0,00	0,00	60,63	0,00	49,40	0,00	0,00	0,00	0,00	0,00
Veliki Crljeni Field	161,03	210,24	-49,21	0,00	0,00	1,66	21,55	40.85	-21,03	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Tamnava West Field	1.865,03	1.781.70	59,26	70,13	0,00	48,37	0,00	755.73	121,37	0,00	0,00	8,58	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Radljevo	388,09	360.36	27,73	0,00	2,77	0,18	-0,18	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
TOTAL:	9.459,71	9.212,71		1.488,53		240,01		3.172,01		0,00		611,30		100,40		7,00		0.00	

1.2.4. Environmental Noise Measurement

During 2020, due to the situation with COVID-19 and difficult working conditions, there was no environmental noise measurement.

1.2.5. Waste

In 2020, Waste and Hazardous Substances Division activities involved the establishment of waste management systems, procurement of waste management equipment, signing of contracts with the operators licensed to sell – handle waste, reporting to the competent authorities, elaboration of tender documentation and waste sale contracts implementation.

Waste generated within the Branch “Open Cast Mines Baroševac” in 2020 is shown in the Table 11, in line with the Serbian waste management regulations.

Table 11

KOLUBARA MB BRANCH –“OPEN CAST MINES“ OU										
Types of waste generated in 2020										
No.	Rulebook on waste categories, testing and classification (OG RS No. 56/2010 and 93/2019)		Measuring unit	Open Cast mine/Object						Note
				"Field D"	"Field B"	"Tamnav a West Field"	"Tamnav a East Field"	Auxiliary Machi.	Total:	
	Name	Index number		Generated waste quantities						
1.	Used printer cartridge other than the one indicated under 08 03 17	08 03 18	t	0,007	0,000	0,035	0,050	0,000	0,092	Used printer cartridge
2.	Scraping and processing of ferrous metals	12 01 01	t	12,000	3,000	2,500	0,000	0,000	17,500	Iron and steel scrapings, metal chip, clean waste ferrous metals chip, waste ferrous metals chip with impurities
3.	Mineral non-chlorinated hydraulic oils	13 01 10*	t	0,000	0,000	0,000	2,000	0,000	2,000	Hydraulic oils
4.	Mineral non-chlorinated motor oils, oils for gearboxes and lubrication	13 02 05*	t	0,000	0,000	0,000	7,560	33,340	40,900	Motor oils, gearbox oils
5.	Mineral chlorinated oils for insulation and heat transfer	13 03 10*	t	0,100	0,000	0,000	0,000	0,000	0,100	Transformer oil
6.	Sludge from oil/water separator	13 05 07*	t	9,780	2,500	0,000	0,000	7,060	19,340	Separator residue, liquid waste from oil pit (emulsion)
7.	Other emulsions	13 08 02*	t	0,000	2,000	0,000	0,000	6,880	8,880	Mechanical emulsions and solutions without halogenated matters, waste sludge from cleaning area
8.	Packaging containing residues of substances or contaminated by hazardous substances	15 01 10*	t	0,000	0,250	0,000	0,000	0,000	0,250	Waste metal barrels of oil and lubricants, waste barrels of grease and oil, metal packaging of paints, varnishes and thinners
9.	Absorbents, filter materials (including oil filters not otherwise specified), wipes, protective clothing contaminated with hazardous substances	15 02 02*	t	0,430	0,180	0,090	0,000	3,800	4,500	Oil and air filters, oiled glass wool, work suits, cloths, work suits

10.	Absorbents, filter materials, wipes and protective clothing other than those specified under 15 02 02	15 02 03	t	0,000	0,000	0,000	0,000	10,160	10,160	Air filters
11.	Waste tires	16 01 03	t	0,000	0,000	0,000	0,000	25,442	25,442	Pneumatics
				0,000	0,500	0,000	0,000	0,000	0,500	Sealing rubber, wipers, idler rings
12.	Brake linings containing asbestos	16 01 11*	t	0,000	0,000	0,000	0,000	0,560	0,560	Waste from asbestos braids and brake linings
13.	Lead batteries	16 06 01*	t	0,320	0,000	0,080	0,000	0,000	0,400	Lead-acid batteries
14.	Waste from tank cleaning	16 07 08*	t	0,000	0,000	0,000	0,000	4,000	4,000	Tank washing and waste liquid fuels
15.	Copper, bronze, brass	17 04 01	t	0,170	0,000	0,000	6,000	0,000	6,170	Copper, copper strips, copper lacquer wire, insulated copper coils, scrap tin bronze, scrap aluminium bronze
16.	Iron and steel	17 04 05	t	115,000	10,400	7,100	1,000	0,000	133,500	Alloy steel (platform segments, crusher hammers, excavator teeth)
				30,000	4,550	0,000	0,000	0,000	34,550	Iron and steel with rubber coating, padded idlers
				40,340	7,080	0,000	0,000	0,000	47,420	Iron over 6 mm (rails, parts of structures, idlers and shafts)
				18,000	48,500	0,000	27,500	0,000	94,000	Iron and steel up to 3 mm (sheets, electrical switching cabinets. Vulcanization container, sheet metal profiles, mixed category cabinets)
				148,000	144,500	25,105	37,370	6,680	361,655	Iron and steel over 3 mm (sheets, rolls, shafts, structures, steel ropes, pieces of various sizes and shapes, unclassified, steel ropes, sheets, steel idler bodies, structures, crates, pontoons, rails)

				0,000	54,340	0,000	0,000	0,000	54,340	Railway wagons (wagons, handrails)
17.	Cables other than those specified under 17 04 10	17 04 11	t	21,000	0,000	0,000	15,000	0,000	36,000	High voltage copper cables incl. insulation
				9,000	0,000	0,000	0,000	0,000	9,000	Low voltage copper cables incl. insulation
				0,000	0,000	1,500	0,000	0,000	1,500	Telephone cable
18.	Metal waste contaminated with hazardous substances	17 04 09*	t	12,650	0,000	0,000	0,000	0,000	12,650	Oiled roller bearings
19.	Insulating materials containing asbestos	17 06 01*	t	0,000	6,640	0,000	0,000	0,000	6,640	Building insulation boards containing asbestos, hardboard
20.	Plastic and rubber	19 12 04	t	0,000	0,000	15,715	0,000	0,000	15,715	Wipers, sealing rubber, rubber rings, conveyor belt with canvas
21.	Other wastes from mechanical treatment of wastes containing hazardous substances	17 02 04*	t	6,530	0,000	0,000	0,000	0,800	7,330	Greased rubber-plastic seals and hydraulic hoses
22.	Paper and cardboard	20 01 01	t	0,000	0,000	0,220	0,000	0,000	0,220	Waste paper and cardboard
23.	Discarded electrical and electronic equipment other than those specified under 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	0,195	0,000	0,470	1,220	0,000	1,885	Electro-hydraulic latches, electronic equipment, other
24.	Discarded electrical and electronic equipment other than that specified under 20 01 21, 20 01 23 and 20 01 35	20 01 36	t	16,040	0,000	0,000	0,000	0,000	16,040	Waste electric motors
				0,000	8,347	0,030	0,000	0,000	8,377	El. tools, devices and equipment (used electric machines and electric motors, tools, other)

B. MB KOLUBARA BRANCH – “PRERADA” BRANCH AND “KOLUBARA METAL” BRANCH

B.1. “PRERADA” BRANCH

MB “Kolubara” Branch – “Prerada” Branch performs the processing and valorisation of run-of-mine coal from “Field B/C” and “Field D” open cast mines. Produced coal is used to supply the power plants, market sale, for industrial consumers, etc.

MB “Kolubara” Branch comprises “Prerada” Branch, which comprises of the following organizational units:

- Operations centre
- Dry separation – unit
- Coal valorisation – unit
 - Wet separation
 - Drying and classification plant
 - Heating plant
 - Maintenance
- Railway transport – unit
- Coal and wastewater testing centre (accredited laboratory)

All units were constructed based on the valid designs and they possess the necessary utilisation permits.

1.1. Overview and Status of Permits

Overview and status of permits in 2020 for the “Prerada” Branch is given in Table 12.

Table 12

MB KOLUBARA BRANCH – PRERADA BRANCH			
Overview and Status of Permits in 2020			
Unit	Permits, licenses and other necessary approvals, obtained in 2020 (number and date) Project name and status	Applications for new or extension of valid permits	Note
Valorisation Unit RU Heating plant	JVP “Srbijavode” issues the water permit with the new validity period for PE “Electric Power Industry of Serbia”, MB Kolubara Branch, Prerada Branch, for oil derivatives storage for the Heating Plant Unit and discharges atmospheric waste water and steam condensate used to heat fuel oil inside the Heating Plant Unit, Prerada Branch, located on CP 1828/1 CM Vreoci, urban municipality of Lazarevac, Belgrade area, No. 04.08-389256/1-2019 od 12.07.2019.	-	2 years from the decision date
Prerada Branch Vreoci	WWTP Environmental Impact Assessment Study at the Prerada Branch approval issued to the Kolubara Branch – Prerada Branch, Lazarevac, cadastral parcel No. 1820 CM Vreoci, Lazarevac Municipality, No. 353-02-1837/2017-02 of 28.01.2018. Ref: Response to the opinion application Approval: Prerada Branch WWTP Environmental Impact Assessment Study, cadastral parcel No. 1820, CM Vreoci, was conducted in line with the EIA Law and approved by the competent authority – Approval Decision remains in force.	Application for opinion about the need to update the EIA Study filed, No. 0408-168429/1-20 of 19.03.2020	Decision is final

1.2. Monitoring and Environmental Impact

1.2.1. Air Quality Measurements

No air quality measurements and monitoring were performed within the “Prerada” Branch impact zone in 2020. Air quality in the area covered by the MB “Kolubara” Branch organisational units is monitored by the City of Belgrade automatic air quality monitoring network.

Belgrade automatic air quality monitoring network, under the jurisdiction of the City of Belgrade, inter alia includes the measuring points on the territory of Lazarevac in the town centre, where soot, SO₂, NO₂, O₃ and PM₁₀ are measured

1.2.2. Emission Measurements of Matters Affecting Air Quality

OU Heating Plant Vreoci is a thermal and power facility generating superheated steam used by technological processes, for heating of industrial facilities and the town of Lazarevac, of the capacity 2x60 MW. Flue gases are treated by an electrostatic precipitator and discharged into the air through an 80m high stack.

During 2020, individual measurements of air pollutants were conducted by an accredited laboratory of the Occupational Safety Institute Novi Sad. The Monitoring Programme included measurements of flue gas conditions (temperature, pressure and humidity), flow rate, oxygen content, mass concentrations and emission factors for sulphur dioxide (SO₂), nitrogen oxides (NO_x–NO₂), carbon monoxide (CO), hydrogen chloride, hydrogen fluoride and dust.

Legal compliance was evaluated by comparing the measured emissions prescribed by the Regulation stipulating air pollutants emission limit values (OG RS No. 6/2016) and the Large Combustion Plants Directive 2001/80/EC.

Table 13 provides an overview of the results of individual air pollutants measurements for the Vreoci Heating Plant conducted in 2020.

Table 13

MB KOLUBARA BRANCH – “PRERADA” BRANCH		
Individual measurements of air pollutants emission for 2020		
Mass concentrations of air pollutants (mg/Nm³)		
Heat output MWth120 (2 x 60MW)		
Organisational unit	Heating Plant Vreoci	
Boiler	1	2
Date	09.03.2020.	09.03.2020.
SO₂	627,00	656,06
NO_x (NO₂)	300,67	281,36
CO	232,63	179,77
Dust	61,75	37,60

Note: Pursuant to the Directive on the limitation of emissions of certain pollutants into the air from large combustion plants (Off. Gazette of RS, no. 6/16), Article 5 stipulates that old large combustion plants do not have to comply with individual ELVs if from the date of entry into force of the mentioned Directive they are included in the preliminary application for the National Emission Reduction Plan from the stationary large combustion plants. OC Vreoci is included in the National Emission Reduction Plan.

Table 14 provides an overview of emissions of substances affecting air quality: dust, SO₂, NO₂ and CO₂ for the “Prerada” Branch in 2020. Annual emissions have been given on the basis of data obtained from the National Pollution Sources Register - TEAMS.

Table 14

MB KOLUBARA BRANCH – “PRERADA” BRANCH				
Emissions of substances affecting air quality for 2020 (t/year)				
Facility	Vreoci Heating Plant			
	Dust	SO₂	NO_x (NO₂)	CO₂
BOILER 1	44,41	421,78	190,21	258.621,40
BOILER 2				
TOTAL: MB KOLUBARA BRANCH – “PRERADA” BRANCH	44,41	421,78	190,21	258.621,40

Table 15 shows the fuel consumption for the “Prerada” Branch for 2020.

Table 15

MB KOLUBARA BRANCH – “PRERADA” BRANCH		
Fuel consumption in 2020		
Facility	Vreoci Heating Plant	
	t/year	
	Coal	Fuel oil
BOILER 1	214.563,00	154,60
BOILER 2		
TOTAL: MB KOLUBARA BRANCH – “PRERADA” BRANCH	214.563,00	154,60

1.2.3. Emission Measurements of Substances Affecting Water Quality

Process water is used in the technological process and coal valorisation (wet separation, drying plant, heating plant) from the water intake from the Kolubara River reservoir. The largest process water amounts are used in the “Prerada” Branch to generate superheated steam, ash and slag transport and wet coal separation. “Prerada” Branch also operates the Vreoci waterworks, supplying potable water to industrial facilities and the Vreoci village.

Wastewater is generated during the technological process of lignite processing and enrichment (wet separation, drying plant, heating plant) - chemical treatment of boiler water and sanitary water treated by the wastewater treatment plant.

Wastewater treatment plant comprises a receiving tank, filter sedimentation tank, fast mixing tank, Emser filters, secondary sedimentation tank, lagoons and purified water collectors. The treated water from the wastewater treatment plant is discharged through the gauge station into a channel and transported to the Kolubara River via a 7km long channel.

The Monitoring Programme includes the following types of water:

- Kolubara River water upstream of the wastewater discharge;
- Wastewater entering the treatment system;
- Wastewater leaving the treatment system;
- Kolubara River water downstream of the wastewater discharge.

Testing includes the determination of physical-chemical and microbiological characteristics of water which are of hygiene, water management and technical-technological importance, as follows: water appearance, visible waste materials, water temperature, air temperature, turbidity, colour, pH, sulphates, conductivity, ammonia, total nitrogen, chloride, KMnO₄ demand, COD, BOD₅, iron, manganese, and filtered water vaporisation residue, unfiltered water vaporisation residue, suspended solids, particulate matter, phenol matter, arsenic, mineral oil, and microbiological analysis of water.

Quality control of groundwater was performed in 11 piezometers (6 in the vicinity of the wastewater treatment plant and 5 in the vicinity of the ash and slag landfill in Medosevac).

During 2020, testing was carried out by the authorized and accredited laboratory of the Occupational Safety Institute Novi Sad. Reports presenting the quality control of the wastewater, treated water, Kolubara River water and groundwater within the "Prerada" Branch impact zone are submitted to: the Ministry of Environmental Protection, Public Water Company "Srbijavode", City Administration - Department for Utilities and Housing Services - Water Division, PE Electric Power Industry of Serbia, and the Secretariat (City of Belgrade Environmental Division).

Table 16 shows the groundwater quality data analysis in the vicinity of the wastewater treatment plant. Evaluation of legal compliance was done by comparing the hazardous and harmful substances concentrations values measured in piezometers with remediation values of hazardous and harmful substances concentration and values indicating considerable groundwater contamination

Table 16

MB KOLUBARA BRANCH – "PRERADA" BRANCH		
Groundwater quality in 2020		
Concentration	RV ¹	Waste water treatment plant
Arsenic (mg/l)	0,06	Measured values are in the range of <0,01-0,181
Phenols (mg/l)	2	All measured values were below remediation value (<0,1-<0,02)
Mineral oils (mg/l)	0,6	All measured values were below remediation value (<0,01- 0,079)

RV¹ - remediation values of concentrations of hazardous and harmful substances and values potentially indicating significant groundwater contamination under the Regulation establishing a program of systematic soil quality monitoring, indicators for assessing the risk of soil degradation and remediation programs development methodology (OG RS No. 88/2010).

Table 17 shows an overview of the groundwater quality data in the vicinity of the ash and slag landfill in Medosevac. Legal compliance was established by comparing the measured values of groundwater pollutants concentrations in piezometers with remediation values of hazardous and harmful substances concentrations and values potentially indicating significant groundwater contamination.

Table 17

MB KOLUBARA BRANCH – "PRERADA" BRANCH		
Groundwater quality in 2020		
Concentration	PB ¹	Medosevac – ash and slag landfill
Arsenic (mg/l)	0,06	All measured values were below remediation value (<0,1-0,02)
Phenols (mg/l)	2	All measured values were below remediation value (<0,1-0,037)
Mineral oils (mg/l)	0,6	All measured values were below remediation value (<0,01- 0,019)

Table 18 shows wastewater quality data analysis at the treatment plant inlet and outlet in 2020.

Wastewater treatment plant discharges do not adversely affect the quality of the recipient, i.e. Kolubara River; there is no significant change in water quality of the Kolubara River.

Table 18

MB KOLUBARA BRANCH – "PRERADA" BRANCH		
Wastewater treatment plant operating results in 2020		
Parameter	Concentration (mg/l)	
Pollutant	Plant inlet	Plant outlet
Suspended solids	2760,00-3330,00	104,00-730,00
Organic substances COD	2164,67-3410,73	164,43-820,16
Phenols	1,185-3,959	0,002-0,51
Arsenic	0,131-0,350	0,08-0,218

1.2.4. Emission Measurements of Substances Affecting Soil Quality

During 2020 no physical-chemical soil testing in the "Prerada" Branch site was carried out, considering that the analysed soil samples for 2011 and 2012 did not reach values requiring remediation measures in accordance with the Regulation establishing a program of systematic soil quality monitoring, indicators for assessing the risk of soil degradation and remediation programs development methodology (OG RS No. 88/10).

1.2.5. Environmental Noise Measurements

During 2020, noise levels were not measured because the “Prerada” did not have an active contract with any institutions performing measurements.

1.2.6. Waste

Waste amounts generated in 2020 in “Prerada” Branch are shown in Table 19, according to Serbian waste management legislation

Table 19

MB KOLUBARA BRANCH – “PRERADA” BRANCH					
Generated types of waste in 2020					
Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS No. 56/2010 and 93/2019)					
Number	Name	Index number	Unit	Waste amount	Note
1.	Waste printer cartridges other than the ones specified under 08 03 17	08 03 18	t	0,110	Waste printer cartridges
2.	Other fuels (including mixtures)	13 07 03*	t	3,100	Fuel oil
3.	Mineral non-chlorinated engine oils, transmission oils and lubricants	13 02 05*	t	4,230	Misc. oils
4.	Non-chlorinated mineral oils for insulation and heat transfer	13 03 07*	t	0,980	Transformer oil
5.	Packaging containing residues of hazardous substances or contaminated with hazardous substances	15 01 10*	t	0,280	Waste grease and oil packaging
6.	Absorbents, filter materials (including oil filters not otherwise specified), wipes, protective clothing, contaminated with hazardous substances	15 02 02*	t	0,250	Cotton wiping cloth
7.	Iron and steel	17 04 05	t	710,600	Railway cars
			t	229,160	Iron and steel over 6 mm
			t	45,900	Iron and steel over 3 mm
			t	60,700	Iron and steel below 3 mm
			t	7,020	Special types of stainless steel
8.	Insulating materials containing asbestos	17 06 01*	t	7,920	Lesonite boards
9.	Insulating materials other than those specified under 17 06 01 and 17 06 03	17 06 04	t	15,700	Glass wool
10.	Plastic and rubber	19 12 04	t	2,680	Conveyor belt with canvas
11.	Paper and cardboard	20 01 01	t	1,500	Waste paper and cardboard
12.	Fluorescent tubes and other wastes containing mercury	20 01 21*	t	0,270	Fluorescent tubes
13.	Detergents other than those specified under 20 01 29	20 01 30	t	1,840	Detergents
14.	Discarded electrical and electronic equipment other than that specified under 20 01 21, 20 01 23 and 20 01 35	20 01 36	t	1,080	Misc. el. equipment
15.	Plastics	20 01 39	t	2,630	Koterm boards

B.2. “KOLUBARA-METAL” BRANCH

MB “Kolubara” Branch – “Kolubara-Metal” Branch performs designing, manufacturing, assembly and maintenance of mining, energy and processing equipment.

“Kolubara-Metal” Branch comprises of the following organizational parts, with short descriptions of technological processes:

- **Operations Centre;**
- **Manufacturing unit:** mechanical and thermal treatment of materials and moulding, machine parts washing, washing oily and greasy surfaces of spare parts;
- **Overhaul unit:** overhaul of mining equipment, machine parts washing, cleaning of oily and greasy surfaces of spare parts;
- **Montaza Unit,** relocated from the Branch complex, performs electromechanical assembly of mining, processing and thermal power equipment and facilities;
- **ELMONT Unit,** relocated from the Branch complex, manufactures spare parts and assemblies workshops, revitalization and regeneration of electrical equipment, maintenance of power and on site telecommunication facilities, car and electrical equipment washing;
- **In-house maintenance.**

All the above units were constructed based on the valid designs and they possess utilisation permits.

1.1. Overview and Status of Permits

There were no new permits for Kolubara-Metal Branch in 2020. Overview and status of inspections and decisions are given in the Table 20.

Table 20

“KOLUBARA MB” BRANCH – “KOLUBARA-METAL” BRANCH		
Overview and status of inspections and divisions in 2020		
No.	Mark	Name
1.	353-03-00423/2020-07 26.02.2020.	Office inspection order
2.	353-03-00423/2020-07 04.03.2020.	Inspection report
3.	353-03-00423/1-5/2020-07 01.07.2020.	Decision stipulating measures to eliminate illegalities
4.	353-03-00423/2020-07 27.10.2020.	Decision extending deadlines for implementation of illegalities elimination measures
5.	501-98/2020-08 04.12.2020.	Office inspection order
6.	501-98/2020-08 22.12.2020.	ELMONT Unit Inspection Record

1.2. Monitoring and Environmental Impact

1.2.1. Emission Measurements of Substances Affecting Air Quality

In accordance with the Law and Decision of Environmental Protection Inspector of the competent Ministry, Kolubara-Metal Branch shall measure air emissions from the production capacities within Production Unit as well as boiler emission measurements within Montaza and ELMONT Units.

According to the Contract No. E.04.04-141/127-2019 dated 16 April 2019, for the “Air Quality Analysis” service, individual air emission measurements were performed by the accredited laboratory of the Occupational Safety

Institute, Novi Sad. The Monitoring Programme included measurements of flue gas conditions (temperature, pressure and humidity), flow rate, mass concentrations and emission factors for sulphur dioxide (SO₂), nitrogen oxides (NO_x-NO₂), carbon monoxide (CO), dust, and organic compounds expressed as a total carbon.

Measured emission values were compared to emission limit values prescribed by the Regulation. Emission measurement results are given in Table 21, per metering points

Table 21

“KOLUBARA MB” BRANCH – “KOLUBARA-METAL” BRANCH				
Emission Measurements of Substances Affecting Air Quality in 2020				
Emitted substance	Montaza Unit coal-fired boiler (E_M) (mg/Nm³)	ELMONT Unit coal-fired boiler (E_M) (mg/Nm³)	ELV (mg/Nm³)	Result assessment
CO	2.092,23	835,82	350	No legal compliance*
SO₂	163,99	156,19	1700	Compliant with legal regulations
Nitrogen oxides expresses as NO₂	1168,47	1.225,72	650	No legal compliance
Dust	No measurements	92,96	150	Compliant with legal regulations *

E_M - the highest value of emission measurement results reduced by the value of the measurement uncertainty

*Legal regulations: Regulation on limit values of air pollutants from stationary pollution sources (OG RS No. 5/16).

Analysis results show there is no excess emission according to the Regulation, except for boiler rooms in the Montaza Unit and ELMONT Unit in Lajkovac. The above exceedance for carbon monoxide (CO), and nitrogen oxides in the boiler rooms of the Montaza and ELMONT Units, occurred partially due to obsolete boilers and congestion during heating.

1.2.2. Emission Measurements of Substances Affecting Water Quality

Treated water from the wastewater treatment plant (separator), installed at washing points of mining equipment and car parts, as well as regenerated parts of equipment for excavators, flows into atmospheric wastewaters collectors and is conveyed from the Kolubara-Metal Branch via storm drainage into the PUTOKS plant and subsequently over a channel into the Kolubara River.

According to the Water Law (OG RS No. 30/10, 93/12,101/16 and 95/18), wastewater and treated water from the OU Kolubara Metal plants was controlled by the authorized and accredited laboratory.

In accordance with the Contracts No. E.04.04-204/288-18 of 6 July 2018 and E.04.04-141/276-2019 of 5 July 2019, testing was conducted by the authorized and accredited laboratory of the Occupational Safety Institute, Novi Sad. Four series of wastewater and treated water quality testing were performed. Testing included physical-chemical and microbiological characteristics of water of hygienic, water management and technical-technological importance, as follows: water appearance, visible waste substances, water temperature, air temperature, turbidity, colour, pH value, sulphates, specific conductivity, ammonia, total nitrogen, chloride, KMnO₄ demand, COD, BOD₅, iron, manganese, filtered water vaporisation residue, unfiltered water vaporisation residue, suspended solids, particulate matter, total phosphates, phenols, arsenic, mineral oil, and microbiological analysis of water. Physical-chemical wastewater testing results are given in Tables 22, 23, 24 and 25.

Table 22

KOLUBARA MB BRANCH – OU “KOLUBARA-METAL”							
Wastewater physical-chemical testing in 2020 – first quarter							
Tested parameter	Measured value						Reference value*
	I	II	III	IV	V	VI	
Water temperature (°C)	10.3	11.0	32.5	11.0	11.5	11.0	30
Turbidity (NTU)	33.6	412	17.1	212	412	23.8	-
Conductivity (µS/cm)	614	439	558	725	568	523	-
Total phosphorus (mg/l)	0.4	0.90	0.11	0.26	0.16	0.019	-
Fe (mg/l)	3.84	3.92	0.399	0.886	6.58	0.53	-
Mn (mg/l)	0.269	0.094	0.098	0.118	0.371	0.303	-
As (mg/l)	<0.01	<0.01	<0.01	<0.01	0.018	0.031	-
Mineral oil (TPH) (mg/l)	2.88	1.364	0.031	0.027	0.072	0.219	10
Total number of faecal coliform bacteria (cfu/100ml)	1.2x10 ³	6x10 ²	3.7x10 ³	<60	8x10 ³	3.1x10 ²	-

Table 23

KOLUBARA MB BRANCH – OU “KOLUBARA-METAL”							
Wastewater physical-chemical testing in 2020 – second quarter							
Tested parameter	Measured value						Reference value*
	I	II	III	IV	V	VI	
Water temperature (°C)	27.0	23.7	22.6	24.0	22.6	22.4	30
Turbidity (NTU)	13.8	203	32.8	49.9	27.1	55.6	-
Conductivity (µS/cm)	396	210	187	969	510	88	-
Total phosphorus (mg/l)	0.43	0.11	0.028	0.034	0.11	0.044	-
Fe (mg/l)	1.46	11.61	3.65	7.87	1.30	1.35	-
Mn (mg/l)	0.418	0.210	0.147	1.45	0.076	0.043	-
As (mg/l)	<0.01	0.030	0.018	<0.01	<0.01	<0.01	-
Mineral oil (TPH) (mg/l)	0.016	<0.01	<0.01	0.033	<0.01	0.019	10
Total number of faecal coliform bacteria (cfu/100ml)	5.2x10 ²	1x10 ⁴	2.9x10 ³	60	6.5x10 ⁴	2.4x10 ²	-

Table 24

KOLUBARA MB BRANCH – OU “KOLUBARA-METAL”							
Wastewater physical-chemical testing in 2020 – third quarter							
Tested parameter	Measured value						Reference value*
	I	II	III	IV	V	VI	
Water temperature (°C)	23.8	20.2	20.2	-	21.4	20.3	30
Turbidity (NTU)	35.5	92.6	3.34	-	150	25.4	-
Conductivity (µS/cm)	866	290	721	-	731	605	-
Total phosphorus (mg/l)	0.57	0.18	0.098	-	0.072	0.079	-
Fe (mg/l)	1.57	1.765	0.48	-	3.19	1.96	-
Mn (mg/l)	0.515	0.094	0.042	-	0.144	0.779	-
As (mg/l)	<0.01	0.016	<0.01	-	0.017	<0.01	-
Mineral oil (TPH) (mg/l)	0.628	1.071	0.041	-	0.098	0.072	10
Total number of faecal coliform bacteria (cfu/100ml)	5.8x10 ³	1.2x10 ²	5.9x10 ³	-	3.7x10 ⁴	60	-

Table 25

KOLUBARA MB BRANCH – OU “KOLUBARA-METAL”							
Wastewater physical-chemical testing in 2020 – fourth quarter							
Tested parameter	Measured value						Reference value*
	I	II	III	IV	V	VI	
Water temperature (°C)	11.0	-	28.0	-	14.0	9.5	30
Turbidity (NTU)	106	-	8.95	-	7.7	32.3	-
Conductivity (µS/cm)	1351	-	455	-	701	828	-
Total phosphorus (mg/l)	0.1	-	0.04	-	0.16	0.011	-
Fe (mg/l)	30.326	-	0.217	-	0.455	0.882	-
Mn (mg/l)	1.4	-	0.053	-	0.064	0.422	-
As (mg/l)	<0.01	-	<0.01	-	<0.01	<0.1	-
Mineral oil (TPH) (mg/l)	1.099	-	0.553	-	0.627	0.661	10
Total number of faecal coliform bacteria (cfu/100ml)	4.6x10 ³	-	3.2x10 ³	-	2.4x10 ²	2.2x10 ⁴	-

*Reference value: Regulation stipulating emission limit values for pollutants in water and deadlines for their achievement (OG RS, No. 67/2011, 48/2012 and 1/2016). Emission limit values for wastewater containing mineral oils, Table 4.1. Emission limit values at the point of discharge into surface waters.

Measuring points I, II, IV and VI are outlets from the separator inside the Manufacturing Unit, Overhaul Unit and ELMONT Unit in Lajkovac, while measuring points III and V are storm drainage outlets from the Manufacturing Unit and Overhaul Unit.

During sampling at individual measuring points, no samples were taken at the inlets due to separator clogging. Some of the presented results do not provide a realistic image of the separator efficiency due to the clogging and abundant precipitation within the intervals before and after sampling.

Based on the presented results it can be concluded that wastewater treatment efficiency was reduced and that the wastewater at separator outlets was not of satisfactory quality, in terms of its legal compliance (values prescribed by the Regulation), considering that separators have not been working properly. For this reason, the concentration of suspended solids, organic compounds (COD) was significantly increased, while the concentration of iron, phenols and arsenic in wastewaters at the separator outlet fluctuate considerably. Such reduced wastewater treatment efficiency was caused by the lack of cleaning of oily sludge separators, which was impossible, because no hazardous waste disposal was performed before the sampling took place. Namely, in order to keep the wastewater treatment plant (separators) fully operational and maintain its efficiency, oily sludge needs to be removed and disposed, which is usually outsourced and performed by authorised operators – persons authorised for hazardous waste management. Person responsible for waste management at the “Kolubara Metal” Branch, provided information about the above services (hazardous waste disposal) performed between 17 and 20 November 2020 including separator emptying and cleaning. During the sampling at the measuring points in the Manufacturing and Overhaul units and based on the measurement results, it was concluded that separator cleaning was performed partially and unsatisfactorily, which made sampling impossible. The person responsible for waste management at the “Kolubara Metal” Branch was informed that hazardous waste disposal service providers should be requested to clean the separator adequately to make it fully operational.

1.2.3. Waste

Waste amounts generated in 2020 in the “Kolubara-Metal” Branch are presented in Table 26, according to Serbian waste management legislation.

Table 26

“KOLUBARA MB” BRANCH – OU “KOLUBARA-METAL”					
Generated types of waste in 2020					
Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS No. 56/2010 and 93/2019)					
No.	Name	Index number	Unit of measure	Waste amount	Note
1.	Waste paint and varnish containing organic solvents or other hazardous substances	08 01 11*	t	2,440	Expired paints and protective coatings
2.	Scraping and processing of ferrometals	12 01 01	t	90,700	Pure waste ferrometal scrapings without impurities and waste ferrometal scrapings with impurities
3.	Scraping and processing of non-ferrous metals	12 01 03	t	8,500	Waste bronze scrapings
4.	Mineral non-chlorinated hydraulic oils	13 01 10*	t	10,220	Waste mineral non-chlorinated hydraulic oils
5.	Mineral non-chlorinated motor oils, transmission oils and lubricants	13 02 05*	t	5,180	Waste non-chlorinated mineral motor oils
6.	Other emulsions	13 08 02*	t	30,300	Waste sludge from the washing area
7.	Packaging containing residues of hazardous substances or contaminated with hazardous substances	15 01 10*	t	2,860	Metal packaging of paints, varnishes and thinners
8.	Waste tires	16 01 03	t	3,940	Pneumatics
9.	Copper, bronze, brass	17 04 01	t	19,080	Copper lacquer wire, insulated copper coils, scrap tin bronze, scrap aluminium bronze
10.	Iron and steel	17 04 05	t	195,420	Scrap iron and steel over 3mm
				213,480	Scrap iron and steel over 6 mm (rolls and shafts)
				49,160	Scrap iron and steel with rubber coating (coated idlers)
				199,640	Scrap iron and steel - alloy steel (platform segments)
				34,320	Scrap iron and steel (buckets, platforms, pontoons and structure parts)
11.	Insulating materials containing asbestos	17 06 01*	t	2,440	Roof coverings with asbestos impurities
12.	Other wastes (including materials mixtures) from mechanical treatment of wastes containing hazardous substances	19 12 11*	t	6,380	Greased rubber-plastic seals
13.	Fluorescent tubes and other wastes containing mercury	20 01 21*	t	0,600	Fluorescent tubes
14.	Discarded electrical and electronic equipment other than that specified under 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	1,000	Electronic hazardous waste
15.	Discarded electrical and electronic equipment other than that specified under 20 01 21, 20 01 23 and 20 01 35	20 01 36	t	26,600	Electrical non-hazardous waste

The cumulative amount of waste for the Kolubara MB (Open Cast Mines “Baroševac” Branch, “Prerada” Branch and “Kolubara-Metal” Branch) generated in 2020 is presented in Table 27, in line with the Serbian waste management legislation.

Table 27

KOLUBARA MB BRANCH – OU OPEN CAST MINES BAROSEVAC, OU PRERADA AND OU KOLUBARA METAL													
Number	Званична номенклатура Правилника о категоријама, испитивању и класификацији отпада ("Службени гласник РС". бр. 56/2010 и 93/2019)		Мерна јединица	Generated types of waste in 2020									Note
				"Field D"	"Field B"	"Tamnava Zapadno Polje"	"Tamnava Istočno polje"	Auxiliary mechanization	Total OCM	Total: Prerada	Total: Kolubara Metal	Total: Kolubara MB	
	Name	Index number		Generated waste amount									
1.	Waste paint and varnish containing organic solvents or other hazardous substances	08 01 11*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	2,440	2,440	
2.	Waste printer cartridges for printing other than that specified in 08 03 17	08 03 18	t	0,007	0,000	0,035	0,050	0,000	0,092	0,110	0,000	0,202	Waste printer cartridges
3.	Scraping and processing of ferrometals	12 01 01	t	12,000	3,000	2,500	0,000	0,000	17,500	0,000	90,700	108,200	Iron and steel shavings, metal scrapings, clean waste ferrometal scrapings without impurities, ferrous metal waste scrapings with impurities
4.	Scraping and processing of non-ferrous metals	12 01 03	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	8,500	8,500	Non-ferrous metal shavings, waste bronze scrapings
5.	Mineral non-chlorinated hydraulic oils	13 01 10*	t	0,000	0,000	0,000	2,000	0,000	2,000	0,000	10,220	12,220	Hydraulic oils
6.	Mineral non-chlorinated motor oils, transmission oils and lubricants	13 02 05*	t	0,000	0,000	0,000	7,560	33,340	40,900	4,230	5,180	50,310	Motor oil, gear oils
7.	Non-chlorinated mineral oils for insulation and heat transfer	13 03 07*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,980	0,000	0,980	Transformer oil
8.	Mineral-based chlorinated insulating and heat transmission oils	13 03 10*	t	0,100	0,000	0,000	0,000	0,000	0,100	0,000	0,000	0,100	Transformer oils

9.	Oily water from oil/water separators	13 05 07*	t	9,780	2,500	0,000	0,000	7,060	19,340	0,000	0,000	19,340	Sludge from separators, liquid waste from the oil pit (emulsion)
10.	Other fuels (including mixtures)	13 07 03*	t	0,000	0,000	0,000	0,000	0,000	0,000	3,100	0,000	3,100	Heavy fuel oil
11.	Other emulsions	13 08 02*	t	0,000	2,000	0,000	0,000	6,880	8,880	0,000	30,300	39,180	Mechanical emulsions and solutions without halogenated matters, Waste sludge from washing points
12.	Packaging containing residues of hazardous substances or is contaminated by hazardous substances	15 01 10*	t	0,000	0,250	0,000	0,000	0,000	0,250	0,280	2,860	3,390	Waste metal barrels from oil and lubricants, waste barrels from oil and lubricants, metal packaging of paints, varnishes and thinners
13.	Absorbent and filter materials (including oil filters not otherwise specified) wiping cloths, protective clothing contaminated by hazardous substances	15 02 02*	t	0,430	0,180	0,090	0,000	3,800	4,500	0,250	0,000	4,750	Oil and air filters, oilywiping cloth, working clothes, wiping cloth
14.	Absorbent, filter materials, wiping cloths and protective clothing, not otherwise specified in 15 02 02	15 02 03	t	0,000	0,000	0,000	0,000	10,160	10,160	0,000	0,000	10,160	Air filters
15.	Used tires	16 01 03	t	0,000	0,000	0,000	0,000	25,442	25,442	0,000	3,940	29,382	Pneumatics
				0,000	0,500	0,000	0,000	0,000	0,500	0,000	0,000	0,500	Rubber gaskets, wipers, roll rings
16.	Brake pads containing asbestos	16 01 11*	t	0,000	0,000	0,000	0,000	0,560	0,560	0,000	0,000	0,560	Waste from asbestos braids and brake linings
17.	Lead batteries	16 06 01*	t	0,320	0,000	0,080	0,000	0,000	0,400	0,000	0,000	0,400	Lead-acid batteries
18.	Waste from tanks cleaning	16 07 08*	t	0,000	0,000	0,000	0,000	4,000	4,000	0,000	0,000	4,000	
19.	Copper, bronze, brass	17 04 01	t	0,170	0,000	0,000	6,000	0,000	6,170	0,000	19,080	25,250	Copper, copper strips, copper lacquer wire, insulated copper coils,

													scrap tin bronze, scrap aluminum bronze
20.	Iron and steel	17 04 05	t	115,000	10,400	7,100	1,000	0,000	133,500	0,000	199,640	333,140	Alloy steel (crawler platforms, crusher hammers, excavator teeth)
				30,000	4,550	0,000	0,000	0,000	34,550	0,000	49,160	83,710	Iron and steel with rubber coating, upholstered idlers
				40,340	7,080	0,000	0,000	0,000	47,420	229,160	213,480	490,060	Iron over 6 mm (rails, structure parts, idlers and shafts)
				18,000	48,500	0,000	27,500	0,000	94,000	60,700	0,000	154,700	Iron and steel up to 3 (steel sheets switching cabinets, vul.houses, sheet metal profiles, cabinets of mixed category)
				148,000	144,500	25,105	37,370	6,680	361,655	45,900	195,420	602,975	Iron and steel over 3 mm (steel sheets, idlers, shafts, structures, steel ropes, pieces of various sizes and shapes, unclassified, steel ropes, sheets, steel body idlers, structures, crates, pontoons, rails)
				0,000	54,340	0,000	0,000	0,000	54,340	710,600	0,000	764,940	Railway wagons (wagons, handrails)
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	34,320	34,320	Waste iron and steel (buckets, pads, pontoons, circum chutes and structure parts)
				0,000	0,000	0,000	0,000	0,000	0,000	7,020	0,000	7,020	Special types of stainless steel
21.	Cables other than those mentioned in 17 04 10	17 04 11	t	21,000	0,000	0,000	15,000	0,000	36,000	0,000	0,000	36,000	High voltage copper cables with insulation
				9,000	0,000	0,000	0,000	0,000	9,000	0,000	0,000	9,000	Low voltage copper cables with insulation

				0,000	0,000	1,500	0,000	0,000	1,500	0,000	0,000	1,500	Telephone cords
22.	Waste from metal contaminated with hazardous substances	17 04 09*	t	12,650	0,000	0,000	0,000	0,000	12,650	0,000	0,000	12,650	Oily bearings from idlers
23.	Insulating materials containing asbestos	17 06 01*	t	0,000	6,640	0,000	0,000	0,000	6,640	7,920	2,440	17,000	Building insulation boards containing asbestos, hardboards
24.	Insulating materials	17 06 04		0,000	0,000	0,000	0,000	0,000	0,000	15,700	0,000	15,700	Glass wool
25.	Plastics and rubber	19 12 04	t	0,000	0,000	15,715	0,000	0,000	15,715	2,680	0,000	18,395	Scrapers, sealing rubber, rubber rings, conveyor belt with canvas
26.	Other waste from mechanical treatment containing hazardous substances	17 02 04*	t	6,530	0,000	0,000	0,000	0,800	7,330	0,000	6,380	13,710	Greased rubber-plastic seals and hydraulic hoses
27.	Fluorescent tubes and other waste containing mercury	20 01 21*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,270	0,600	0,870	Fluorescent tubes
28.	Detergents other than those specified in 20 01 29	20 01 30	t	0,000	0,000	0,000	0,000	0,000	0,000	1,840	0,000	1,840	Detergents
29.	Discarded electrical and electronic equipment other than those indicated under 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	0,195	0,000	0,470	1,220	0,000	1,885	0,000	1,000	2,885	Electro-hydraulic thrustors, electronic equipment, other
30.	Discarded electrical and electronic equipment other than those indicated under 20 01 21, 20 01 23 and 20 01 35	20 01 36	t	16,040	0,000	0,000	0,000	0,000	16,040	0,000	0,000	16,040	Waste electric motors
				0,000	8,347	0,030	0,000	0,000	8,377	1,080	26,600	36,057	El. tools, devices and equipment (used electric machines and electric motors, tools, other)
31.	Plastics	20 01 39	t	0,000	0,000	0,000	0,000	0,000	0,000	2,630	0,000	2,630	Punch plates
32.	Paper and cardboard	20 01 01	t	0,000	0,000	0,220	0,000	0,000	0,220	1,500	0,000	1,720	Waste paper and cardboard

Table 28 provides the implementation of the takeover amount of waste that Branch MB "Kolubara" had in the period from 1st January – 31st December 2020.

Table 28

BRANCH MB KOLUBARA			
Takeover amount of waste in 2020			
Item No.	Waste name	Waste index number	Takeover amount (kg)
1.	Scraping and processing of ferrous metals – pure waste shaving of ferrous metals without impurities	12 01 01	35.520,000
2.	Scraping and processing of ferrous metals – waste ferrometal waste shaving with various impurities and soil	12 01 01	70.560,000
3.	Scraping and processing of non-ferrous metals – copper waste shaving	12 01 03	8.500,000
4.	Non-chlorinated mineral engine oils, gearbox oils and lubricating- other motor oils	13 02 05*	48.440,000
5.	Non-chlorinated mineral hydraulic oils	13 01 10*	10.220,000
6.	Other oils for insulation and heat transfer - oils from transformers	13 03 10*	1.160,000
7.	Other fuels (including mixtures)	13 07 03*	1.080,000
8.	Absorbents, filter materials, wipes and protective clothing other than those mentioned in 15 02 02 - filter materials (air filters)	15 02 03	10.160,000
9.	Waste tires - pneumatics	16 01 03	31.340,000
10.	Copper, bronze, brass - copper lacquer wire, copper windings with insulation	17 04 01	11.400,000
11.	Copper, bronze, brass - tin bronze	17 04 01	4.500,000
12.	Copper, bronze, brass - aluminum bronze	17 04 01	3.180,000
13.	Iron and steel below 3 mm (rails, rolls, steel ropes, mixed categories, steel of various sizes and shapes)	17 04 05	141.560,000
14.	Iron and steel over 3 mm (rails, rolls, steel ropes, mixed categories, steel of various sizes and shapes)	17 04 05	497.840,000
15.	Iron and steel, alloy steel, slipper segments, crusher hammers, excavator teeth, impact plates	17 04 05	239.840,000
16.	Iron and steel - over 6 mm (spoons, pontoons, shoes, circum chutes, rolls, shafts, structure parts...)	17 04 05	249.860,000
	Iron and steel - spoons, pontoons, shoes, circum chutes, construction parts...	17 04 05	76.060,000
17.	Iron and steel - railway wagons	17 04 05	710.600,000
18.	Iron and steel, of various dimensions and shapes with various impurities and soil	17 04 05	32.340,000
19.	Iron and steel with rubber coating	17 04 05	112.940,000
20.	Cables other than those mentioned in 17 04 10 - high voltage, low voltage and telephone insulated copper cables	17 04 11	31.480,000
21.	Discarded electrical and electronic equipment other than that specified in 20 01 21 and 20 01 23 and 20 01 35 - electric motors, tools, el. devices, apparatus, telephones, miscellaneous, welding machines with copper coil	20 01 36	79.400,000
22.	Discarded electrical and electronic equipment other than that specified in 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	10.220,000
TOTAL: BRANCH MB KOLUBARA			2.418.200,000

Table 29. shows an overview of the realization of the disposed waste of Branch MB "Kolubara" in the period from 1st January – 31st December 2020.

Table 29

BRANCH MB KOLUBARA			
Disposed waste in 2020			
Item No.	Waste name	Waste index number	Takeover amount (kg)
1.	Waste paint and varnish containing organic solvents or other hazardous substances - paints and protective coatings with expired life time	08 01 11*	2.440,000
2.	Wastes not otherwise specified - wastes from occasional treatments of metals and plastics, ZIS 218 welding paste for old welding method	12 01 99	5.120,000
3.	Used wax and grease, waste not otherwise specified, grease mixtures, oils with various impurities	12 01 12* 13 08 99*	1.740,000
4.	Oily water from oil/water separators - cleaning grease and oil separators	13 05 07*	19.340,000
5.	Other fuels (including mixtures) - waste heavy fuel oil	13 07 03*	2.500,000
6.	Other emulsions - cleaning of existing washing points and sludge from washing points	13 08 02*	30.300,000
7.	Other emulsions - machine emulsions and solutions not containing halogens	13 08 02*	8.880,000
8.	Packaging containing residues of hazardous substances or contaminated with hazardous substances - packaging of paints, varnishes and thinners	15 01 10*	2.860,000
9.	Absorbents, filter materials (including oil filters not otherwise specified), wipes, protective clothing, contaminated with hazardous substances - oily wiping cloth, working clothes	15 02 02*	4.540,000
10.	Brake linings containing asbestos	16 01 11*	1.460,000
11.	Nickel cadmium batteries	16 06 02*	1.160,000
12.	Insulating materials containing asbestos - asbestos panels from building insulation, roof coverings with asbestos admixtures	17 06 01*	24.900,000
13.	Insulating materials other than those mentioned in 17 06 01 and 17 06 03 - mineral wool	17 06 04	940,000
14.	Other wastes (including mixtures of materials) from mechanical treatment of wastes containing hazardous substances - greasy rubber-plastic seals and hydraulic hoses	19 12 11*	25.640,000
15.	Fluorescent tubes and other wastes containing mercury	20 01 21*	840,000
16.	Detergents other than those mentioned in 20 01 29 - detergents not containing hazardous substances (household waste, cleaning agents)	20 01 30	1.840,000
TOTAL: BRANCH MB KOLUBARA			134.500,000

1.3. Working Environment Monitoring, Occupational Health and Safety

The 2020 Occupational Safety and Health Reports include the following elements:

- **Working Environment Monitoring**
 - working environment noise measurement
- **Occupational Safety**
 - personnel training
 - work injuries
- **Health**

1.3.1. Working Environment Monitoring

■ Working Environment Noise Measurements

Working environment noise levels measurements results are provided in Table 30.

Table 30

BRANCH MB KOLUBARA			
Working environment noise for 2020			
Business Unit	Plant	Registered noise level (dB(A))	Permitted noise level (dB(A))
Open Cast Mines	At 750 points the measured noise was within the proscribed limits		
Processing Plant	At 302 points the measured noise was within the proscribed limits		85
Metal	At 110 points the measured noise was within the proscribed limits		
Headquarter	In 2020 there were no measurements		85
Project	In 2020 there were no measurements		85

1.3.2. Occupational Safety

Analysis of high-risk jobs was carried out and it was established that such workplaces (jobs) are adequately protected in line with legislation

■ Personnel Training

Occupational health and safety training is conducted when new employees are recruited, when existing employees are transferred to other positions, when new technologies and tools are introduced. Trainings are both theoretical and practical.

Theoretical (general) training is performed by the Health and Safety Division introducing normative acts in the field of occupational safety and health to employees. Practical training is conducted at the workplace and implemented by line managers. Theoretical training of newly recruited employees and the ones transferred to new positions is performed regularly.

In 2020, occupational health and safety training was performed for 5.155 persons in MB "Kolubara" (employment, transfer to other positions, contractors, students employed under temporary and provisional contracts).

Under the Law on Mining and Geological Exploration, Occupational Health and Safety Law, Law on Fire Protection, OHS Regulations, and FP Regulations, the employer is under the obligation to perform OHS and FP testing of employees.

The training of employees is conducted in accordance with "Occupational Health and Safety Training Programme". Training and testing is conducted for employees working at job positions with higher risk, as well as for employees working at job positions that are not of higher risk

Table 31

BRANCH MB KOLUBARA			
Knowledge test in 2020			
Business unit	Invited	Tested	%
Open Cast Mines	5.439	4.626	85.05
Processing Plant	1.640	1.610	98.17
Metal	1.516	1.188	78.36
Headquarter	497	488	98.19
Project	9	9	100.00
TOTAL: BRANCH MB KOLUBARA	9.101	7.921	87.03

■ Work injuries

Table 32 provides the 2020 work injuries data.

Table 32

BRANCH MB KOLUBARA						
Work injuries in 2020						
Business unit	Number of employees	Injuries – employees ratio				
		Minor	Severe	Fatal	Total	%
Open Cast Mines	6.647	96	29	0	125	1.88
Processing Plant	1.442	10	10	0	20	1.39
Metal	1.877	34	8	0	42	2.24
Headquarter	1.542	4	1	0	5	0.32
Project	85	0	0	0	0	0.00
TOTAL: BRANCH MB KOLUBARA	11.593	144	48	0	192	1.66

1.3.3. Health

Medical examinations are performed by the Occupational Health Department of Đorđe Kovačević Lazarevac Medical Centre. Periodic medical examinations are performed annually, and employees working in high-risk workplaces and those operating at computer screens are referred to examination.

Table 33 presents periodic examinations data for employees working in high-risk workplaces in 2020.

Table 33

BRANCH MB KOLUBARA											
Employees' work capability in 2020											
Business unit	Number of employees	Previous and periodical examinations				Work capability					
		Referred to examination		Examined		Capable		Referred to examination		Examined	
		number	%	number	%	number	%	number	%	number	%
Open Cast Mines	6.647	6.264	94.24	5.483	87.53	3.834	69.93	1516	27.65	133	2.43
Processing Plant	1.442	427	29.61	422	98.83	289	68.48	125	29.62	8	1.90
Metal	1.877	1.168	62.23	1.100	94.18	865	78.64	203	18.45	32	2.91
Headquarter	1.542	304	19.71	278	91.45	188	67.63	89	32.01	1	0.36
Project	85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL: BRANCH MB KOLUBARA	11.593	8.163	70.41	7.283	89.22	5.176	71.07	1.933	26.54	174	2.39

Note: As of 16.03.2020 a state of emergency was declared throughout Serbia due to the spread of the COVID-19 coronavirus. The new unforeseen situation made working conditions difficult. Periodic reviews were suspended, staff were sick, and training was organized in small groups. All work has been adjusted to reflect the current situation.

1.4. Public Complaints

Under the Act number 1201.68476/2-19 dated 12th February 2019, PE EPS notified The Protector of Citizens on the current affairs and the prospects of moving the remaining citizens of the settlement of Veliki Crljeni, Zeoke and Medoševac, accentuating that on 22nd November 2018 the Government of the Republic of Serbia defined the public interest for the expropriation into the so called "infrastructure corridor" in OCM Zeoke for 15 affected households. It was emphasized that further steps in moving depend on the possibilities of eliminating negative environment impacts in the settlement of Veliki Crljeni, i.e. planned development of mining activities in the settlement of Medoševac.

2. BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES

Branch TPP-OCM "Kostolac" is comprised of four business units, as follow:

- TPP "Kostolac" A
- TPP "Kostolac" B
- Open Cast Mine "Drmno" (OCM Drmno)
- Open Cast Mine "Ćirikovac" (OCM Ćirikovac)

2.1. Overview and Status of Permits

Table 34 provides the overview of permits and status of permits, licenses and other necessary approvals for 2020.

Table 34

BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES			
Overview and status of permits for 2020			
Business unit	Granted permits and approvals (number and date)	New requests for permits or for existing permits extension	Note
OCM Drmno	<ol style="list-style-type: none"> 1. Decision of the Ministry of Mining and Energy on the use and utilization of the substation 110/6kV Rudnik 3 with the newly equipped reserve overhead line field 110 Kv No.1262, br.310-02-00165/2020-02 dated 02.06.2020. 2. Decision of the Ministry of Mining and Energy for commissioning of the substation SS 110/6kV Rudnik 4 and overhead line 110 kV No. 1261 RP 110Kv Drmno (TPP Kostolac B)- SS 110/6kV Rudnik 4 at the opencast mine Drmno, No.310-02-01064/2020-02 dated 12.06.2020. 3. Decision of the Ministry of Mining and Energy on the use and utilization of the substation SS 110/6kV Rudnik 5 and overhead line 110kV Rudnik 3 - Rudnik 5, No. 310-02-00164/2020-02 dated 07.07.2020. 4. Decision - approval of the Ministry of Mining and Energy - Sector for Geology and Mining for the construction of mining facilities and mining works on the Supplementary Mining Project for the capacity of the Drmno mine of 12h10⁶ tons of coal per year no No.310-02-00027/2020-02 dated 20.10.2020. 	-	-

2.2. Monitoring and Environmental Impact

2.2.1. Air Quality Measurements

Air quality measurements in the vicinity of mines and TPP "Kostolac" A and TPP "Kostolac" B are conducted under an integral network of measuring points.

2.2.2. Emission Measurements of Matters Affecting Water Quality

■ Dewatering System Waters

Water from the OCM "Drmno" dewatering system is mainly transported to the TPP "Kostolac" B cooling water reservoir, while smaller amounts are discharged into the Mlava River. Water from the OCM "Ćirikovac" dewatering system is accumulated in the mine vicinity. OCM "Klenovnik" water amounts are low and therefore not measured.

Drainage water quality control originating from the OCM "Drmno" dewatering system in 2020 was carried out by the authorized legal entity Institute for Occupational Safety Institute Novi Sad. Table 35 shows the drainage water quality results for OCM "Drmno" in 2020.

Table 35

BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES			
Drainage water quality in 2020			
OCM Drmno	Draining well 3 (drainage lake inlet TEKO B)	Draining well 75 (northern section OCM Drmno)	Spillway station - Mlava OCM Drmno
Sulfates (mg/l)	90.21-112.50	8.73-18.46	55.0-86.6
Phenols (mg/l)	0.01-0.10	0.02-0.10	0.02-0.10
Electrical conductivity (µs/cm)	670-963	695-710	714-878
Arsenic (mg/l)	0.01-0.019	0.01-0.025	0.01

■ Sanitary Water

Table and sanitary water used by the OCM "Drmno" comes from Bradarac water source. Table water quality is controlled by the authorized legal entity Požarevac Health Protection.

Table 36 shows data on sanitary wastewater treatment device operation in 2020.

Table 36

BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES	
Sanitary wastewater treatment device operation in 2020	
Pollutant concentration (mg/l)	BIODISC OCM Drmno
Suspended matter (mg/l)	
Device inlet	13.60-58.0
Device outlet	7.20-18.0
5 days Biochemical oxygen demand (BOD ₅)	
Device inlet	10.0-40.0
Device outlet	3.80-15.0
Device efficiency assessment	Satisfies guarantees for suspended matters for all measuring

In 2020, sampling and testing of water quality was performed by the authorized legal entity on sanitary wastewater treatment plant inlet and outlet on the location of OCM Drmno.

Table water used by the OCMs "Ćirikovac" and "Klenovnik" comes from the city waterworks system. Water quality is controlled by the authorized legal entity Požarevac Health Protection.

Data from Table 37 for sanitary water consumption in OCM Drmno refer to the Crushing plant "Drmno" and container complex "Drmno". Workers' estate OCM Drmno has its water from "Bradarac" water source. Since Bradarac village and OCM Drmno have one shared water meter, for the for the working circle, the first water meter started to record consumption on 29.01.2020, while the second water meter was installed in July.

Table 37 shows the used and sanitary water data amounts, together with the drainage water amounts for the OCM Drmno in 2020.

Table 37

Table 31

BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES				
Water amounts in 2020 (m³/a)				
Open cast mine		Dewatering	Sanitary waters for needs of the OCM	
		Total water amounts	Water supply	Total amount
Klenovnik		31,968.00	300,00	32,268.00
Ćirikovac	Ash landfill dewatering	111,491.56	3,350.00	114.841.56
	Pit	0	0	
Drmno	Surface dewatering	5,234,435.00	148,389.00	38.075.997.00
	Deep dewatering	32,693,173.00		
TOTAL: BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES		38,071,067.56	152,039.00	38,223,106.56

2.2.3. Emission Measurements of Matters Affecting Soil Quality

Branch TPP-OCM "Kostolac" monitors the pollutants emission in soil every year. The comments of the results are given in accordance with the maximum allowable concentration (MAC) and limit and remediation values of hazardous and harmful substances concentration proscribed under the Regulation on limit values for pollutant, harmful and dangerous substances in soil ("Official Gazette of RS", no. 30/2018 and 64/2019) and under the Land Law.

The results showed that the total content of mercury (Hg)) and nickel (Ni) exceeded maximum limit value for heavy metals in all analyzed samples. Excessive amounts were also noted for the contents of chrome (Cr), copper (Cu), as well as cadmium (Cd). The content of cadmium (Cd) exceed maximum limit value in 31.6% of samples, the content of chrome (Cr) exceeded MAC values in 10.5% and copper (Cu) in 10.5% of analyzed samples. Other analyzed parameters were within the limits of allowable concentration.

In 2020, soil quality monitoring in the proximity of Branch TPP-OCM "Kostolac" was performed in vegetative and non-vegetative period by the accredited Laboratory "Occupational Safety and Environmental Protection" Belgrade "Ltd. - Belgrade. Concentrations of substances that affect soil quality are presented in Tables 38 and 39.

Table 38

BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES									
Concentration of Matters Affecting Soil Quality in 2020									
Sample symbol	Chemical Properties								
	Soil pH		Organic carbon	Easily accessible		Total nitrogen content	Humus content	Ion content	
	H ₂ O	KCl	(TOC) %	P ₂ O ₅ mg/100g	K ₂ O mg/100g	% N	%	NO ₂ -mg/kg	NO ₃ -mg/kg
Z-1	8.2	7.7	1.67	2.7	37.5	0.14	2.88		
Z-4	7.9	7.4	1.53	<1	14.0	0.13	2.63		
Z 12	8.1	7.2	1.50	5.2	19.3	0.13	2.58		
Z 23	8.0	7.4	2.29	378.4	164.0	0.18	3.94		
Z 25	7.3	6.1	1.96	12.0	57.9	0.16	3.36		
Z 26	5.8	5.1	3.99	19.7	57.9	0.29	6.89		
Z 27	8.1	7.8	1.57	1.6	24.4	0.13	2.70		
Z 28	8.3	7.8	1.70	1.8	29.7	0.14	2.93		
Z 36	8.4	8.0	1.55	8.2	55.9	0.13	2.67		
Z 43	8.3	7.8	2.34	7.9	9.5	0.18	4.04		
Z 44	8.4	7.9	1.51	3.6	30.2	0.13	2.60		
Z 45	8.4	7.9	1.30	7.5	31.3	0.11	2.24		
Z 46 0-30	8.2	7.5	1.60	3.5	36.1	0.11	5.17		
Z 46 30-60	8.4	7.9	0.64	<1	26.3	0.07	1.10		
Z 47	8.2	7.5	1.29	3.5	36.1	0.11	5.17		
Z 51	8.6	8.0	0.25	17.0	21.7	0.04	0.43		
Z 56	7.89	7.2	1.77	20.9	30.6	0.14	3.04		
Z 57 0-30	8.2	7.8	1.67	1.5	33.8	0.14	2.88		
Z 57 30-60	8.5	8.0	1.23	9.0	23.3	0.11	2.12		

Table 39

BRANCH TPP & OCM KOSTOLAC - OPEN CAST MINES																			
Concentration of Matters Affecting Soil Quality in 2020																			
Sample symbol	Sample symbol																		
	Heavy metals accessible form mg/kg										Total content of heavy metals mg/kg								
	Cr	Ni	Pb	Cu	Zn	Cd	Hg	B	As	%Fe	Cr	Ni	Pb	Cu	Zn	Cd	Hg	As	%Fe
Z-1	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	54.2	43.9	13.2	18.9	69.8	<0.4	0.7	10.4	2.1
Z-4	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	109.9	128.6	47.1	23.3	98.9	<0.4	0.6	12.6	2.3
Z-12	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	63.8	57.5	35.5	29.2	108.5	<0.4	0.9	10.6	2.4
Z-23	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	40.2	35.5	<8	13.7	82.8	<0.4	1.1	6.1	0.05
Z-25	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	48.1	47.8	24.1	41.1	78.4	1.4	0.6	7.9	1.9
Z-26	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	13.9	20.9	12.3	41.7	43.5	1.1	0.8	7.8	0.8
Z-27	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	40.89	38.9	12.3	15.6	61.2	<0.4	1.0	6.8	1.8
Z-28	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	47.1	41.8	13.1	16.7	65.4	<0.4	1.0	6.8	2.0
Z-36	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	36.8	38.2	11.9	29.2	56.6	<0.4	0.9	9.3	1.6
Z-43	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	37.0	39.3	21.6	24.5	58.9	1.5	0.6	6.3	1.5
Z-44	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	45.5	39.3	11.5	14.6	29.0	<0.4	0.7	<1	1.8
Z-45	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	39.4	35.5	9.3	13.2	53.0	<0.4	1.0	8.7	1.19
Z-46 0-30	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	86.2	112.3	25.4	18.9	68.9	1.4	0.2	8.4	1.9
Z-47	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	107.2	100.7	72.8	30.9	117.6	<0.4	1.0	16.9	2.8
Z-51	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	50.9	53.0	16.16	16.2	79.5	1.6	0.3	7.2	2.0
Z-56	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	46.8	41.1	27.2	23.6	89.5	2.0	0.8	9.7	2.0
Z-57 0-30	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	37.5	36.8	10.7	15.2	73.0	<0.4	0.8	8.6	1.7
Z-57 30-60	<5	<1	<8	<6	<5	<0.4	<1	<0.1	<1	<0.01	40.2	35.3	7.3	13.5	53.9	<0.4	0.8	9.1	1.7

▪ Overview of Expropriated and Reclaimed Areas

Overview of expropriated and reclaimed areas in PE EPS Branch TPP-OCM Kostolac for the period until 2019, changes in 2020 and total area up to and including 2020, for locations and types of reclaimed areas are represented in Table 40.

Total expropriated areas until 2020 amounted to 4,333.02 ha.

Land area registered in the cadaster until 2020 amounts to 316.55 ha. Land area whose use has been changed until 2020 amounts to 454.32 ha.

Land area containing building structure until 2019 amounted to 1.41 ha, and up to and including 2020 this has remained unchanged.

Land areas under dump sites until 2019 amounted to 769.20 ha, in 2020 amounted to 90.00 ha, which in total including 2020 is 859.20 ha.

Reclaimed areas include areas under forests, arable land, orchards and plant nursery.

In 2020, reclaimed area under forests was increased for 28.00 ha and it amounted to 166.71 ha in 2020.

Reclaimed area under arable land until 2019 amounted to 327.80 ha, and up to and including 2020, status with these areas is 342.80 ha.

Reclaimed area under orchards amounted to 2.00 ha in 2019, which remained unchanged in 2020.

Reclaimed area under plant nursery amounted to 7.50 ha until 2019, which status remained unchanged in 2020

Table 40

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES																			
Overview of expropriated and reclaimed areas until 2020																			
Open cost mine	Expropriated area (ha)	Land area registered in the cadaster (ha)		Land area whose use was changed (ha)		Land area containing building structure (ha)		Dump site areas (ha)				Reclaimed areas (ha)							
		Until 2019	In 2020	Until 2019	In 2020	Until 2019	In 2020	Inside		Outside		Forests		Arable Land		Orchards		Plant Nursery	
								Until 2019	In 2020	Until 2019	In 2020	Until 2019	In 2020	Until 2019	In 2020	Until 2019	In 2020	Until 2019	In 2020
Klenovnik	472.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Čirikovac	1,047.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Drmno	2,644.47	197.50	-	373.32	81.0	1.41	-	769.20	90.0	-	-	32.51	8.00	327.80	15.00	2.00	-	7.50	-
Kličevac	169.55	20.45	98.60	-	-	-	-	-	-	-	-	106.20	20.00	-	-	-	-	-	-
TOTAL	4,333.02	316.55		454.32		1.41		859.20		-		166.71		342.80		2.00		7.50	

2.2.4. Environment Noise Measurements

Noise measurements in 2020 were performed by the authorized legal entity – Public Health Institute Požarevac and Miphem Laboratory Ltd. Belgrade at three measuring locations in accordance with the Law on Protection Against Noise in the Environment (Official Gazette of RS, No. 36/2009 and 88/2010), Rulebook on Noise Measurement Methods, Contents and Form of Noise Measurement Reports (Official Gazette of RS, No. 72/2010) and the Regulation on Noise Indicators, Limit Values, Methods for Noise Indicators Evaluation, Nuisance and Harmful Effects of Noise in the Environment (Official Gazette of RS, No. 75/2010).

Measurements were performed at the following metering points:

1. Drmno OCM - Vidikovac
2. Drmno OCM – container complex
3. Drmno OCM - the road towards Kličevac

Table 41 represents data on measured noise levels in the environment in 2020 in Kostolac TPPs-OCMs Branch – organizational units Open-Cast Mines, separately given for winter and summer period.

Table 41

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES				
Noise levels in 2020 (dB)(A)				
I measuring – winter				
Metering points	Drmno OCM			
	Limit Values (dB)	Vidikovac (dB)	Container Complex (dB)	The road to Kličevac (dB)
For day	65	41.5	49.0	46.7
For day	65	51.6	44.3	46.5
For evening	65	54.1	53.7	50.1
For night	55	54.6	52.5	50.3
For night	55	54.5	53.7	49.5
II measuring – summer				
For day	65	54.3	56.3	58.7
For day	65	56.1	58.0	59.2
For evening	65	58.2	58.4	55.6
For night	55	50.5	54.7	52.2
For night	55	51.6	53.1	52.3

2.2.5. Waste

Table 42 shows waste production in 2020 for Kostolac TPP&OCM Branch (branch sections Drmno OCM and Čirikovac OCM).

Table 43 shows quantities of submitted waste in 2020 from Kostolac TPP&OCM Branch (branch sections Drmno OCM and Čirikovac OCM).

Table 42

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES							
Generated types of waste in 2020 (t)							
Number	Rulebook on Waste Categories, Testing and Classification (Official Gazette of RS, no. 56/2010 and 93/2019)	Index number	Organizational unit				Note
	Name		Drmno OCM	Ćirikovac OCM	HW Warehouse	Total	
1	Waste paint and varnish containing solvents or other substances	08 01 11*	0.000	0.000	0.000	0.000	-
2	Waste printer cartridges other than the ones indicated under 08 03 17	08 03 18 08 03 99	0.008	0.008	0.000	0.016	-
3	Waste bonds and seals containing organic solvents or other hazardous substances	08 04 09*	0.000	0.000	0.000	0.000	-
4	Used waxes and greases	12 01 12*	0.300	0.000	0.000	0.300	Used waxes and greases
5	Waste mineral non-chlorinated hydraulic oil	13 01 10*	15.401	0.000	0.000	15.401	-
6	Waste synthetic non-chlorinated hydraulic oil	13 01 11*	0.505	0.000	0.000	0.505	-
7	Waste mineral non-chlorinated gearbox and lubrication oils	13 02 05*	12.500	0.000	0.000	12.500	-
8	Other motor oils, gearbox oils and lubrication oils	13 02 08*	0.000	0.000	0.000	0.000	D2 additive
9	Waste mineral non-chlorinated insulation and heat transfer oil – transformer oil	13 03 10*	0.000	0.000	0.000	0.000	-
10	Other fuels (including mixtures)	13 07 03*	0.470	0.000	0.000	0.470	-
11	Other emulsions	13 08 02*	4.950	0.000	0.000	4.950	-
12	Packaging containing residues of hazardous substances or contaminated by hazardous substances	15 01 10*	0.090	0.000	0.000	0.090	Metal packaging oil tanks
13	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing, contaminated with hazardous substances	15 02 02*	1.350	0.000	0.000	1.350	Oily wiping cotton cloth
			0.000	0.000	0.000	0.000	Absorbent
14	Absorbents, filter materials, wiping cloths and protective clothing other than those indicated under 15 02 02	15 02 03	0.200	0.000	0.000	0.200	Air filter
			0.000	0.050	0.000	0.050	Protective equipment – PPE footwear
15	Waste tires	16 01 03	5.459	0.000	0.000	5.459	Car tires
16	Discarded vehicles not containing liquids nor other hazardous components	16 01 06	0.000	0.000	0.000	0.000	-
17	Oil filters	16 01 07*	2.600	0.000	0.000	2.600	-
18	Waste brake pads containing asbestos	16 01 11*	0.100	0.000	0.000	0.100	-

19	Antifreeze solution containing hazardous substances	16 01 14*	0.000	0.000	0.000	0.000	-
20	Discarded equipment different from the one indicated under 16 02 09 to 16 02 12	16 02 13*	0.630	0.000	0.000	0.630	-
21	Organic waste containing hazardous substances (other solutions)	16 03 05*	0.000	0.000	0.000	0.000	-
22	Lead batteries	16 06 01*	7.392	0.000	0.000	7.392	Accumulator batteries
23	Nickel-cadmium batteries	16 06 02*	0.000	0.000	0.000	0.000	-
24	Other batteries and accumulators (alkaline batteries)	16 06 05	0.000	0.000	0.000	0.000	-
25	Glass	17 02 02	3.600	0.000	0.000	3.600	-
26	Plastics	17 02 03	1.760	0.000	0.000	1.760	-
27	Copper, bronze, brass	17 04 01	0.100	0.000	0.000	0.100	-
28	Aluminium	17 04 02	0.130	0.000	0.000	0.130	-
29	Iron and steel	17 04 05	916.368	40.01	0.000	956.378	Various thickness
30	Cables other than those indicated under 17 04 10	17 04 11	27.100	29.150	0.000	56.25	Copper cables
			0.000	0.000	0.000	0.000	Aluminum cables
31	Earth and stone containing hazardous substances	17 05 03* 15 02 02*	0.000	0.000	0.000	0.000	Earth and sand soaked with oil
32	Construction material containing asbestos (asbestos cement plates)	17 06 05*	0.000	0.000	0.000	0.000	-
33	Plastics and rubber	19 12 04	0.000	0.000	0.000	0.000	Rubber bands
			4.706	0.050	0.000	4.756	Rubber material
34	Fluorescent tubes and other waste containing mercury	20 01 21* 20 01 35*	0.000	0.000	0.000	0.000	UV light bulbs
35	Fluorescent tubes and other waste containing mercury	20 01 21*	0.130	0.000	0.000	0.130	Fluepipes and mercury bulbs
36	Discarded electrical and electronic equipment other than those indicated under 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	0.820	0.000	0.000	0.820	-
37	Discarded electrical and electronic equipment other than those indicated under 20 01 21 and 20 01 23 and 20 01 35	20 01 36	0.000	0.000	0.000	0.000	Sodium and incandescent light bulb

Table 43

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES							
Waste delivered in 2020 (t)							
Number	Official nomenclature of the Rules defining waste categories, its testing and classification ("Official Gazette of RS". no. 56/2010 and 93/2019)	Index number	Organizational unit				Note
	Name		Drmno OCM (t)	Čirakovac OCM (t)	HQ Warehouse (t)	Total (t)	
1	Waste mineral non-chlorinated hydraulic oil	13 01 10*	25.805	0.000	0.000	25.805	-
2	Waste synthetic non-chlorinated hydraulic oil	13 01 11*	1.470	0.000	0.000	1.470	-
3	Waste mineral non-chlorinated gearbox and lubrication oils	13 02 05*	10.565	0.000	0.000	10.565	-
4	Other emulsions	13 08 02*	4.300	0.000	0.000	4.300	-
5	Lead batteries	16 06 01*	20.000	0.000	0.000	20.000	Accumulators
6	Iron and steel	17 04 05	298.100	116.100	0.000	414.200	Various thickness
7	Cables other than those indicated under 17 04 10	17 04 11	57.200	27.550	0.000	84.75	Copper cables

2.3. Working Environment Monitoring, Occupational Health and Safety

The 2020 Occupational Health and Safety Reports include the following elements:

- **Working environment monitoring**
 - working environment noise measurements
- **Safety**
 - training
 - work injuries
- **Health**

2.3.1. Working Environment Monitoring

- **Working environment noise measurements**

In 2020 at Drmno OCM and Ćirikovac OCM monitoring was not conducted, i.e. noise measurements were not conducted.

2.3.2. Occupational Safety

- **Employees training**

In Public Enterprise „Electric Power Industry of Serbia“ employees are trained in accordance with the Health and Safety Training Programme and in accordance with the health management system procedures and occupational safety standards ISO 45001. Testing of occupational safety competence and knowledge advancements are implemented at least once a year in accordance with Kostolac TPP-OCM Branch Risk Assessment Act, Law on Mining and Geological Exploration and Occupational Safety and Health Law. Under the Occupational Safety and Health Law, training at Kostolac open cast mines was conducted with every new worker recruitment, deployment to new workplaces, technological process changes and the introduction of new equipment and work tools. Revision and competence testing was conducted for employees working at working positions with increased risk.

Table 44 shows the number of employees envisaged for training, as well as the number of employees trained in 2020.

Table 44

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES					
Employees training in 2020					
Organizational units	Number of Employees	To be trained		Trained	
		Number	%	Number	%
Drmno OCM	1,490	1,266	84.97	818	64.61
Ćirikovac OCM	76	44	57.89	44	100.00
HQ	538	47	8.73	46	97.87
TOTAL: KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES	2,104	1,357	64.50	908	66.91

Note: Certain employees passed more than one training, e.g. due to transfer to other workplaces, etc.

- **Work injuries**

Table 45 shoes the number of occupational injuries in 2020.

Table 45

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES						
Occupational injuries in 2020						
Organizational units	Number of Employees	Injuries – employees ratio				
		Minor	Severe	Fatal	Total	%
Drmno OCM	1,490	11	3	0	14	0.94
Čirikovac OCM	76	0	0	0	0	0.00
HQ	538	1	2	0	3	0.56
TOTAL: KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES	2,104	12	5	0	17	0.81

2.3.3. Health Protection

All employees from the Kostolac open-cast mines are subject to pre-employment or periodical medical examinations. Employees to be employed or during transfer to some other work post with high risk are referred to pre-employment medical examinations. Employees working at high-risk posts are referred to periodic medical examinations done once a year. In 2020, periodic medical examinations were done in the Occupational Medicine Clinic within Požarevac Health Center.

Table 51 shows data on periodic medical examinations for examining work capability of employees in 2020.

Table 46

KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES											
Work capability of employees in 2020											
Organizational units	Number of Employees	Periodical examinations				Work capability					
		Referred to examination		Examined		Capable		Limited capability		Not capable	
		number	%	number	%	number	%	number	%	number	%
Drmno OCM	1,490	651	43.69	640	98.31	572	89.38	55	8.59	13	2.03
Čirikovac OCM	76	44	57.89	40	90.91	30	75.00	10	25.00	0	0.00
HQ	538	50	9.29	49	98.00	45	91.84	3	6.12	1	2.04
TOTAL: KOSTOLAC TPPs & OCMs BRANCH – OPEN CAST MINES	2,104	745	35.41	729	97.85	647	88.75	68	9.33	14	1.92

Note: Out of a total number of employees, 2 employees are still undergoing additional medical examinations for determining work capability, and they were not represented in column 'Work capability'. Due to infectious disease pandemics, the number of employees referred to examination and the number of examined employees is significantly lower than the number of employees planned for periodic examinations.

2.4. Public Complaints

There were no public complaints regarding the environment in 2020..

3. NIKOLA TESLA THERMAL POWER PLANT BRANCH

Nikola Tesla TPP Branch (TENT Branch) comprises of five organizational units:

- **Nikola Tesla A TPP (TENT A);**
- **Nikola Tesla B TPP (TENT B);**
- **Kolubara A TPP (Kolubara A TPP);**
- **Morava TPP (Morava TPP);**
- **Railway transport (RT)).**

3.1. Permits Overview and Status

Table 47 shows an overview of obtained permits, as well as submitted applications for new permits or extension of existing ones in 2020.

Table 47

NIKOLA TESLA THERMAL POWER PLANT BRANCH			
Overview and status of permits in 2020			
Organizational unit	Obtained permits and approvals (number and date)	Applications for new or extension of existing permits	Note
TENT A	-	-	-
TENT B	- Decision on issuing water permit (water permit is issued for collection of surface waters from the Sava River, discharging of cooled and sanitary water into the Sava River, storing of oil derivatives and for dispatch location on the right bank of Sava River. Water permit validity period is until 16 June 2022.	-	-
KOLUBARA A TPP	- Approval of the Ministry of Environmental Protection for continuous measurements of pollutants emission from stationary sources of pollution for boiler plants K3, K4 and K5 of Kolubara TPP. Decision no. 353-01-00603/2020-03 dated 21 August 2020.	-	-
MORAVA TPP	-	-	-

3.2. Monitoring and Environmental Impact

3.2.1. Air Quality Measurements

Air quality monitoring in the vicinity of the TENT Branch organizational units is carried out as part of the monitoring financed and organized by individual organizational units. It should be noted that the air quality monitoring is within the competence of the legislator; therefore, air quality monitoring is carried out as part of the national automatic air quality monitoring network, including measuring points located in the proximity of the TENT Branch.

During 2020., air quality measurements were performed in the proximity of all four organizational units: TENT 1, TENT B, Kolubara TPP and Morava TPP. Measurements contractors were Occupational Safety and Environmental Protection Beograd Ltd. and City Institute for Public Health Belgrade. Measurements were performed in the period January – March and June – October. In the period April – May due to pandemics and proclamation of state of emergency it was not possible to issue entry permits to the measurements contractors on the facilities of TENT, so measurements were temporarily halted. As at October the contract validity period

expired, and due to slow public procurement procedure no new contract was signed, so measurements for November and December are missing. Measurements during 2020, with a pause in the period April-May during which the laboratory was closed due to pandemics, measurements were conducted in the vicinity of TENT A and TENT B, and internally by the laboratory Division for Environmental Monitoring and Control TENT, which is not accredited.

TENT A and TENT B

In 2020 in the vicinity of TENT A and TENT B measurements of the total particulate matter content (TPM) were performed by the accredited laboratories at 18 measuring points, sulphur dioxide and soot concentrations were performed at two measuring points, and suspended matter smaller than 10µm (PM₁₀) at one measuring point. Table 53 presents data on air quality in the vicinity of TENT A and TENT B for the period January – March and June – October, based on their measurements, while for the period November – December data was presented for TPM and sulphur dioxide, as well as for December for soot concentrations, based on the measurements of the laboratory Division for Environmental Monitoring and Control TENT.

During 2020 there was no significant ash dispersion from ash landfills and no citizens' complaints to air pollution. All existing active cassettes protection systems on TENT A and TENT B ash landfills were in operation, water lens covered an optimal area in accordance with the technical requirements. Moreover, wetting of dry surfaces was also executed.

Kolubara A TPP

Air quality measurements in the Kolubara A TPP surroundings have been performed for over twenty years. Monthly and annual air quality monitoring reports for the vicinity of Kolubara A TPP are submitted to the local self-government authorities and governmental agencies, at their request. During 2020, TPM content was measured at 8 measuring points, and concentration of SO₂, soot and total suspended particles PM₁₀ was measured at 1 measuring point. Measurements were performed in the period from 1st January 2020 until 31st March 2020 and from 1st June 2020 until 31st October 2020.

Morava TPP

Air quality monitoring in the vicinity of Morava TPP started on 1st September 2019 by measuring the TPM content at 8 measuring points, and concentration of SO₂, soot and total suspended particles PM₁₀ at 1 measuring point.

During 2020, ash was dispersed from ash landfills due to strong winds. The system for ash wetting was installed at one inactive cassette VII, which was in operation during the summer period, especially when there were strong winds. Water lens at an inactive cassette VII covered an optimal area in accordance with the technical requirements.

Table 48 shows air quality data analysis for 2020 in terms of conformity with the legal requirements for the plants of TENT Branch. Air quality assessment was performed based on the measuring results compared to the limit and tolerable values for SO₂, TPM, total suspended matter PM₁₀ and soot, specified by the Regulation stipulating air quality monitoring conditions and requirements (Official Gazette of RS, no. 11/10, 75/10 and 63/13). The regulation is compliant with the European Union Regulation.

Table 48

NIKOLA TESLA THERMAL POWER PLANT BRANCH					
Air quality in 2020					
Legal compliance (data or days exceeding legal limits)					
Air quality indicators	Total particulate matters levels - TPM (mg/m ² /day)		Concentration of SO ₂ (µg/m ³)		
	Maximum permissible value (MPV)		LV	TV	TL
Averaging period					
One hour			350	350	0
*One day			125	-	
**One month	450		-		
***Calendar year	200		50	-	
TENT A and TENT B	*	-	One exceedance out of a total of 586 data. Measurements performed on two measuring points.		
	**	Measurements were performed at 18 measuring points, as follows: - 2 measuring points, TENT A landfill area; - 3 measuring points, TENT B landfill area; - 4 measuring points in the vicinity of TENT A; - 5 measuring points in the vicinity of TENT B; - 4 measuring points in Obrenovac and its vicinity; - 1 measuring point in Vladimirci. Out of a total of 174 data items for monthly TPM values, there were seven exceedances of TPM, which is 4.0% - one exceedance in the vicinity of TENT A, three at TENT B landfill area, two in the vicinity of TENT B and one in Vladimirci.	-		
	***	Out of a total of 18 metering points there was an exceedance of TPM for mean annual TPM value (at TENT B landfill area)	No exceedance		
KOLUBARA A TPP	*	-	No LV exceedance out of a total of 242 data items		
	**	Measurements were performed at 8 measuring points, as follows: In August 2020, at Kolubara TPP MM8 50 meters of CWT there was exceedance 725.60 mg/m ² /day (for the observed period in March 2020 no measurements for MM8 were conducted), there was no exceedance of TPM at other measuring points in the observed period.	No LV exceedance		
	***	For the observed period from 1 st January 2020 until 31 st March 2020 and from 1 st June 2020 until 31 st October 2020 there was no exceedance of TPM at measuring points MM1-MM7, while there was exceedance of MPV at Kolubara TPP MM8 in the observed period (287.36 mg/m ² /day)	For the observed period from 1 st January 2020 until 31 st March 2020 and from 1 st June 2020 until 31 st October 2020 there was no exceedance of LV (242 data items)		
MORAVA TPP	*	-	No exceedance		
	**	Measurements were performed at 8 measuring points, as follows: - 2 measuring points at TEM ash landfill ; - 1 measuring point in the vicinity of oil landfill; - 4 measuring points in Svilajnac; - 1 measuring point in the village of Crkvenac; There was no exceedance of MPV out of a total data for monthly values of TPM.	No exceedance		

	***	For the measuring period from 2 nd September 2019 until 31 st October 2020 there was exceedance of MPV at one measuring point MM4, while there was no exceedance of MPV at other seven measuring points.			No exceedance
Air quality indicators		Total suspended matters PM ₁₀ (µg/m ³)			Soot (µg/m ³)
Averaging period		LV	TV	TL	Maximum permissible concentration (MPC)
*One day		50	50	0	50
***Calendar year		40	40	0	50
TENT A and TENT B	*	Number of data exceeding LV was 51 (most in January - 26), which amounts to 20.9% out of 244 data items. Measurement was performed daily at one measuring point	-	-	No exceedance out of a total of 540 data items. Measurement were taken at two measuring points.
	**	-	-	-	-
	***	No measurings were performed during the whole year	-	-	No exceedance
KOLUBARA A TPP	*	Number of data exceeding LV was 74 (most in January 28), which amounts to 31.49% (based on 235 data items). Measurement was performed daily at one measuring point. Exceedance more than 35 times per one calendar year.	-	-	. No exceedance of MPC МДК
	**				
	***	above LV – 47.80 µg/m ³ (based on 235 data items, which is 64.21% data items for the subject year)	-	-	Below LV - 12.44 µg/m ³ (based on 242 data items)
MORAVA TPP	*	Number of data exceeding LV was 78 (in September - 5, in October - 11, in December - 13, in January - 29, February - 5, March - 10, September - 1, October - 4)	-	-	No exceedance
	**	-			-
	***	No exceedance			No exceedance

LV – Limit value, TV – Tolerance value, TL – Tolerance limit
Note: hourly values are not measured for sulphur dioxide

Based on the long-term air quality monitoring in this area, the following may be concluded:

- SO₂ concentrations are below the prescribed average daily and annual mean limit values and tolerance values;

- Air pollution by ash particles PM_{10} is of local significance, mainly the result of power plant operation and other sources of pollution (traffic, household furnaces and the like). Pollution is higher during winter months.

3.2.2. Emission Measurements of Matters Affecting Air Quality

Total sulphur content in Kolubara lignite supplied to the TENT Branches is approximately 0.5%. Flue gases containing sulphur dioxide, nitrogen oxides, carbon dioxide and dust, after treatment and dust separation by electrostatic precipitators, are emitted into the air through stacks of the following heights:

- TENT A - 150m (units A1, A2 and A3) and 220m (units A4, A5 and A6)
- TENT B - 280m (units B1 and B2)
- Kolubara A TPP - 105m (boiler K1), 105m (boilers K3, K4 and K5) and 130m (unit A5, K6);
- Morava TPP - 105m.

In line with the legal requirements individual pollutants air emission measurements are carried out regularly, while continuous measurements are carried out on the majority of the TENT Branch units.

■ Periodic emission measurements of matters affecting air quality

During 2020, periodic emission measurements of matters affecting air quality were conducted once a year at TENT A units – units A2, A3, A4, A5 and A6; at TENT B at units B1 and B2, at Kolubara A TPP at the stack 2 (boilers K3, K4 and K5) and at stack 3 (unit A5, K6), and twice a year at stack 1 (boiler K1) at Kolubara TPP. In Morava TPP there were two individual measurements of air emission affecting the air quality. Both measurements were conducted on the stack, as stack measuring point was aligned with the standard in the meantime. Monitoring Programme included the flue gas condition measurements (temperature, pressure and humidity), flow rate, oxygen c, mass concentrations and emission factors for sulphur dioxide (SO_2), nitrogen oxides (NO_x - NO_2), carbon monoxide (CO), chlorine (HCl) and fluorine (HF) compounds and dust. Furthermore, technical and elementary coal analysis was conducted. In addition to this, macro-elements, combustible substances, particle size distribution and electrical resistance of fly ash measurements were also conducted.

Emission measurements of matters affecting air quality were performed by accredited laboratories of the Nuclear Science Institute Vinča and Mining Institute - Belgrade, in line with the Air Pollutants Emission Periodic Measuring Plan.

Table 49 shows the results of periodic emission measurements of air pollutants affecting air quality for the TENT Branch, performed during 2002.

Table 49

NIKOLA TESLA THERMAL POWER PLANT BRANCH									
Periodic emission measurements of matters affecting air quality in 2020									
Mass concentrations of matters affecting air quality (mg/Nm³)									
Organizational unit	TENT A						TENT B		
Unit	A1	A2	A3	A4	A5	A6	B1	B2	
Power MWth	660	660	932	943	934	934	1,809	1,826	
SO ₂		1,997	2,300	2,814	2,293	2,032	1,754	1,936	
NO _x (NO ₂)		495	375	235	194	377	474	315	
CO		81	82	61	58	86	30	38	
Particulate matter		149	57	25	32	39	43	42	
Organizational unit	KOLUBARA A TPP							Morava TPP	
Unit, boiler	K1		K3,K4 and K5			A5,K6			
Power MWth	125.6		376.8			333.5	420.0		
SO ₂	1,627.1		1,253.9			2,141,1	4,400		
	1,852.0						4,777		
NO _x (NO ₂)	252.7		171.6			419.4	555		

	327.2			615
CO	110.5	38.3	97.8	32
	51.4			23
Particulate matter	816.4	867.0	143.7	37
	954.4			24

Note: Pursuant to the Directive on the limitation of emissions of certain pollutants into the air from large combustion plants (Off. Gazette of RS, no. 6/16), Article 5 stipulates that old large combustion plants do not have to comply with individual ELVs if from the date of entry into force of the abovementioned Directive they are included in the preliminary application for the National Emission Reduction Plan from big stationary combustion plants. TENT A and TENT B are included by National Emission Reduction Plan.

Likewise, in accordance with Article 6 of this Directive, authorized body can exclude huge combustion plants from implementation of limit values of pollutant air emissions and from obligation determined by National Emission Reduction Plan of old combustion plants on condition that these were in exemption mechanism due to its limited life. TEM and TEK are included in this mechanism due to the limited life of the plant.

On units A3, A5 and A4 in TENT A, burners were reconstructed in order to reduce nitrogen oxide emissions and increase unit capacity (unit A4).

▪ Continuous emissions measurements of matters affecting air quality

In the period from 2004 until the end of 2014, equipment for continuous emissions measurements of matters affecting air quality was installed on TENT Branch units. In addition to the basic equipment for measuring mass concentration of dust and gases, some additional measuring equipment was installed for oxygen (O₂), carbon dioxide (CO₂) and humidity, as well as temperature (t), pressure (p) and flue gases flow rate. Data acquisition and processing equipment was also installed.

The project funded through an IPA donation included design, supply, delivery, installation, commissioning, calibration - QAL2 certification of the continuous measuring system for sulphur dioxide (SO₂), nitrogen oxides (NO_x - NO₂), carbon monoxide (CO), carbon dioxide (CO₂), dust for:

- all units (A1-A6) in Nikola Tesla A TPP (completion of existing equipment),
- units B1 and B2 Nikola Tesla B TPP and
- unit A5 - Kolubara A TPP.

CEMS Reports were established in line with the Large Combustion Plants Directive 2001/80/EC and in accordance with the legislation in the Republic of Serbia. The entire system was reconciled with EN 14181 (QAL1, QAL2 and QAL3) standard and national legislation.

Pursuant to the Air Protection Act (Official Gazette of RS No. 36/09 and 10/13) and the Rulebook on conditions for giving approval to operators for air quality measurements and/or emissions from stationary pollution sources (Official Gazette of RS No. 16/12), TENT A, TENT B, MTPP and KTPP boilers K3, K4 and K5 and unit A5 obtained approvals for continuous emission measurements from stationary pollution sources.

Table 50 shows the overview of results for continuous emission measurements of matters affecting air quality (mean annual mass concentration) for TENT Branch in 2020.

Table 50

NIKOLA TESLA THERMAL POWER PLANT BRANCH								
Continuous emission measurements of matters affecting air quality in 2020								
Mass concentrations of matters affecting air quality (mg/Nm ³)								
Organizational unit	TENT A						TENT B	
Unit	A1	A2	A3	A4	A5	A6	B1	B2
Power MWth	660	660	932	943	934	934	1.809	1.826
SO ₂	2.204	2.368	2.823	2.876	2.465	2.560	2.226	2.362
NO _x (NO ₂)	357	421	401	329	247	426	345	313
CO	108	117	106	67	77	101	30	64
Particulate matter	145	182	60	37	43	41	28	40

Organizational unit	Kolubara A TPP*			Morava TPP
Unit, boiler	K1	K3, K4 and K5	A5, K6	
Power MWth	125,6	376,8	333,5	420,0
SO ₂	-	2.292,3	1.965,0	-
NO _x (NO ₂)	-	280,3	464,0	-
CO	-	121,1	82,0	-
Particulate matter	-	1.316,3	134,0	-

Note: In accordance with Article 38 paragraph 2 and Appendix 3 paragraph 1.2 of the Regulation prescribing air emission measurements from stationary sources of pollution there is not obligation of continuous emission measurements for plants with heating power of 100 MWth to 300 MWth with remaining plant life cycle less than 10,000 operating hours. Boiler K1 does not have equipment for continuous emission measurement of air pollutants. In December 2020, a condition was met for exclusion from the obligation of continuous emissions measurement of air pollutants from boiler plant of the boiler K1 in Kolubara TPP, since the remaining service life of the plan was less than 10,000 operating hours. Since 1 January 2018 until 31 December 2020, the boiler plant K1 in Kolubara TPP used up 10,484.50 operating hours, and its remaining time is 9,515.50 hours. Namely, the boiler K1 in Kolubara TPP is an old large combustion plant at the final list of plants and, since 1 January 2018 has been using exemption due to limited life cycle (the so called "opt out" mechanism – 20,000 operating hours until 31 December 2023).

Table 51 shows data on equipment in units for continuous emission measurement of matters affecting air quality in TENT Branch organizational units.

Table 51

Table 3

NIKOLA TESLA THERMAL POWER PLANT BRANCH										
Equipment in TPP units for continuous measurement of matters affecting air quality in 2020										
Emitted matter					Parameters					
Organizational unit		Particulate matter (PM)	Gases		Content			p	T	Flow
			SO ₂ , NO _x (NO ₂), CO	HCl and HF	Humidity	CO ₂	O ₂			
TENT	A1	Measuring devices installed on each unit on flue ducts after the left and right ESP, behind flue gas fan (FGF) Total: 12 measuring devices.	One measuring device installed per unit. Sampling is carried out on flue ducts, continuously, behind the left and right FGF. Flue gas is mixed and led to measuring devices for gases Total: 6 sets of measuring devices.	-	Humidity adopted Installation of 6 more measuring devices planned.	Total: 6 measuring devices.	Measuring devices installed on each unit, on flue ducts after the left and right ESP, flue gas fan Total: 12 sets of measuring devices.			
	A2									
	A3									
	A4									
	A5									
	A6									
TENT B	B1	Measuring device installed on the flue duct, at the elevation 55.1 m in the inner stack lining.	-	Measuring device installed on the flue duct, at the level 55.1m in the inner stack lining.						
		Platform located at the elevation 54m, inner stack lining Total: 1 set of measuring devices								
	B2	Measuring device installed on the flue duct, at the elevation 55.1m in the inner stack lining.		Measuring devices installed on the flue duct, at the level 55.1m in the inner stack lining.						
		Platform located at the elevation 54m, inner stack lining Total: 1 set of measuring devices								
KOLUBARA A TPP	K1	-	-	-						
	K3	Measuring devices (except HC and HF devices) installed at the elevation of 46.25m, outer stack lining. Platform is located at the elevation of 45m, outer stack lining. Control measurements openings at the elevation of 46.75m. Stack height - 105m.								
	K4									
	K5									

	A5-K6	Installed: <ul style="list-style-type: none">• behind ESP after FGF: Left ESP Right ESP <ul style="list-style-type: none">• stack	Installed on the stack	-	Installed on the stack	Installed: <ul style="list-style-type: none">• behind ESP after FGF: Left ESP Right ESP <ul style="list-style-type: none">• stack	Installed on the stack
Measuring devices installed at the elevation of 51m, outer stack lining. Platform is located at the elevation of 50m, outer stack lining. Measuring plane with measuring opening for control measurements located at the elevation of 51.5m. Stack height - 130m.							
MORAVA TPP		At the measuring section of the stack three measuring platforms were located (50,3m 50,7m and 56,7m). In the measuring platform MP1 at the elevation 50.3m there are openings for AMS. Measuring devices for pressure, gases and dust on the outer side of the stack lining. Measuring platform MP2 at 50.7m have openings for CPM. MP3 is located at 56.7m. Inlet part of the platform is at 46.7m and the outer is at 48.3m. Platform is at the elevation 49m. Stack height is 105m.					

Data acquisition and processing equipment (software) is an integral part of the above automatic measuring system (AMS).

Under the Decisions issued by the competent ministries, i.e.: 2nd December 2018 Ministry of Energy, Development and Environment, 22nd December 2015 and 16th January 2017 Ministry of Agriculture and Environment, and 25th November 2019 the Ministry of Environmental Protection, TENT was granted Approval for independent continuous stationary pollutant sources measurements for the following pollutants: SO₂, NO_x, CO and total particulate matter for TENT A units A1 to A6, TENT B units B1 to B2 and Kolubara A TPP unit A5.

The abovementioned devices for boilers K3, K4, K5 at Kolubara A TPP were installed on joint stack 2 (105m high), at the elevation of 46.25m. The first calibration of devices - QAL2 tests of basic and additional equipment were conducted in November 2014 by the accredited laboratory AEROLAB d.o.o. Beograd. Under Decisions issued by the competent ministries, i.e. on 30th November 2015 by the Ministry of Agriculture and Environment, on 11th October 2017 and 21 August 2020 by the Ministry of Environmental Protection, TENT was granted approval for continuous measurement of pollutant emissions from stationary pollution sources for boilers K3, K4, K5 - Kolubara TPP.

Equipment for the continuous emissions measurements of air pollutants at the Morava TPP was installed on the stack in 2018. The equipment is in operation and was calibrated under QAL-2. In 2019, the Ministry's Approval was obtained for continuous measurement of pollutant emissions from stationary pollution sources. The measurement results were incorrect due to damage to the heating line for transporting gas sample from the stack to the analyzer placed in the container at the bottom of the stack. This inability for continuous emissions monitoring was timely reported to the competent ministry, followed by the suitable explanation. During 2020, the heating line for transporting gas sample from the gas to the analyzer was replaced. Due to the state of cold reserve of the unit TEM, there was no calibration of the unit in accordance with the QAL-2 method. The implementation of calibration is expected during 2021

•Annual emissions of matters affecting air quality

Table 52 provides an overview of air emissions affecting the air quality: dust, SO₂, NO₂ and CO₂ for TENT Branch in 2020.

Annual dust, SO₂ and NO₂ emissions were calculated on the basis of mean annual flow rates, mean annual concentration of pollutants obtained from continuous measurements and periodic emission measurements, and operating periods during stable operation (h) of each unit (stack), according to CEMS (there might be correctios regarding emission calculation method).

There is no equipment for continuous emission measurement of matters affecting air quality on stack D1 (boiler K1) in Kolubara TPP. For boiler K1 the quantities of emissions of matters affecting air quality are calculated by

multiplying operating periods during normal operation of the plant (h) with output pollutant flow rate (Nm³/h) and mean measured mass concentration (mg/Nm³) obtained by periodic emission measurement of pollutants in 2020.

Calculation for CO₂ was done based on the fuel consumption, presented in Table 53 and CEF – correction emission factor.

Table 52

NIKOLA TESLA THERMAL POWER PLANT BRANCH				
Emissions of matters affecting air quality in 2020 (t/year)				
Organizational unit	Particulate matter	SO ₂	NO _x (NO ₂)	CO ₂
TPP NIKOLA TESLA A				
A1-A2-A3	1.984,10	43.342,36	6.739,10	4.346.582
A4-A5-A6	1.090,70	66.556,95	8.446,44	6.686.941
Total: TENT A	3.074,80	109.899,31	15.185,54	11.033.523
TPP NIKOLA TESLA B				
Total: TENT B	1.284,88	85.765,90	12.170,69	8.849.344
Kolubara A TPP				
K1	310	610	101	63.965
K3, K4 и K5	2.772	4.828	590	230.119
A5, K6	353	5.173	1.222	452.538
Total: KOLUBARA A TPP	3.435	10.611	1.913	746.622
Morava TPP				
Total: MORAVA TPP	76	11.321	1.443	570.412
TOTAL: NIKOLA TESLA THERMAL POWER PLANT BRANCH	7.870,68	217.597,21	30.712,23	21.199.901

Table 53

NIKOLA TESLA THERMAL POWER PLANT BRANCH								
Fuel consumption in 2020								
Organisational unit	TENT A		TENT B		KOLUBARA A TPP		MORAVA TPP	Branch Total
Raw material	Unit	(t/year)	Unit		Boiler	(t/year)	(t/year)	(t/year)
COAL	A1	1.391.850	B1	6.064.787	K1	88.952	637.329	30.130.754
	A2	1.811.135	B2	6.723.519	K2	-		
	A3	2.954.507			K3	44.320		
	A4	3.178.885			K4	150.158		
	A5	3.073.984			K5	109.984		
	A6	3.261.663						
	TOTAL	15.672.024		12.788.306		1.033.095	637.329	
HEAVY FUEL OIL	A1	3.903	B1	6.503	K1	-	608	31.884
	A2	4.588	B2	5.300	K2	-		
	A3	2.814			K3	-		
	A4	2.728			K4	-		
	A5	1.821			K5	-		
	A6	3.619						
	TOTAL	19.473		11.803		-	608	
OIL	A1	-	B1	-	K1	437	237	2.079
	A2	-	B2	-	K2	-		
	A3	-			K3	63		
	A4	-			K4	197		
	A5	-			K5	158		
	A6	-						
	TOTAL	-		-		1.842	237	

- **Harmonisation of emissions of matters affecting air quality with European Union regulations**

Particulate matter

Unit A3 electrostatic precipitator was reconstructed in 2014. This means that to date electrostatic precipitators of all Nikola Tesla A TPP units (A1, A2, A3, A4, A5 and A6) were reconstructed, along with the Nikola Tesla B units (B1 and B2) and unit A5 of Kolubara A TPP. Outlet dust mass concentration guaranteed by the equipment supplier is $\leq 50\text{mg/Nm}^3$, which is in line with EU and Serbian legislation.

Electrostatic precipitator of Morava TPP was reconstructed in order to achieve the output dust concentration of 50 mg/Nm^3 , during the 2016 overhaul. Individual measurements of matters affecting air quality carried out in December 2017 confirmed an outlet dust mass concentration within the values guaranteed by the equipment supplier.

Sulphur dioxide

During the designing and construction of Nikola Tesla A and B TPPs, no sulphur oxides emissions reduction measures were undertaken. To reduce sulphur oxide emissions below 200mg/Nm^3 in line with the Serbian and EU legislation, flue gas desulphurization plants should be introduced in the forthcoming period.

In 2011, the Japanese Government approved a loan to introduce the flue gas desulphurisation system at the Nikola Tesla TPPs. Following the tender procedure, a consortium led by Mitsubishi Hitachi Power Systems was selected as the contractor in September 2017. The contract signed with the contractor has been valid since November 2017. Completion date related to construction of Flue Gas Desulphurization Plant will be 21st May 2022 plus 12 months' guarantee period, as per the latest information.

During 2018, in addition to numerous activities, a New General Regulation Plan for TENT A was developed and adopted by the competent authorities in June 2018. Public discussion and presentation of the Assessment Study on environmental impact of FGD plants construction in TPP "TENT A" units A3-A6 were conducted in November 2018. After obtaining the approval for the Study from the Ministry for Environmental Protection in 2019, the conditions for building permit acquisition were fulfilled. During 2019, within the Flue Gas Desulphurization Project in A3-A6 Nikola Tesla thermal power plant, the following was realized: building permit for relocation of underground installations at the complete FGD area (both phases) was obtained, building permit for phase 1 (system for limestone receiving and gypsum storing) was obtained, as well as the building permit for preparation works in phase 2 (obtained on 18th January 2020).

Works related to both phases pursued over 2020. Within the phase I of the facility C19 – facility for limestone transfer, the following was done: concreting the roof slab of the tunnel part; dismantling of the tie beam system above the tunnel part; installation of formwork and reinforcement and concreting of part of the walls; installation of reinforcement and formwork, installation of anchors and concreting of the foundation slab at the lowest elevation of the facility. As for the facility C23 – power control facility for limestone and gypsum, a facade was made; then installation of cable trays on the first floor of the facility, as well as construction of secondary steel structure (construction of 6 kV plant substructure). As for the facility C22 – limestone storage facility – installation of steel structure pursued. As for the facility C24 – limestone grinding facility – preparatory works for the beginning of installation of the equipment and steel structure were done; installation of working scaffolds and platforms; delivery to the construction site of the elements of mill equipment for installation; installation of oil pumps. As for the facility C30 – gypsum storage facility – Staxo tower for the slab at the elevation of +33,2m and internal scaffolding were installed. As for the facility C38.15 – Electric bridge 15, steel structure was installed.

Within the phase 2, the following was performed: on the facility C1 – absorber of the units A3 and A4, the road was closed in accordance with the permit by the Investor, the terrain was prepared for the foundation of the absorber, piles driven and concreted.

On the facility C2 – absorber of the units A5 and A6, piles driven, foundation concreted, absorber's annular ring mounted; delivery of enlarged segments of steel structure for installation began.

On the facility C5 – FGD system power control building – roof hydro-insulation works were completed; water pipes and sewerage system were installed, secondary steel structure was done (6kV plant subconstruction).

On the facility C11 (flue gas ducts A4), pre-assembly and installation of the supporting steel structure was performed; channel pre-assembly; transport and backfilling of materials around AB footings;

On the facility C10-1 – Drainage pit – reinforcement was fitted with installation of workform for the second segment of the wall; work scaffolding mounted

On the facility C41 2 – Transformer's foundations – deck plate made, channels dug under the track with material removal and protective pipes installed; lean concrete, built-in reinforcement of the floor and walls of the channel.

Nitrogen oxides

In the previous period, primary measures have been introduced on units A3 and A5 TENT A and during capital overhaul in 2018 also on unit A4. Guarantee measurements were performed – TEST A by accredited laboratory, which confirmed guarantee parameters of the system of nitrogen oxide emission reduction on unit A4. The plan is to introduce primary nitrogen oxide reduction measures in the coming period on unit A6 TENT A, as well as on TENT B units B1 and B2.

3.2.3. Emission Measurements of Matters Affecting Water Quality

Water used for condenser vapour cooling has the highest share in the total amount of technical water used by PE EPS Nikola Tesla Branch TPPs. River water is captured, used to cool condensers and subsequently discharged via the return tunnel back into the recipient. TENT A and TENT B use the Sava River water for cooling, while the Morava TPP uses the Morava River water, and those three thermal power plants have an open cooling system. Kolubara A TPP uses the Kolubara River water and it has a closed cooling system with towers.

Approximately 2.5% of captured water is used for thin slurry (ash and slag) transport in TENT A, while 0.8% of captured water was used in 2020 in TENT B for thin slurry transport and wetting of the landfill.

Wastewater originating from the thin slurry transportation system is discharged directly or indirectly into the recipient in the form of overflow and drainage water, in old technology of hydraulic transport of "thin" ash water ratio (1:10) in TENT A and Kolubara A TPP. Drainage and overflow waters in TPP Morava are returned by pumps to the system for ash and slag transport.

In the case of the thick slurry transport (ash/water ratio - 1:1) used by TENT B there is no overflow and discharge of drainage water into the recipient, but water is stored in the winter and used for disposal site wetting in the summer.

Demineralized water (demi water) used in boilers and the water-vapour system is produced by a chemical water treatment plant. Demi water is produced by chemical treatment of groundwater in ion exchangers. In Kolubara A TPP demi water is obtained by treating decarbonised water in ion exchangers - columns. Raw water is captured from tube wells located along the riverbank. HCl or NaOH solution is used to regenerate ion masses, resulting in acid and alkaline wastewater used for ash and slag transport.

Sanitary wastewater after mechanical-biological treatment under aerobic conditions (TENT A and TENT B) is discharged directly or indirectly into the river. The equipment for sanitary wastewater treatment Biodisk, in TENT A has a UV lamp for water disinfection before it is released into the Sava. At the Morava TPP, sanitary water is discharged into the city sewer network.

Water containing oil and/or fuel oil, after oil or fuel oil removal from the water surface by means of adsorption agents indirectly via storm drainage or a return cooling water tunnel, is discharged back into the recipient (TENT B, TEK and TEM).

Waste water treatment plant was constructed and commissioned at TENT A in 2016, and it consists of several units:

- atmospheric water from the concrete surfaces and roofs of the administrative building, the maintenance building, the turbine hall and the rolling stock, as well as other facilities at site runs through the main collector, and from the concrete surfaces and roofs of the RT buildings, warehouse and the external rolling stock runs through the secondary collector and flow into the return cooling water channel. Atmospheric water and other wastewater from the coal landfill, (water from wagons defrosting, washing of inclined bridges and conveyor belts, from bulldozer depots) after purification at the wastewater treatment plant (G1), are discharged into the old drainage channel of the ash landfill, where atmospheric waste water from water landfill after passing the separator is also discharged;
- waste waters from drainage pit of heavy oil station, condensate expander and drainage pits of heavy oil heating stations, after treatment at the plant for pretreatment of heavy oil waste waters (UM1), are taken to the oily waste water treatment plant (U1),
- except the heavy oil contaminated waste waters which were pretreated on API- separator (UM1), waste waters from machine hall drainage pits are treated at U1 plant as well and then discharged into the old ash landfill drainage channel;
- plant for treatment of waste waters resulting from the flue gas desulphurization process (FGD) is not in operation at this time because the construction of FGD plant is still underway;

Control of waste water in the facilities of TENT Branch and its impact on recipients and groundwater is done 4 times a year, except for the return cooling water at TENT A and TENT B and the water at the oil separator outlet at TENT A waste disposal, which are analyzed once a month. Tests are carried out by authorized legal person.

The program of control of each organizational part of the TENT Branch includes the physical and chemical, bacteriological and radiological parameters that are given as necessary for monitoring the compliance with the legal regulations related to certain types of water.

Control program includes the following types of water:

- Waste waters at discharging points into the river;
- River waters – recipients' waters on the profiles upstream and downstream of the waste water discharge point;
- Groundwater in the vicinity of ash and slag landfill (piezometers and rural wells).

Within the control program, monitoring of the efficiency of devices for wastewater treatment is also carried out at TENT A - G1, UM1 and Biodisk. Ash and slag landfills groundwater quality impact is monitored by testing water quality in the piezometers and rural wells located in the landfill vicinity. Long-term studies have shown that concentrations of sulphate and arsenic are relevant parameters to monitor the impact of ash and slag landfills on groundwater. Sulphate ion, originating from the landfill is characterised by the fastest migration and is considered to be an excellent tracer for monitoring of the landfill groundwater impact. There is groundwater control in piezometers in vicinity of coal storage and waste storage in TENT A.

TENT B recorded the current state, so-called "zero state", of groundwater quality prior to the commencement of ash landfill site exploitation. Groundwater quality data, "zero state", are of great importance for further monitoring and evaluation of the ash landfill impact on the groundwater quality. In TENT B, PUTOKS plant for sanitary waste water treatment is monitored in terms of its operational efficiency.

Annual surface and groundwater quality reports for each TENT unit are submitted by authorized person to Serbian Environmental Protection Agency, to the competent inspectors upon their request, as well as to the relevant institutions during the opinion obtaining process for the purpose of issuance of water permits.

Results of water quality measurements are presented in the Environmental Report developed each year for every organisational unit. Additionally, data are presented in the National Pollution Sources Registry delivered by PE EPS TENT Branch each year to the Environmental Protection Agency in line with the legal regulations. Surface, groundwater and wastewater quality control for 2020 at all four locations of TENT was executed by

authorized legal entity, the Institute for occupational protection Novi Sad. Table 54 shows the analysis of wastewater and recipient quality data for 2020 in terms of their legal compliance.

In case of surface waters, legal compliance was evaluated by comparing the measured values of parameters with the limit values defined by the Regulation stipulating limit values for pollutants in surface and ground waters and sediments, and due dates for their achievement (Official Gazette of RS No. 50/2012), while wastewater values were compared with the limit values defined by the Regulation stipulating limit values of pollutants in water and due dates for their achievement (Official Gazette of RS No. 67/2011, 48/2012 and 1/2016).

Table 54

NIKOLA TESLA TPPs BRANCH				
Water quality in 2020				
Organizational unit	TENT A	TENT B	KOLUBARA A TPP	MORAVA TPP
Water type	Waste water and recipients			
Drainage wastewater from the landfill	<ul style="list-style-type: none"> suspended solids: <1 – 25 mg/l, no LV exceedance arsenic: up to 93 µg/l, LV exceedance of 10µg/l in three samples of new drainage channel and one sample of old drainage channel sulphates: 137-449 mg/l Below LV-2.000mg/l 	<ul style="list-style-type: none"> suspended solids: <1 – 10.4 mg/l, arsenic: 24 - 46 µg/l, sulphates: 661-721 mg/l Not discharged into recipient 	-	Not discharged into recipient
Overflow wastewater from the landfill	<ul style="list-style-type: none"> suspended solids: <1 – 6 mg/l, no LV exceedance arsenic: 81 – 306 µg/l. above LV- 10µg/l sulphates: 397 – 492 mg/l. below LV-2000mg/l <p>Note: analysed sample is a mixture of overflow and drainage waters with mostly overflow waters</p>	<ul style="list-style-type: none"> suspended solids <1 – 8.4 mg/l arsenic: 69 – 159 µg/l sulphates: 700-858 mg/l Not discharged into recipient 	<p>suspended solids <1.0-71.6 mg/l (II batch of sampling is above the reference value of 35 mg/l)</p> <p>arsenic: 0.131-0.379 mg/l (all four batches of sampling are above the reference value of 0.01 mg/l)</p> <p>sulphates: 143.9-587.6 mg/l (all four batches below the reference value of 2000 mg/l)</p>	<p>pH 10.57-12.31</p> <p>suspended matter <27.2 mg/l</p> <p>As 0.004-0.021 mg/l (IV quarter)</p> <p>Pb <0.01 mg/l</p> <p>Not discharged into recipient</p>
Recipient	<p>No changes of the Sava River quality upstream - downstream of TENT A for:</p> <ul style="list-style-type: none"> arsenic: not exceeding LV - 10µg/l sulphates: up to 26 mg/l. Below LV -100 mg/l mineral oil: not identified <p>Sava River temperature differences (TENT A upstream and</p>	<p>In the fourth quarterly sampling, worsening of the Sava River quality was registered downstream (III class) compared to the sample upstream of TENT B (II class) both in physical-chemical and microbiological terms:</p> <ul style="list-style-type: none"> arsenic: in the fourth quarterly sampling, its value was increased 	<p>Turija River:</p> <ul style="list-style-type: none"> arsenic: two samples upstream (III and IV batches) are above the reference value 0.010 mg/l (0.016 and 0.018 mg/l) and two samples downstream (III and IV batches) are above the reference value 0.010 mg/l (0.046-0.084) 	<p>Velika Morava River upstream wastewater discharge:</p> <p>Total N 1.66-3.95mg/l</p> <p>Ammonium ion 0.824mgN /l (I quarter)</p> <p>Velika Morava River downstream wastewater intake:</p> <p>Total N 1.72-3.71/l</p> <p>Amonium ion 0.63 mgN/l (I quarter)</p>

	<p>downstream) do not exceed 3°C (legal limit) and it averages 0.9°C.</p>	<p>downstream of TENT B - 43 µg/l (LV-10µg/l).</p> <ul style="list-style-type: none"> ▪sulphates: 16 – 25 mg/l, below LV-100 mg/l both upstream and downstream ▪ mineral oil: not identified <p>In the third quarterly sampling, the Sava River temperature difference upstream and downstream of TENT B exceeds 3°C, measured 3.4°C Temperature difference averages 2.0°C</p>	<ul style="list-style-type: none"> ▪sulphates: upstream values are below the reference value (100 mg/l) Two samples downstream (III and IV batches of sampling) are above the reference value of 100 mg/l (122.4 and 197.8 mg/l) Kolubara River: <ul style="list-style-type: none"> -arsenic: upstream one sample (IV batch) exceeds MPC 0.010 mg/l (0.024 mg/l) and downstream one sample (III batch) exceeds reference value (0.020 mg/l) RV (0.010 mg/l) -sulphates: upstream and downstream all samples are below reference value (100 mg/l) downstream sample in IV batches of sampling is at the limit of reference value 99.30 mg/l - Mineral oils upstream in three batches of sampling <0.01 mg/l, in IV batch of sampling 0.084 mg/ and downstream I batch 0.021 mg/l, II batch <0.01mg/l, III batch 0.39 mg/l , IV batch 0.067 mg/ Reference values are not given. - Kolubara River temperature difference upstream and downstream from TEK is lower than 3°C in I, III and IV batches of sampling while in II batch of sampling it is 3.4 °C 	<p>Velika Morava River during discharge of wastewater from sand filters washing:</p> <p>Total N 2.80-3.39 mg/l</p> <p>Ammonium 0.438mgN/l (I quarter)</p> <p>Nitrites 0.038 mg/l (I quarter)</p> <p>Total phosphorus 0.22 mg/l (I quarter)</p>
--	---	--	--	--

Table 55 shows the groundwater quality data analysis in the ash and slag landfill site vicinity in 2020 in terms of their legal compliance. Analysis was provided for certain tested parameters of greater importance.

During 2020 groundwater quality monitoring in TENT A was conducted in 13 piezometers (they are, in addition to the vicinity of ash landfill, located within TENT A area, near MPB) and 3 rural wells, TENT B – 7 piezometers (they are, in addition to the vicinity of ash landfill, located on the waste storage) and 4 rural wells, TPP KOLUBARA A - 4 piezometers and 4 rural wells and TPP Morava 1 piezometer and 4 rural wells.

Legal compliance is evaluated by comparing the groundwater values measured in piezometers with remediation values of pollutant, hazardous and harmful substances in aquifer in line with the Regulation on limit values of pollutant, hazardous and harmful substances in soil (Official Gazette of RS No. 30/2018), while the rural wells water data are compared with the maximum permissible concentrations (MPCs) stipulated by the Rulebook on hygienic correctness of drinking water (Official Gazette of FRY No. 42/98 and 44/99 and Official Gazette of RS, No. 28/19).

Table 55

NIKOLA TESLA TPPs BRANCH						
Groundwater quality around ash and slag landfills in 2020						
	Permissible values		Organisational unit			
	*	**	TENT A	TENT B	KOLUBARA TPP A	MORAVA TPP
Sulphates (mg/l)	250		Highest in piezometers: P7-3, П10/4 and P2 (from 312 mg/l – 770 mg/l). Below MPC in all samples of rural wells.	Highest in piezometers: P2 and P48: 475mg/l-644 mg/l Below MPC in all samples of rural wells.	In wells: -N1 and N3 below the reference value -N2, 573.4 – 661.8 mg/l , in all batches above the reference value 250 mg/l; -N4 136.2 – 624.8 mg/l, in I, II, III and IV batches of sampling above RV. In piezometers: ▪I-2, 450 – 491.6 mg/l; ▪VIII-1, 193.8 – 656.0 mg/l; ▪XV-1, 387.9 – 527.4 mg/l; ▪B2, 468.1 – 505.5 mg/l; no reference value for piezometers (Regulation on limit values of pollutant, hazardous and harmful substances in soil (Official Gazette of RS No. 30/2018 and 64/2019))	In controlled piezometer 61-96.54-328.5 mg/l. Above MPC in 3 wells measured 269.3-274.9 – 406.6 mg/l. (I, II, III quarters)

Arsenic (µg/l)	10	60	Above MPC in one sample of piezometer P7c and two samples of rural wells Krtinska 2	Below MPC in all piezometers. Below MPC in all rural wells.	In wells: ▪ N1,N2 and N4 below the reference value 0.010 mg/l ▪ N3, in IV sampling 0.017 mg/l is above reference value in other samples it is below RV; In piezometers: ▪ I-2, 0.284 – 1.89 mg/l , in all four samples above reference value 0.060 mg/l; ▪ VIII-1, 0.083 – 0.179 mg/l in all samples above reference value 0.060 mg/l; ▪ XV-1, 0.046 – 0.318 mg/l , in I, II and IV batches of sampling above reference value; ▪ B2, < 0.004- 0.025 mg/l, in all samples below reference value 0.060 mg/l;	In controlled piezometer below MPC. Above MPC in 1 well measured 0.021mg/l. (IV quarter)
Lead and cadmium (mg/l)	Pb 0.01	Pb 0.075 Cd 0.006	Lead above MPC in two samples of piezometer P19 (0.083 and 0.123mg/l) and one sample of rural well Krtinska 1 Cadmium above MPC in one sample of piezometer P19 (0.0076mg/l).	Lead above MPC in one sample of piezometer P59 (Pb – 0.114 mg/l), Cadmium below MPC in all piezometers Both lead and cadmium below MPC in all rural wells	In wells N1,N2,N3 and N4 Pb is below reference value 0.01 mg/l in all samples. In piezometers, Cd is below reference value 0.006 mg/l in all samples. Pb in piezometers: ▪ I-2, < 0.01– 0.059 mg/l below reference value 0.075 mg/l; ▪ VIII-1, 0.013 – 0.075 mg/l , in I batch of sampling on the limit of reference value 0.075 mg/l; ▪ XV-1, < 0.01– 0.036 mg/l , below reference value; ▪ B2, 0.014- 0.026 mg/l , below reference value;	In controlled piezometer below MPC. Below MPC in all wells.
Zinc (mg/l)	3.0	0.8	Above MPC in most samples of piezometers (up to 23 mg/l)	Above MPC in piezometers P59 and P32 (2.2 – 28.6 mg/l)	Zinc below reference value 3.0 mg/l in all samples in wells. In piezometers Zn is below reference value 0.800 mg/l in all samples except in piezometer VIII-1 in I and II sampling series (5.53 mg/l и 2.24 mg/l).	In controlled piezometer zinc is below MPC. Below MPC in all wells.

Manganese (mg/l)	0.05		Above MPC in sample of one rural well 2 in Krtinska– 0.397 mg/l.	Below MPC in all samples of rural wells	In Wells : N1 - <0,004 – 0.653 mg/l in I, II and III sampling batches above reference value 0.05 mg/l. N2 – 2.42 – 3.43 mg/l, in all four samples above reference value. N3 – 0.020 mg/l – 0.630 mg/l in III and IV sampling batches above reference value. N4 – <0.004 -0.016 mg/l below reference value in all samples.	In controlled piezometer 0,135-0,19mg/l. Above MPC in 1 well (Topoljar) measured 0.622-0.803mg/l (I,II, III,IV quarters).
Ammonia (mg/l)	0.03				Ammonia below reference value 0.5 mg/l in wells N1 and N4, while in well N2 in all four samples above reference value (2.08 - 3.50 mg/l) and in well N3 in IV batch of sampling 2.92 mg/l; Nitrites are below MPC in wells N1 and N4. In well N2 in III batch of sampling above reference value 0.03 mg/l (0.312 mg/l) and in well N3 in I and II sampling batch above reference value (0.031 – 0.109 mg/l) There is no reference value for ammonia for piezometers (Regulation released in Official Gazette of the Republic of Serbia No. 30/2018 and 64/2019, nitrites were not tested	
Nitrites (mg/l)	0.1		Ammonia is below MPC in all samples of rural wells. Nitrites above MPC are registered in samples of wells in Urovci and Krtinska 2 (0.38– 3.06 mg/l)	Ammonia below MPC in all samples from rural wells Nitrites above MPC registered in one sample from the well in Usce		In controlled piezometer below MPC. Above MPC in 1 well (hydrant water) measured 1.08-2.09 mg/l. (I and II quarters) In controlled piezometer below MPC. Above MPC in 1 well (hydrant water) measured 0.29 mg/l. (IV quarter)
Nitrates (mg/l)	50		Above MPC in most of the rural wells (47 - 349 mg/l)	Nitrates below MPC in all samples of rural wells	Below reference value 50 mg/l in all samples taken from wells. There is no reference value for nitrates for piezometers (Regulation released in Official Gazette of the Republic of Serbia No 30/2018 and 64/2019-second regulation)	In controlled piezometer below MPC. Below MPC in all wells

*MPC of potable water;

**Remediation values of concentration of hazardous and harmful substances and values indicating serious groundwater contamination

As the concentration of manganese in the overflow and drainage waters of ash landfill is low, increased manganese concentration in rural wells water is probably caused by the high level of this element in soil, which

can be concluded from the fact that concentrations of manganese and nitrates in rural wells' water are increased as well as microbiological failures around the TENT B ash landfill, established by the "zero state" testing.

Annual reports of authorized persons from the previous years state that measured high concentration of zinc in piezometers on TENT A and TENT B is the result of dissolution of metal from galvanized pipes the piezometers are made of.

Microbiological analysis of rural wells water indicated the presence of coliform bacteria. This is caused by the proximity of septic tanks and stables, which is concluded based on the data on „zero state“.

Table 56 provides the analysis of sanitary wastewater quality data at the treatment plant inlet and outlet for 2020.

Table 56

NIKOLA TESLA TPPs BRANCH			
Sanitary wastewater treatment plant operation in 2020			
Pollutants concentration (mg/l)	MPC (mg/l)	Biodisk plant TENT A	Putoks plant TENT B
Suspended solids (mg/l)			
Plant inlet	-	18.4 – 55.6	20.8 – 132
Plant outlet	75	4.0 – 19.6	4.0 – 26.8
Biological oxygen demand for 5 days (BOD5)			
Plant inlet	-	9 – 120	26 – 170
Plant outlet	50	6– 12	20 – 40

• Water amounts

Table 57 provides an overview of water amounts captured and discharged by TENT Branch organisational units for 2020. TENT A and TENT B calculation of annual amounts of captured surface waters and discharged return cooling water, as well as discharged overflow and drainage waters on TENT A is prepared based on the data on capacity and operating time of the pumps for capturing i.e. discharging water. In TENT A and TENT B, there are flow meters both for captured underground and discharged sanitary waste water. In the case of gravitational wastewater discharges, calculations were made based on previous wastewater measurements (overflow and drainage waters from the ash and slag landfill). Veliki Crljeni potable water treatment plant supplies Veliki Crljeni and Kolubara A TPP with potable water. A gauge was installed for the line running towards the Kolubara A TPP, also supplying one part of the settlement and the sports centre.

Table 57

NIKOLA TESLA TPPs BRANCH						
Water amounts in 2020 (m ³ / year x10 ³)						
Organizational unit	Reservoir		Discharged wastewater			
	Used amounts		Return cooling water	Wastewater discharged into Bare Channel	Overflow and drainage water – ash disposal site	Sanitary wastewater
	Surface	*groundwater				
Nikola Tesla A TPP	1.238.653	979	1.207.982	-	30.748	142 ¹⁾
Nikola Tesla B TPP	1.172.183	379	1.163.941	-	-	51
Kolubara A TPP	4.329	-	-	577	190	377
Morava TPP	65.966	90	63.972	-	-	6
TOTAL: NIKOLA TESLA TPP BRANCH	2.481.131	1.448	2.435.895	577	30.938	576

* For raw water preparation

1) In 2020, flow meter at sanitary water outlet at TENT A was broken and therefore the quantity of water captured from Obrenovac water supply is taken as the amount of discharged sanitary water.

▪ Improvements aimed at reducing wastewater impacts on surface and groundwater

One of the conditions to obtain the integrated permit for further operation and performance of activities after 31st December 2020 is to reduce emissions into water in accordance with the Water Act (Official Gazette of RS No. 30/10) and the Regulation stipulating emission limit values of pollutants in waters and due dates for their achievement (Official Gazette of RS No. 67/11, 48/12 and 1/2016).

TENT A

TENT A wastewater treatment plant consisting of several parts has been functioning since 2016 and it includes treatment plants for coal contaminated waste water (G1), oil contaminated waste water (U1) including pre-treatment of heavy oil contaminated waste waters (UM1) and FGD wastewaters (that is not operating since FGD plant has not been built yet). Accredited laboratory of Institute for operational protection Novi Sad performed quarterly samplings in 2020 in order to monitor operational efficiency of the plant. The plants had satisfactory efficiency without outlet LV exceedance.

TENT B

Detail Design for the TENT B Wastewater Treatment Plant Construction has been prepared and a Contractor has been selected but the construction of the plant has not started due to the impossibility of the Contractor to execute works. Plant Design was implemented through decentralized system for IPA Projects management (EU Delegation was responsible for management of the project), having in mind a fact that the construction of the plant was approved for financing from IPA 2011 Funds.

3.2.4. Emission Measurements of Matters Affecting Soil Quality

During 2020 the testing of soil quality and the content of total and available forms of heavy metals and pollutants in soil was continued, together with the monitoring of chemical composition and water quality in the melioration channels around TENT Branch TPPs to identify ash and slag landfill impacts on soil and melioration channels water. Annual monitoring reports covering thermal power plant ash and slag landfill soil and melioration channels impacts for each of the PE EPS organisational unit are made available to the inspection upon request. Soil quality measurement results are presented in an Environmental Report prepared annually for each organisational unit.

In 2020, one sampling and testing of soil were performed by “Operational and Environmental Protection Belgrade”, DOO at locations of TENT A, TENT B, TPP Kolubara and TPP Morava. The samples were analysed for: physical properties of soil, chemical properties of soil, soil reaction, topsoil content, total nitrogen and organic carbon soil content, nitrate and nitrite ions content, readily available phosphorus and potassium content, heavy metals content (chromium, nickel, lead, copper, zinc, cadmium, mercury, arsenic and boron).

The soil monitoring programme included: field and laboratory measurements on representative sampling points entered into the topographic map (GPS identified points), allowing future monitoring of changes of the studied parameters at the same measuring points.

Measuring points are defined depending on their distance from the landfill. A total four sampling zones has been defined (three impact zones and one control zone) as follows:

- Zone 1 – up to one kilometre from the landfill,
- Zone 2 – between one and three kilometres from the landfill,
- Zone 3 – three to five kilometres from the landfill, and
- Zone 4 – represents control sample taken at the distance of more than five kilometres from the landfill.

The content of heavy metals and other toxic elements in soil was within normal ranges and below remediation values for: chromium (Cr), lead (Pb), copper (Cu), zinc (Zn), cadmium (Cd), mercury (Hg), arsenic (As) and boron (B).

Data were evaluated based on the Regulation on limit values for pollutant, harmful and dangerous substances in soil (Official Gazette of RS No 30/2018) and the Regulation stipulating permissible hazardous and harmful substances content in soil and irrigation water and their testing methods (Official Gazette of RS № 23/94) and by Regulation on limit values for pollutant, harmful and dangerous substances in soil (Official Gazette of RS No 30/2018 and 64/2019).

TENT A and B

In TENT A, ash is disposed by uniform discharge of a water and ash mixture (slurry) into the storage area (active cassette), while the remaining area is temporarily idle (passive cassette). Uniform ash disposal is achieved by changing the unloading points on the active cassette, as well as by switching from one to another cassette, every 5 to 6 years (transitional period). The landfill occupies a total area of 400 ha. The entire area is divided into 3 cassettes. Disposal of ash and slag takes place in cassette II, and cassette III has been idled since April 2018.

Total area of the disposal site of TENT B is 600 ha, out of which 400 ha were used for ash and slag disposal. Technology of collecting, transport and disposal of ash was changed from thin to thick slurry (on 4th October 2009, unit B2 was connected to new system, while B1 was connected on 30th May 2010). Currently, cassette II is active, and cassette I is idle.

Along with the soil analysis, landfill ash samples were analyzed as well.

On TENT A and TENT B locations, ash and 30 soil samples were analysed.

KOLUBARA TPP

The reconstruction of ash handling system of Unit A5 Kolubara TPP in 2009 is part of a joint project, which also included a reconstruction of an electrostatic precipitator plant aimed at reducing dust emissions to the limit values. Ash and slag landfill area is 78ha and has four cassettes. Two cassettes (1 and 2) underwent permanent reclamation by foresting in 2009.

At the Kolubara TPP, ash and 16 soil samples were analysed taken from the landfill.

MORAVA TPP

Retention of ash and slag is achieved by constructing peripheral embankments. In total there are eight bunds (cassettes), of which I, II, III, IV, V and VI were biologically reclaimed (grass sowing, planting of fruit and other plants), a part of the cassette VI represents borrowing area for exploitation of ash for needs of cement plants, and cassettes VI and VIII are active and ash and slag are disposed there. In 2014 overflow reservoir system is built where drainage water from ash and slag landfill is collected and then returned by pump system into slurry station for further ash and slag transport.

At the Morava TPP, ash and 17 soil samples were analysed taken from the landfill. Table 58 contains measurement results evaluation in accordance with the above legislation. Data show pollutant content in ash as a potential pollution source, however data were not evaluated since the above mentioned legislation refers to soil, not ash.

Table 58

NIKOLA TESLA TPP BRANCH						
Content of substances affecting the soil quality around ash landfill in 2020						
Content (mg/kg)	LV	RV	TENT A	TENT B	KOLUBARA TPP	MORAVA TPP
	mg/kg					
Chromium (Cr)	100	380	Ash: 94.0 Soil: Out of 24 samples, none exceeds LV. None exceeds RV. Soil, control zone: Out of 5 samples none exceeds LV. None exceeds RV.	Ash: 60.7 Soil: Out of 23 samples, none exceeds LV. None exceeds RV. Soil, control zone: Out of 4 samples none exceeds neither LV nor RV Zone across Sava: Out of 2 samples none exceeds neither LV nor RV	Ash: 20.0 Soil: Out of 15 samples, none exceeds LV. None exceeds RV. Soil, control zone: control sample not exceeding LV and RV.	Ash: 27.7 Soil: In 1 sample chromium content exceeds LV in out-of-vegetation period.
Nickel (Ni)	35	210	Ash: 68.9 Soil: Out of 24 samples, 21 exceed LV. None exceeds RV. Soil, control zone: Out of 5 samples, 2 exceed LV. None exceeds RV.	Ash: 72.2 Soil: Out of 23 samples, 8 exceed LV. None exceeds RV. Soil, control zone: Out of 4 samples 1 exceeds LV. None exceeds RV. Zone across Sava: Out of 2 samples 2 exceed LV. None exceeds RV.	Ash: 46.3 Soil: Out of 15 samples 9 exceed LV. None exceeds RV. Soil, control zone: control sample exceeds LV, but not RV.	Ash: 43.5 Soil: In 16 samples nickel content exceeds LV in out-of-vegetation period In 15 samples nickel content exceeds MPC in out-of-vegetation period
Lead (Pb)	85	530	Ash: 48.8 Soil: Out of 24 samples, none exceeds LV. None of them exceeds RV. Soil, control zone: out of 5 samples none exceeds LV. None of them exceeds RV.	Ash: 7.6 Soil: Out of 23 samples none exceeds LV nor RV. Soil, control zone: Out of 4 samples, none exceeds LV nor RV. Zone across Sava: out of 2 samples none exceeds LV nor RV.	Ash: 103.1 Soil: Out of 15 samples all of them exceed LV but not RV. Soil, control zone: control sample exceeds LV but not RV.	Ash: 112.6 Soil: In 16 samples lead content exceeds LV in out-of-vegetation period. In 13 samples lead content exceeds MPC in out-of-vegetation period.
Copper (Cu)	36	190	Ash: 45.2 Soil: Out of 24 samples, none exceeds LV. None exceeds RV. Soil, control zone: Out of 5 samples none exceeds LV. None exceeds RV.	Ash: 30.2 Soil: Out of 23 samples, 1 exceeds LV. None exceeds RV. Soil, control zone: Out of 4 samples one exceeds LV. None exceeds RV Zone across Sava: Out of 2 samples one exceeds LV None exceeds RV.	Ash: 3.5 Soil: Out of 15 samples, none exceeds LV. None sample exceeds RV. Soil, control zone: control sample does not exceed neither LV nor RV.	Ash: 44.7 Soil: In 2 samples copper content exceeds LV in out-of-vegetation period .
Zinc (Zn)	140	720	Ash: 32.9 Soil: Out of 24 samples, none exceeds LV. None exceeds RV. Soil, control zone: Out of 5 samples none exceeds LV.	Ash: 26.9 Soil: Out of 23 samples, one exceeds LV. None exceeds RV. Soil, control zone: Out of 4 none exceeds neither LV nor RV.	Ash: 38.5 Soil: Out of 15 samples, 3 exceed LV. None sample exceeds RV. Soil, control zone:	Ash: 29.0 Soil: In 9 samples zinc content exceeds LV in out-of-vegetation period .

			None exceeds RV	Zone across Sava: Out of 2 samples none exceeds neither LV nor RV.	control sample exceeds neither LV nor RV.	
Cadmium (Cd)	0.8	12	Ash: 1,4 Soil: Out of 24 samples 5 exceed LV. None of the samples exceeds RV. Soil, control zone: Out of 5 samples 2 exceed LV. None of the samples exceeds RV.	Ash: 2,3 Soil: Out of 23 samples, 6 exceed LV. None of the samples exceeds RV Soil, control zone: Out of 4 samples, 1 exceed LV. None of the samples exceeds RV. Zone across Sava: Out of 2 samples, none of the samples exceeds LV and RV	Ash: 1,5 Soil: Out of 15 samples, all of them not exceeds LV. None of the samples exceeds RV Soil, control zone: Control sample does not exceed LV and RV .	Ash: 1,9 Soil : In 15 samples cadmium content exceeds LV in out-of-vegetation period In 1 sample cadmium content exceeds MPC in out-of-vegetation period.
Mercury (Hg)	0.3	10	Ash: 1.3 Soil: Out of 24 samples 5 exceed LV. None of the samples exceeds RV. Soil, control zone: Out of 5 samples 2 exceed LV. None of the samples exceeds RV.	Ash: 0.3 Soil: Out of 23 samples, 4 exceed LV. None of the samples exceeds RV Soil, control zone: Out of 4 samples, 2 exceed LV. None of the samples exceeds RV. Zone across Sava: Out of 2 samples, none of the samples exceeds LV and RV.	Ash: 0.2 Soil : Out of 15 samples, none of the samples exceeds LV and RV. Soil, control zone: Control sample does not exceed LV and RV .	Ash: 0.2 Soil: No exceedance
Arsenic (As)	29	55	Ash: 91,9 Soil: Out of 24 samples, one exceeds LV. None of the samples exceeds RV. Soil, control zone: Out of 5 samples none exceeds LV and RV	Ash: 133,1 Soil: Out of 23 samples none exceeds RV and LV. Soil, control zone: Out of 4 samples none exceeds LV and RV. Zone across Sava: Out of 2 samples none exceeds LV and RV	Ash: 4,5 Soil: Out of 15 samples, one exceeds LV and none of them RV. Soil, control zone: Control sample does not exceed LV and RV	Ash: 11,3 Soil: In 5 samples lead content exceeds LV in vegetation period .
Boron (B)	.	.	Ash: 30 Soil: Out of 24 samples none exceeds RV and LV. Soil, control zone: Out of 5 samples none exceeds LV and RV.	Ash: 28,3 Soil: Out of 23 samples none exceeds RV and LV. Soil, control zone: Out of 4 samples none exceeds LV and RV Zone across Sava: Out of 2 samples none exceeds LV and RV.	Ash: <0.1 Soil: Out of 15 samples, none exceeds LV and RV. Soil, control zone: Control sample does not exceed LV and RV	Ash: <0.1 Soil: No exceedance

3.2.5. Environmental Noise Measurement

During 2020 in the plants of TENT Branch area environment noise levels were measured by Mining Institute Belgrade. Noise levels were measured on four measuring points around each plant. Measuring points are distributed on different sides of the world, at different distances from the plants. At the order of the inspection, noise was measured in TENT A and TENT B closest residential areas. Measurements were conducted during the day, evening and night mode. Table 64 shows values for day and night measurements as mean values of two fifteen-minute measurements. The measurements were done in line with SRPS ISO 1996-1 and SRPS ISO

1996-2. Ultimate objective of the above measurements was to determine the relevant noise levels indicated as the measured equivalent levels.

Annual Environmental Noise Levels Reports for each TENT organisational unit are delivered to the Environmental Protection Agency and are made available also to the relevant inspectors upon request. Environmental noise levels results are also presented in an Environmental Report prepared each year for every organisational unit.

Noise in the process of electricity generation in thermal power plants is created by operation of the following plants: mills, turbines, flue gas fans while occasionally during unit (boiler) operation disturbances, noise is created by when safety valves are turned on, lasting up to 1 minute.

Table 64 shows the measured noise levels in 2020 for the Nikola Tesla TPPs Branch.

Local governments of Obrenovac, Lazarevac (Belgrade City), and Svilajnac have not carried out yet acoustic spatial zoning in accordance with the Environmental Noise Protection Act (Official Gazette of RS No. 36/09 and 88/10). Due to the lack of clearly limited acoustic zones it was not possible to accurately determine the measuring points, that should be located at the border lines of zone 5 – City centre, trading, crafts, administrative zones containing flats, zones along motorways, state and city roads and zone 6 – Industrial, storage, service areas and transport terminals without residential buildings. Thus, the reports of the Mining Institute of Belgrade do not include the comparison of measured values with limit values.

Measuring points selected as the residential area closest to TENT B, are along the trunk road, so great noise influence is made by traffic noise.

Based on environmental noise measurement done 2nd July – 3rd July 2020 around the thermal power plant of Kolubara on four measuring points in order to determine relevant noise level, which is given through measured level equivalents and possible additions to the level depending on the type of the noise measured. At the time of measurement and report preparation, data on acoustic zoning in vicinity of Kolubara TPP were not available and therefore Mining Institute from Zemun did not perform comparison with the limit values and assessment of measurement results. The measuring point MM4 is located on the south side of TEK along the local road Veliki Crljeni - Junkovac on the outside of the fence 2.5 meters from the road, therefore a large share of noise is traffic noise, because at the time of measuring TPP Kolubara was in "total suspension", i.e. no part of the plant for the electricity generation, including auxiliary and joint plants, was in operation on the day of measuring. The obtained noise level indicators are shown in Table 59.

Table 59

NIKOLA TESLA TPPs BRANCH				
Noise levels in 2020 (dB)(A)				
Noise indicators limit values, Regulation stipulating noise indicators, limit values, methods assessing noise indicators, disturbance levels and harmful living environment noise effects (OG RS № 75/10)	*Closed area		Day and evening	Night
			35	30
	Open areas	Areas for rest and recreation, hospital zones and rehabilitation centres, cultural and historical sites, large parks	50	40
		Tourist areas, camps and school zones	50	45
		Purely residential areas	55	45
		Commercial-residential areas, trading-residential areas and children's playgrounds	60	50
		City centre, trading, crafts, administrative zones containing flats, zones along motorways, state and city roads	65	55
		Industrial, storage and service areas and transport terminals without residential buildings	At the border of this zone noise must not exceed the limit value in the zone with which it is bounded.	

Measuring points		TENT A		TENT B		KOLUBARA A TPP Measurement I	MORAVA TPP Measurement I
Day	1	53,9		67,4		55,3	59,6
	2	53,3		66,6		55,8	57,5
	3	54,1		58,6		48,7	55,6
	4	50,4		48,6		64,7	53,1
Evening	1	53,3		66,6		45,0	60,2
	2	53,7		63,3		58,5	63,8
	3	51,5		59,3		49,0	55,0
	4	51,0		53,4		60,3	53,5
Night	1	49,9		61,0		45,2	58,8
	2	53,8		58,8		50,4	57,6
	3	59,6		56,5		46,5	54,8
	4	53,0		53,5		60,7	55,3

Preparation of Study for noise decrease in the environment for TPP and CHP is planned in the future period.

3.2.6. Waste

Waste created in 2020 is shown in Table 60, while waste quantities given to the authorized operators in 2020 are shown in Table 61.

Table 60

NIKOLA TESLA TPPs BRANCH									
Generated waste in 2020									
No.	Official nomenclature under the Rulebook on Waste Categories, Testing and Classification "Official Gazette of RS", no. 56/2010 as of 10 th August 2010		Σ ± (t)	Organizational unit				Total	Note
				TPP Nikola Tesla A	TPP Nikola Tesla B	TPP Kolubara A	TPP Morava		
	Name	Index no.	Amounts						
1	Used printer cartridges other than those indicated under 08 03 17	08 03 18	t	0,010	0,486	0,000	0,000	0,496	
2	Ash, slag and dust from boiler (except the dust from boiler stated in 10 01 04)	10 01 01	t	3.107,288,030	2.566,151,450	238.773,670	146.847,000	6.059.060,150	Ash and slag from oil
3	Spent waxes and greases	12 01 12*	t	0,000	0,000	0,000	0,040	0,040	Waste grease
4	Other hydraulic oils	13 01 13*	t	5,480	0,880	0,640	2,200	9,200	Waste hydraulic oils
			t	0,000	0,000	27,000	4,100	31,100	Waste turbine oils
5	Other motor oils, gear oil and lubricating oil	13 02 08*	t	44,100	40,605	0,220	0,000	84,925	Waste oil for lubrication and regulation
			t	1,660	2,430	0,058	2,280	6,428	Waste engine oil, gear oil and lubrication oil
6	Other oils for insulation and heat transfer	13 03 10*	t	2,460	1,850	0,000	3,880	8,190	Waste insulation oil and heat transfer oil
7	Motor fuel and diesel	13 07 01*/13 07 03*	t	0,520	0,000	0,000	0,300	0,820	Waste fuel oil
8	Other fules (including mixtures)	13 07 03*	t	13,040	0,000	0,000	0,000	13,040	Waste sludge and reservoir fuel
			t	0,000	0,000	0,000	0,380	0,380	Waste additive for petroleum
			t	0,000	0,000	0,000	0,060	0,060	Waste fuel oil
9	Other emulsions	13 08 02*	t	5,770	9,290	0,000	0,000	15,060	Waste emulsion (oil-water mix)
10	Other solvents and solvent mixtures	14 06 03*	t	0,005	0,448	0,000	0,000	0,453	Waste solvents and solvent mixtures
11	Wooden packaging	15 01 03	t	10,990	50,000	19,500	0,000	80,490	Wooden packaging waste
12	Metal packaging	15 01 04	t	0,000	0,000	0,000	0,400	0,400	Waste bottles from fire extinguishers
13		15 01 10*	t	0,000	4,000	0,000	0,000	4,000	Waste packaging with a high content of fuel oil

	Packaging with residue of hazardous substances or contaminated with hazardous substances		t	0,000	0,058	0,000	0,000	0,058	Waste contaminated glass packaging
			t	3,628	1,949	0,100	0,000	5,677	Waste contaminated PVC packaging from chemicals
			t	3,365	0,000	1,260	0,000	4,625	Waste metal packaging from oils and lubricants
14	Metal packaging containing dangerous solid porous matrix (e.g., asbestos), including empty bottles under pressure	15 01 11*	t	6,620	0,000	0,000	0,000	6,620	Waste gas bottles
15	Absorbent, filter materials (including oil filters that are not specified in other way), wiping cloths, protective clothing contaminated by hazardous substances	15 02 02*	t	0,260	1,680	0,210	0,240	2,390	Cotton waste with oil and fuel oil
			t	0,380	0,081	0,000	0,180	0,641	Waste oily filters
			t	4,140	0,060	0,360	0,140	4,700	Waste adsorbents with oil and fuel oil
16	Absorbent, filter materials, wiping cloths, protective clothing different from those mentioned in 15 02 02	15 02 03	t	0,000	9,000	0,000	0,000	9,000	Waste sand
			t	0,040	0,067	0,000	0,000	0,107	Waste non-hazardous filters
17	Waste tires	16 01 03	t	1,000	0,670	0,000	0,000	1,670	Waste pneumatic tires
			t	20,880	45,000	1,900	0,740	68,520	Waste rubber conveyor belt
18	Waste vehicles not containing liquids or other hazardous components	16 01 06	t	0,000	0,000	95,780	0,000	95,780	Waste vehicles that do not contain liquids
19	Discarded equipment containing hazardous components other than those indicated under 16 02 09 and 16 02 12	16 02 13*	t	0,095	0,000	0,000	0,000	0,095	Waste condensers with oil
			t	3,038	2,167	5,900	4,420	15,525	Waste from electric and electronic devices
20	Organic waste other than specified in 16 03 05	16 03 06	t	0,000	0,520	0,000	0,000	0,520	Waste fire protection foam
21	Laboratory chemicals made of or containing dangerous substances, including laboratory chemical mixtures	16 05 06*	t	0,000	0,000	0,000	0,030	0,030	Waste chemicals
22	Lead batteries	16 06 01*	t	2,200	0,072	12,330	1,040	15,642	Waste aluminium batteries
23	Nickel-cadmium batteries	16 06 02*	t	1,161	0,000	0,000	0,720	1,881	Ni - Cd batteries

24	Liquid waste based on water containing hazardous substances	16 10 01*	t	1,470	0,000	0,000	0,000	1,470	Hazardous water based waste
25	Tile and ceramics	17 01 03	t	0,000	0,000	0,840	4,740	5,580	Waste ceramics
26	Wood	17 02 01	t	0,000	1,570	0,000	5,480	7,050	Waste wood
27	Glass	17 02 02	t	2,430	0,000	0,000	0,400	2,830	Glass waste
28	Plastic	17 02 03	t	1,330	7,760	44,820	2,980	56,890	Waste mixed plastic
29	Glass, plastic and wood containing hazardous substances or contaminated with hazardous substances	17 02 04*	t	0,000	480,000	135,000	0,000	615,000	Waste railway sleepers
30	Copper, bronze, brass	17 04 01	t	0,011	1,711	0,120	0,000	1,842	Copper and brass waste and scrap
				2,245	0,893	1,740	0,400	5,278	Waste copper cables
				0,000	0,000	0,000	7,120	7,120	Waste brass tubes
31	Aluminium	17 04 02	t	0,000	0,000	0,050	0,000	0,050	Waste aluminium cables
				4,940	0,000	0,300	1,120	6,360	Aluminium sheet metal
32	Iron and steel	17 04 05	t	6,870	8,664	11,500	0,000	27,034	Waste steel sheet metal
				15,860	42,350	4,020	0,040	62,270	Waste galvanized and black sheet metal
				12,160	9,080	0,000	0,000	21,240	Waste Fe combs
				86,580	123,000	63,300	53,540	326,420	Waste impact plates
				12,140	0,000	0,000	0,000	12,140	Waste steam pipeline
				11,500	0,000	0,000	1,860	13,360	Waste boiler tubes
				227,770	260,120	119,700	26,540	634,130	Waste iron up to 5mm thick
				0,000	0,000	131,340	0,220	131,560	Waste grey casting
				0,000	8,640	30,000	0,000	38,640	Waste steel casting
				174,240	17,100	40,220	2,000	233,560	Iron and steel waste and scrap
				456,210	280,937	236,860	31,380	1,005,387	Waste iron thicker than 5 mm
				0,000	0,000	4,580	0,300	4,880	Metal veneer
				25,760	0,000	5,000	0,000	30,760	Railway accessories
				7,680	0,000	11,200	0,000	18,880	Waste railway tracks
				0,000	0,000	8,000	0,000	8,000	Waste iron with concrete admixtures
				0,000	0,000	26,540	25,760	52,300	Waste iron with admixtures of other materials
33	Mixed metals	17 04 07	t	0,020	0,000	3,300	0,000	3,320	Other mixed metal

				0,000	2,820	0,000	0,000	2,820	Waste metal veneer
				0,000	0,000	0,500	0,000	0,500	Waste mixed metal with ceramic admixtures
				0,000	0,000	3,060	0,360	3,420	Valves
				0,000	0,000	0,000	2,080	2,080	Waste mixed metals from magnetic separator
34	Soil and stone containing hazardous substances	17 05 03*	t	0,000	0,190	0,000	0,000	0,190	Gravel contaminated with oil
				0,000	0,200	0,000	0,000	0,200	Soil contaminated with oil
35	Soil and stone other than those mentioned in 17 05 03	17 05 04	t	0,000	0,570	0,000	0,000	0,570	Soil material – not dangerous
36	Insulation material containing asbestos	17 06 01*	t	0,000	2,500	0,000	0,000	2,500	Waste asbestos
37	Insulation material other than those mentioned in 17 06 01 and 17 06 03	17 06 04	t	138,560	39,740	19,700	8,980	206,980	Waste mineral rock wool
38	Construction material containing asbestos	17 06 05*	t	0,000	0,900	0,000	0,000	0,900	Waste asbestos-cement boards
39	Mixed construction and demolition waste other than those indicated under 17 09 01 and 17 09 02 and 17 09 03	17 09 04	t	4.000,000	6.800,000	0,000	0,000	10.800,000	Mixed building material
40	Sludge from other industrial waste water treatments other than mentioned in 19 08 13	19 08 14	t	33,640	0,000	0,000	0,000	33,640	Sludge from industrial waste water treatment
41	Sludge from water decarbonisation	19 09 03	t	0,000	0,000	0,000	7,640	7,640	Sludge from water decarbonisation
42	Saturated or spent ion-exchanging resins	19 09 05	t	2,720	4,360	0,000	0,000	7,080	Waste ionic mass
43	Minerals (e.g. sand and rock)	19 12 09	t	0,000	0,000	50,000	7,960	57,960	Waste white sand
44	Textile	20 01 11	t	0,000	0,000	0,200	0,000	0,200	Fire hoses
45	Fluorescent tubes and other mercury-containing waste	20 01 21*	t	0,200	0,300	0,300	0,080	0,880	Waste fluorescent tubes
			t	0,030	0,175	0,210	0,000	0,415	Waste mercury light-bulbs and thermometers

Table 61

NIKOLA TESLA TPPs BRANCH									
Waste given to operators in 2020									
No.	Official nomenclature under the Rulebook on Waste Categories, Testing and Classification "Official Gazette of RS", no. 56/2010 as of 10 August 2010		Unit (t)	Organizational unit				Total	Note
				TPP Nikola Tesla A	TPP Nikola Tesla B	TPP Kolubara A	TPP Morava		
	Name	Index number		Amounts					
1	Waste printer toner different from 08 03 17	08 03 18	t	0,470	0,600	0,660	0,100	1,830	Waste printer toners
2	Ash, slag and dust from boiler (except the dust from boiler stated in 10 01 04)	10 01 01	t	0,000	102.498,470	25.547,920	10.763,000	138.809,390	Ash and slag from coal
	Coal fly ash	10 01 02							
3	Other fuels (including mixtures)	13 07 03*	t	13,040	0,000	0,000	0,000	13,040	Waste sludge and fuel from reservoir
4	Other emulsions	13 08 02*	t	2,430	8,680	0,000	0,000	11,110	Waste emulsions (oil-water mixture)
5	Other solvents and solvent mixtures	14 06 03*	t	0,565	0,200	0,000	0,000	0,765	Waste solvents and solvent mixtures
6	Wooden packaging	15 01 03	t	20,840	45,260	32,500	0,000	98,600	Waste wooden packaging
7	Metal packaging	15 01 04	t	1,465	0,500	0,000	2,400	4,365	Waste FF device bottles
8	Packaging with residue of hazardous substances or contaminated with hazardous substances	15 01 10*	t	5,900	1,900	0,320	0,120	14,130	Waste contaminated PVC packaging from chemicals
			t	3,890	0,360	1,100	0,540		Waste metal packaging from oil and lubricants
9	Metal packaging containing dangerous solid porous matrix (e.g., asbestos), including empty bottles under pressure	15 01 11*	t	1,380	0,000	0,000	0,000	1,380	Waste gas bottles
10	Absorbent, filter materials (including oil filters that are not specified in other way), wiping cloths, protective clothing contaminated by hazardous substances	15 02 02*	t	0,000	0,900	0,160	0,000	1,060	Cotton waste with oil and heavy oil
			t	0,000	0,020	0,000	0,000	0,020	Waste oily filters
			t	0,000	0,060	0,120	0,000	0,180	Waste adsorption means with oil and heavy oil
11	Absorbent, filter materials, wiping cloths, protective clothing other specified in 15 02 02	15 02 03	t	0,200	0,180	0,000	0,000	0,380	Waste non-hazardous filters
12	Waste tires	16 01 03	t	0,920	0,200	0,000	0,000	1,120	Waste pneumatic tires
			t	52,460	3,080	0,000	0,000	55,540	Waste rubber conveyor belts

13	Waste vehicles not containing liquids or other hazardous components	16 01 06	t	0,000	0,000	63,080	0,000	63,080	Waste vehicles not containing liquids
14	Discarded equipment containing hazardous components other than those indicated under 16 02 09 and 16 02 12	16 02 13*	t	0,145	0,000	0,000	0,000	0,145	Waste condensers with oil
				0,000	0,000	4,200	10,300	14,500	Waste from electric and electronic devices
15	Organic waste other than specified in 16 03 05	16 03 06	t	0,000	0,520	0,000	0,000	0,520	Waste firefighting foam
16	Nickle-cadmium batteries	16 06 02*	t	2,870	0,000	0,000	0,000	2,870	Ni - Cd batteries
17	Liquid waste based on water containing hazardous substances	16 10 01*	t	1,470	0,000	0,000	0,000	1,470	Hazardous water based waste
18	Tile and ceramics	17 01 03	t	0,000	0,000	1,340	4,960	6,300	Waste ceramics
19	Wood	17 02 01	t	0,000	93,100	48,460	5,480	147,040	Wood waste
20	Glass	17 02 02	t	6,600	0,000	0,000	0,400	7,000	Glass waste
21	Plastic	17 02 03	t	1,560	7,980	64,820	2,540	76,900	Waste mixed plastics
22	Glass, plastic and wood containing hazardous substances or contaminated with hazardous substances	17 02 04*	t	0,000	178,640	0,000	0,000	178,640	Waste railway sleepers
23	Cooper, bronze, brass	17 04 01	t	0,000	1,040	2,260	0,000	3,300	Waste and remains of coppers and brass
			t	8,580	8,320	1,060	1,280	19,240	Waste copper cables
			t	37,440	10,320	0,000	0,000	47,760	Aluminium sheet
24	Iron and steel	17 04 05	t	32,540	0,000	0,000	0,000	32,540	Waste steel sheet
			t	65,420	51,280	8,020	0,640	125,360	Waste galvanized and black sheet metal
			t	0,000	0,000	8,580	0,000	8,580	Waste collection electrodes
			t	377,300	9,080	0,000	0,000	386,380	Waste Fe cells
			t	276,680	241,320	5,300	61,980	585,280	Waste impact plates
			t	71,480	0,000	0,000	0,000	71,480	Waste steam pipeline
			t	383,300	0,000	0,000	0,000	383,300	Waste boiler pipelines
			t	501,620	217,960	59,700	17,460	796,740	Waste iron up to 5mm thickness
			t	0,000	0,000	131,340	0,000	131,340	Waste grey cast
			t	578,000	32,080	10,220	0,000	620,300	Waste and remains from iron and steel
			t	3,191,200	599,080	86,860	29,180	3,906,320	Waste iron over 5mm thickness
			t	0,000	8,640	0,000	0,000	8,640	Waste cast steel
			t	0,000	0,000	3,580	0,000	3,580	Metal shavings
			t	72,720	0,000	0,000	0,000	72,720	Waste rail accessories
			t	3,180	0,000	61,200	0,000	64,380	Waste railway rails

			t	0,000	0,000	19,540	26,260	45,800	Waste iron with other matters admixtures
25	Mixed metals	17 04 07	t	5,700	1,000	7,300	0,000	14,000	Waste mixed metal
			t	0,000	2,120	0,000	0,000	2,120	Waste metal shavings
			t	0,000	0,000	3,060	0,360	3,420	Valves
			t	0,000	0,000	0,000	5,960	5,960	Waste mixed metals from magnetic separator
26	Metal waste contaminated with hazardous substances	17 04 09*	t	1,255	0,000	0,000	0,000	1,255	Tin contaminated with fuel oil
27	Soil and stone containing hazardous substances	17 05 03*	t	0,000	0,940	0,000	0,000	0,940	Oil-contaminated gravel
28	Soil and stone other than specified in 17 05 03	17 05 04	t	0,000	12,120	0,000	0,000	12,120	Solid matter – non-hazardous
29	Insulation material other than specified in 17 06 01 and 17 06 03	17 06 04	t	138,560	39,740	19,700	7,500	205,500	Waste mineral rock wool
30	Mixed construction and demolition waste other than those indicated under 17 09 01 and 17 09 02 and 17 09 03	17 09 04	t	3.177,080	6.793,600	0,000	0,000	9.970,680	Mixed building waste
31	Sludge from other industrial waste water treatments other than mentioned in 19 08 13	19 08 14	t	33,640	0,000	0,000	0,000	33,640	Sludge from industrial waste water treatment
32	Sludge from water decarbonisation	19 09 03	t	0,000	0,000	0,000	7,640	7,640	Sludge from water decarbonisation
33	Saturated or spent ion-exchanging resins	19 09 05	t	2,720	4,360	0,000	0,000	7,080	Waste ionic mass
34	Minerals (for example: sand and stone)	19 12 09	t	0,000	0,000	0,000	7,960	7,960	Waste white sand

3.3. Working Environment Monitoring, Safety and Health

Occupational Safety and Health Reports for 2020 include the following elements:

- **Working environment monitoring**
 - working environment noise measurements
- **Occupational Safety**
 - training
 - work injuries
- **Health**

3.3.1. Working Environment Monitoring

- **Working environment noise measurement**

During 2020, summer testings of working environment conditions were done on TENT A, and Railway Transport locations and they are given in Table 62. Noise levels measured at all measuring points where the measurements were performed did not exceed the limit values.

Table 62

TPP NIKOLA TESLA BRANCH		
Working environment noise measurement in 2020 – summer period		
TENT and RT	Measuring point	Registered noise level in dB (A)
TENT A (boiler room, machine hall, exterior facilities)	Elevation 0 - Unit 2, room of the boiler operator at Unit 1, 2 and 3	64,2
	Unit 3, pig valves, elevation -1,2m	63,1
	Unit 3, mill 34, elevation 0m, next to the mill 34	68,7
	Unit 6, BCB 52, BCB 62, elevation 0m	68,9
	Unit 6, NP fuel oil heaters, up to excavator station	59,6
	Unit 6, variator and rust reducer, elevation 2m	63
	Unit 6, mill 63, elevation 0m	64,5
	Unit 6, pig valve, elevation -1,2m	64,5
	New mill workshop	74
	Old mill workshop	51,1
	Unit 6, rotational air heater, lower bearing (LUVO), elevation 9m	59,9
	Unit 6, ESP tariff stations	63,5
	Unit 6, rotational air heater, upper bearing (LUVO), elevation 13m	60,9
	Unit 3-4, locksmith workshop, elevation 16m	78,1
	Unit 6, super heater drainage fittings, venting, injection into the steam super heater, elevation 16m	60,4
	Unit 6, air mixture channel 65, inspection opening, elevation 16m	77,8
	Unit 4, fuel oil burner 45, elevation 19m	78,4
	Unit 4, cabinets for local injection armature commands, elevation 16m	59,9
	Unit 3-4, locksmith workshop, elevation 25m	71,2
	Unit 6, coal feeder 61, elevation 25m	78,2
	Unit 6, air mixture channel 61, elevation 25m	59,3
	Unit 6, valves on the primary and secondary air ducts, elevation 42m	59,1
	Unit 6, rec. channel 62, elevation 42m	59,2
	Unit 6, rec. channel 62, elevation 42m	82,3
	Unit 6, trifluxes, elevation 45m	59,7
	Unit 6, lampblack blowers, right side, elevation 49m	76,5
	Unit 6, safety valve, up to excavator station, elevation 49m	77,4
	Unit 6, condensate pumps, elevation 3,3m	68,8
	Unit 6, condensate pumps, elevation 6m	64,4
	Unit 6, condensate pumps, elevation 0m	72,4
	Unit 1, locksmith workshop, pumps, line A, elevation 0m	61,4
	Unit 3, compressor station, elevation 0m	66,2
	Unit 4, COD manager office, elevation 0m	71,1

	Unit 6, feeding pump 61, elevation 0m	66,4
	Unit 6, under turbine, line B, elevation 0m	64
	Unit 6, diesel generator, line A, elevation 0m	59,9
	Unit 7, locksmith workshop at turbine, line A, in container, elevation 0m	59,5
	Unit 7, locksmith workshop at turbine, line A, under container, elevation 0m	59,7
	Unit 7, locksmith workshop, heating, elevation 0m	78
	Unit 7, circulating pumps for the heating of Obrenovac, elevation 0m	61,6
	Unit 7, mechanic's locksmith workshop, line B, elevation 0m	74,3
	Unit 6, condensate preparation, tanks, elevation 0m	66,5
	Unit 6, below the sealing oil pump generator, elevation 0m	58,7
	Unit 3, turbine oil pumps, line B, elevation 4,5m	63,6
	Unit 6, stator cooling pumps, line A, elevation 4,5m	62,8
	Unit 6, generator switch, elevation 4,5m	64,2
	Unit 4, batteries, elevation 4.5m	73,5
	Unit 4, jumper wires, elevation 4,5m	74
	Container of power plant engineer at Unit 5 and 6, elevation 9m	77,2
	Unit 6, line A, excitation under exciters, elevation 9m	67,8
	Unit 6, turbine, elevation 9m	65,4
	Unit 6, command, elevation 9m	70,9
	Heating command, elevation 9m	70,9
	Bunker machine, bypass pumps, elevation 17m	60,1
	Crane operator cabin, crane 2, elevation 17m	57,3
	Maintenance, locksmith workshop, elevation 0m	74,5
	Maintenance, lathe workshop, elevation 0m	75,6
	Maintenance, welding workshop, elevation 0m	74,6
	Pumping station, elevation 0m	60,8
	Pumping station, basement	62,9
	Pumping station, pumping station operator's office	62,8
	CWT, CWT manger office	55,2
	CWT, compressor station	63,9
	CWT, locksmith workshop	62,3
	CWT, Ammonia and hydrazine solution preparation room	71,5
	CWT, Demi water pump plant for Unit 3	75,3
	CWT, Waste water treatment plant, oily waste water U1	68
	CWT, Waste water treatment plant, oily waste water G1	66,9
	Heavy oil station, heavy oil station operator's office	59,2
	Heavy oil station, elevation 0m	61,6
	Storage, forklift cabin, Linde	68,1
	Coal feed 1, pass over building 2, elevation 13m	63,4
	Coal feed 1, command room, elevation 19m	61,8
	Coal feed 1, digger cabin 1	72,1
	Coal feed 1, pass over building 1, elevation 0m	60,5
	Coal feed 1, pass over building 1, elevation 4m	60,4
	Coal feed 1, unloading station 1, elevation 6m	60,7
	Coal feed 1, unloading station 1, elevation 12m	62,5
	Coal feed 1, locksmith workshop under the sloping bridge T	75,7
	Coal feed 2, command room, elevation 24m	58,1
	Coal feed 2, pass over building 2, elevation 11m	76,6
	Coal feed 2, pass over building 2, elevation 15m	59,1
	Coal feed, bulldozer cabin	49,4
	Unit 5, bunker machine, trolley, elevation 42m	73,5
	Unit 4, elevation 53m, reducer	72,5
	Excavator station, excavator station 4 operator's room	72,2
	Excavator station at Unit 4, elevation 0m	60,5
	Excavator station at Unit 4, elevation 4.5m	65,3
HAGIPS Service	PTP, HAGIPS Service (Vreoci), wet separation, elevation 6m	60,7
	PTP, HAGIPS Service, Vreoci 1an2, elevation 8m	60,7
RT (terminal, exterior facilities)	RT Terminal for locomotive	62,9
	RT Terminal for wagons	64,5

-Obrenovac, drier Vreoci, station TPP Kolubara	Hydraulics workshop	71,9
	Test platform for locomotives	50,8
	Electrician workshop	43,1
	Defrosting workshop	71,6
	Railway station Obrenovac, unloading station OB 1	80,2
	Railway station Obrenovac, unloading station OB 1, train dispatcher office	71,6
	Railway station Obrenovac, unloading station OB 2, train dispatcher office	64,3
	Railway station Obrenovac, unloading station OB 2, boiler inspector office	71,8
	Locomotive 441-4	68
	Locomotive 443-6	66,8
	Locomotive 661-1, diesel	65,6
	Locomotive CEM-1 diesel	68,1
	Loading point during the train loading	66,3
	Workshop for the maintenance of locomotive and wagons	73,1
	Fleet, vehicle repair workshop	62,5
	Fleet, garage for passenger vehicles	67,1
	Fleet, garage for goods vehicles	66,5
	Fleet, tire shop	71,1
	Fleet, truck cabin	71,8
	Fleet, forklift cabin	70,1

3.3.2. Occupational Safety

■ Training

Table 63 shows a number of employees to be trained and a number of trained employees in 2020.

Table 63

NIKOLA TESLA TPPs BRANCH					
Training in 2020					
Organisational unit	Number of employees	Foreseen for training		Trained	
		No.	%	No.	%
Joint services	350	107	30,57	102	95,33
Nikola Tesla A TPP	677	583	86,12	526	90,22
Nikola Tesla B TPP	355	281	79,15	164	58,36
Kolubara TPP	314	247	78,66	84	34,01
Morava TPP	114	97	85,09	45	46,39
Railway transport	459	429	93,46	428	99,77
TOTAL: NIKOLA TESLA TPPs BRANCH	2.269	1.744	76,86	1.349	77,35

In 2020, 963 PROTENT employees performing their jobs within TENT organizational unit were trained.

■ Work injuries

Table 64 gives data on a number of injuries at work in 2020.

Table 64

NIKOLA TESLA TPPs BRANCH						
Work injuries in 2020						
Organisational unit	Number of employees	Injuries – number of employees ratio				
		Easy	Heavy	Fatal	Total	%
Joint services	350	1	0	0	1	0,29
Nikola Tesla A TPP	677	8	2	0	10	1,48
Nikola Tesla B TPP	355	7	1	0	8	2,25
Kolubara TPP	314	2	0	0	2	0,64
Morava TPP	114	1	0	0	1	0,88
Railway transport	459	4	1	0	5	1,09
TOTAL: NIKOLA TESLA TPPs BRANCH	2.269	23	4	0	27	1,19

3.3.3. Health

Medical examinations of employees working in high-risk workplaces is carried out once a year or once in two years in accordance with assessed risks. Table 65 provides periodic examinations data verifying the work capability for 2020.

Table 65

NIKOLA TESLA TPPs BRANCH											
Work capability in 2020											
Organisational unit	Number of employees	Periodical examinations				Work capability					
		Referred to examination		Examined		Capable		Limited capability		Not capable	
		No.	%	No.	%	No.	%	No.	%	No.	%
Joint services	350	101	28,86	101	100,00	92	91,09	8	7,92	1	0,99
Nikola Tesla A TPP	677	649	95,86	645	99,38	575	89,15	49	7,60	21	3,26
Nikola Tesla B TPP	355	286	80,56	280	97,90	253	90,36	24	8,57	3	1,07
Kolubara TPP	314	238	75,80	219	92,02	211	96,35	7	3,20	1	0,46
Morava TPP	114	111	97,37	111	100,00	94	84,68	16	14,41	1	0,90
Railway transport	459	456	99,35	444	97,37	428	96,40	12	2,70	4	0,90
TOTAL: NIKOLA TESLA TPPs BRANCH	2.269	1.851	81,58	1.800	97,24	1.653	91,83	116	6,44	31	1,72

3.4. Public complaints

Public complaints are given in Table 66.

Table 66

NIKOLA TESLA TPPs BRANCH			
Public complaints in 2020			
Organisational unit	Complaint (number, date and by whom submitted)	Subject	Actions
TPP NIKOLA TESLA A	No public complaints		
TPP NIKOLA TESLA B	No public complaints		
KOLUBARA TPP	On 19.03.2020, a complaint of a natural person to the Republic Inspection for Environmental Protection.	Air pollution from Kolubara TPP stack 2	On 19.03.2020 an explanation regarding starting and shutting down the boilers in Kolubara TPP in the past period was submitted to the Head of the Republic Inspection by e-mail. Following this, there were no further actions by the inspector.
	On 04.08.2020, a complaint of the association "Za zdravije sutra", V.Crljeni, was submitted to the Republic Inspection for Environmental Protection.	Air pollution due to fire on the coal stack	On 05.08.2020, an explanation regarding condition of the coal stack in Kolubara TPP in the past period was submitted to the Head of the Republic Inspection by e-mail. On 19.08.2020 (upon O.Topalov's request), a monthly report on air quality analysis for July 2020 was submitted. Following this, there were no further actions by the inspector.
	On 21.12.2020, a complaint of a natural person to the Republic Inspection for Environmental Protection	Air pollution due to self-ignition of coal on the coal stack	On 22.12.2020, a reply (with photos)-condition on the Kolubara TPP coal stack and causes of coal self-ignition on the coal stack and actions taken for solving this case-was submitted to the Head of the Republic Inspection by e-mail. Following this there were no further actions by the inspector.
MORAVA TPP	No public complaints		

4. KOSTOLAC TPPS & OCMS BRANCH

Kostolac TPPs & OCMS branch comprise the following organisational units:

- TPP Kostolac A
- TPP Kostolac B
- Drmno OCM
- Cirikovac OCM

4.1. Overview and Status of Permits

Table 67 provides overview of obtained permits and applications for new permits or extension of existing ones in 2020 – Kostolac TPPs and OCMS Branch“.

Table 67

ОГРАНАК ТЕ- КО КОСТОЛАЦ			
Преглед и статус дозвола за 2020. годину			
Организациони део	Добијене дозволе и одобрења (број и датум)	Нови захтеви за добијање или продужење важећих дозвола	Напомена
TPP KOSTOLAC A		1.A request for an approval of the Environmental Impact Assessment of the existing condition for the project of legalization of the ash and slag handling system from TPP Kostolac A to Cirikovac OCM, No. 12.03621527/2-2020 dated 14.12.2020	
TPP KOSTOLAC B	<p>1.Decision-approval by the Ministry of Environmental Protection for the updated Environmental Impact Assessment of the project for construction of the plant for flue gas desulphurisation in TPP Kostolac B; No. 353-02-2672/2019-03 dated 27.07.2020;</p> <p>2.Decision by the Ministry of Construction, Transport and Infrastructure on amendment of the decision for the building permit for flue gas desulphurisation plant No. 351-02-00366/2019-07 dated 07.02.2020</p> <p>3.Decision by the Ministry of Environmental Protection that preparation of an Environmental Impact Assessment for construction of the ammonia water reservoir with accessories for SNCR system in TPP Kostolac B is not necessary, No. 353-02-1735/2020-03 dated 12.11.2020</p>	<p>1.The Report of the Commission for technical inspection of the works executed on construction of the plant for FGD in TPP Kostolac B, No. 12.03.-517595/1-2020. dated 23.10.2020 with a certificate of the Commission for technical inspection on putting into trial run.</p> <p>2.A request for entering by-products for solid waste with calcium-gypsum base into the registry, No. 10 01 05 in the quantity being 10,000 t/yr, No. 19-0000872/2020-06 dated 16.12.2020</p> <p>3.Rejected request for entering by-products for solid waste with calcium-gypsum base into the registry, No. 10 01 05 in the quantity being 10,000 t/yr, No. 19-0000872/2020-06 dated 16.12.2020</p> <p>4.Supplemental data for the request for entering by-products for solid waste with calcium-gypsum base into the registry, No. 100105, on 17.12.2020</p>	-

* BPD - Building Permit Design

4.2. Monitoring and Environmental Impact

4.2.1. Air Quality Measurements

Air quality monitoring in the vicinity of the Kostolac TPPs & OCMs Branch organisational units is carried out as a part of the Monitoring Plan of the Environmental Management Department. It should be noted that the air quality monitoring in the vicinity of the Kostolac TPPs & OCMs Branch is financed by EPS that employs an authorized legal entity.

There is a measuring point with automatic measurement of pollutants (sulphur dioxide, nitrogen oxide and carbon monoxide), belonging to the national automatic air quality monitoring network, and under the jurisdiction of the Agency for Environmental Protection.

Air quality measurements in the area of the Kostolac TPPs & OCMs Branch have been performed internally for over 30 years by the Environmental Management Department not authorised for total particulate matter and SO₂ measurements (Environmental Management Department Laboratory accreditation activities are in progress). Since 2008 air quality measurements in the area of the Kostolac TPPs & OCMs Branch have been performed by authorized legal entities employed by EPS via Kostolac TPPs & OCMs Branch.

During 2020, for EPS, air quality measurements in the Kostolac TPPs & OCMs Branch area were performed by the authorized laboratory with the Institute of Public Health, Pozarevac (No. of authorization for immission measurements 353-01-00436/2014-08 dated 15.04.2014).

Total particulate matter (TPM), sulphur oxides (SO₂), suspended particulate matter (PM₁₀), soot and heavy metals (Pb, Cd, As and Ni) were identified by analysing samples collected within one month for TPM, while SO₂ concentrations were determined by analysing 24-hour air samples.

SO₂ and soot concentrations were measured on 6 measuring points, as follows:

1. Klenovnik – Klenovnik Local Community
2. Stari Kostolac – Local Community
3. Drmno – Medical centre
4. Bradarac – Medical centre (measuring by the end of July 2020)
5. Cirikovac – Cirikovac OCM administrative building (measuring from July 2020)
6. Kostolac – the Kostolac municipality building (measuring from July 2020)

TPM content was measured on 6 measuring points, as follows:

1. Klenovnik – Klenovnik Local Community
2. Stari Kostolac – St. George Church
3. Drmno – Medical centre
4. Bradarac – water source (measuring by the end of July 2020)
5. Cirikovac – administration building of Cirikovac OCM (measuring from July 2020)
6. Kostolac – the Kostolac municipality building (measuring from July 2020)

Suspended particulate matter - PM₁₀ on the following measuring points:

1. Cirikovac – Cirikovac OCM administrative building
2. Drmno – Georad company
3. Kostolac – Prim company
4. Klenovnik – Kostolac Usluge Klenovnik
5. Kostolac – the Kostolac municipality building (measuring from July 2020)

Suspended particulate matter PM₁₀ were measured in 2020 seven days in each month on each above mentioned measuring points.

Comment in Table 68 relating to suspended particulate matter PM₁₀ refers to number of measurements performed on the above mentioned measuring points – measurements were not done all 365 days a year for each measurement point, but 84 measurement days a year on measuring points Cirikovac – administrative

building OCM Cirikovac (I), Drmno – Georad company (II), Kostolac – PRIM (III), Klenovik – Kostolac Usluge (IV), except for Kostolac – the Kostolac municipality building (V) where measurements were done 42 days.

The authorized legal entity provided an interpretation of the results of measurements done for EPS in its Air Quality Annual Report 2020, according to the Regulation on conditions for monitoring and air quality requirements.

Table 68 shows the 2020 air quality data analysis done by the authorized legal person, in terms of their compliance with legal requirements, for Kostolac TPPs & OCMs Branch organisational units. Comparison between the results obtained in the defined periods, with limit values from the Regulation on conditions for monitoring and air quality requirements was done by comparing measured values with the values prescribed by the Regulation on conditions for monitoring and air quality requirements (Official Gazette of RS, No. 11/2010, 75/2010 and 63/2013).

Table 68

Kostolac TPPs and OCMs Branch						
Air quality in 2020						
Legal compliance (number of data or days exceeding the defined values)						
Air quality indicators		TPM content (mg/m ² /day)	Soot (µg/m ³)	SO ₂ concentration (µg/m ³)		
		Maximum permissible value (MPV)	Maximum permissible concentration (MPC))	LV	TV	LT
Averaging period						
One hour		-	-	350 (at most 24 times in a calendar year)	350	0
*One day		-	50	125 (at most 3 times in a calendar year)		-
**One month		-	-			
***Calendar year		200	50	50		-
		-	-	No measurements		
*	Measuring points	-	No exceedance	No exceedance of limit values for sulphur dioxide concentration more than admissible 24 days in a calendar year		
**	1	June 487,60 mg/m ² /day exceedance	-	-		
	2	June 1187,50 mg/m ² /day exceedance				
	3	June 1734,50 mg/m ² /day exceedance				
	4	No exceedance				
	5	No exceedance				
	6	No exceedance				
***	1	No exceedance	No exceedance	137 µg/m ³ – measuring point Stari Kostolac 140 µg/m ³ – measuring point Drmno		
	2	No exceedance				
	3	No exceedance				
	4	No exceedance				
Air quality indicators		Particulate matter PM ₁₀ (µg/m ³)				
Averaging period		ГБ	TB	ГТ		
*One day		50 (at most 35 times in a calendar year)	50	0		
***Calendar year		40	40	0		
*	1	Exceedance of 10 days out of 84 days in total	10 days out of 84 days			
	2	Exceedance of 10 days out of 84 days in total	10 days out of 84 days			

	3	Exceedance of 5 days out of 84 days in total	5 days out of 84 days	
	4	Exceedance of 8 days out of 84 days in total	8 days out of 105 days	
	5	Exceedance of 2 days out of 42 days in total	Exceedance of 2 days out of 42 days in total	

LV – limit value; TV – tolerance value; LT – limit tolerance

4.2.2. Emission Measurements of Matters Affecting Air Quality

Total sulphur content of the Kostolac lignite used for combustion in the Kostolac TPPs and OCMs Branch is around 1.3%.

Flue gases containing sulphur dioxide, nitrogen oxides, carbon dioxide and dust, after treatment, i.e. dust separation by electrostatic precipitators are emitted into the air through stacks:

Kostolac A TPP

- 105m - Unit A1 (K1 (1 ESP) and K2 (1 ESP))
- 110m - Unit A2 (1 ESP)

Kostolac B TPP

- 250m units B1 (1 ESP) and B2 (1 ESP)
- 180 m after construction of FGD plant for units B1 and B2 (each boiler has its own flue gas pipe)

In accordance with legal requirements occasional individual measurements of emission of matters affecting the air quality are performed regularly and continuous measurements are also performed on all Kostolac TPPs and OCMs Branch units.

Occasional emissions measurements of matters affecting air quality for TPP Kostolac B and continuous measurements for TPP Kostolac A

During 2020, emission measurements of matters affecting air quality were carried out occasionally and continuously on Kostolac B1 TPP and Kostolac B2 TPP units. Occasional measurements were done in June and December.

Upon the obtained approval for Kostolac A1 and A2 TPP, continuous measurements for 2020 are in function. Continuous measurements include: flue gas parameters (temperature, pressure and humidity), volume flow rate, oxygen content and mass concentrations, as well as emission factors for sulphur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), chlorine compounds (HCl) fluorine compounds (HF) and dust.

Table 69 provides an overview of dust emission measurements results in June and December 2020.

Table 69

Kostolac TPPs and OCMs Branch				
Occasional dust emission measurements in 2020				
Kostolac B1 and B2 TPP		June	December	Average
Particulate matters (mg/Nm ³)	TEKO B1	32,13	32,6	32,36
	TEKO B2	63,0	67,76	65,38

Table 70 gives overview of the average annual value results of continuous measurements of emissions affecting air quality for TPPs and OCMs Kostolac Branch, TPP Kostolac A and occasional measurements in TPP Kostolac B, in Units B1 and B2 for 2020.

Occasional measurements for B1 and B2 units were done on 29th and 30th June 2020 and 23rd and 24th December 2020.

Table 70

Kostolac TPPs and OCMs Branch				
Continuous measurements TPP Kostolac A for 2020			Occasional measurements of matters TPP Kostolac B	
Mass concentrations of matters affecting air quality (mg/Nm ³)				
Organisational unit	Kostolac A TPP		Kostolac B TPP	
Boiler	A1	A2	B1	B2
Heat capacity MWt	358	689	1.077,5	1.077,5
SO ₂	4.996,365	5.073,84	4.896,70	4.789,80
NO _x (NO ₂)	344,20	491,00	228,25	239,20
CO	50,40	23,60	183,20	82,05
Particulate matters	64.30	66.90	32.36	65.38

▪ Continuous emissions measurements of matters affecting air quality

Between 2006 and 2014, at the Kostolac TPPs and OCMs Branch, devices for continuous measurement of matters affecting air quality (SO₂, NO_x, CO and dust) were installed– at Kostolac B TPP units (SO₂, NO_x and dust) and TPP Kostolac A2 unit, while at TPP Kostolac A1, continuous measurements (SO₂, NO_x, CO and dust) have been performed since 2nd February 2018. In addition to these basic devices, data acquisition and processing equipment was also installed and additional measurement devices: oxygen (O₂) content and humidity as well as temperature, pressure and flue gases flow volume.

Kostolac A TPP

Consent to continuous measuring at the unit A1 was obtained by the decision of the Ministry of Environmental Protection no. 353-01-00182/2018-03 dated 02.02.2018. TPPs and OCMs Kostolac Branch for TPP A submitted a request for obtaining consent to continuous measuring for units A1 and A2. Consent to continuous measuring for the units A1 and A2 was obtained by the decision of the Ministry no. 353-01-01913/2019-03 dated 23.10.2019 and thus the previously obtained decision on consent for the unit A1 ceased to be valid. Consent to continuous measuring of A1 and A2 units emissions was obtained for: sulfur dioxide, nitrogen oxides, carbon monoxide and particulate matters.

In 2020, tests of proper operation of automatic measuring systems for continuous measurements of emissions, according to requirements set in SRPS EN 14181(AST) – QAL 2, were done in Units A1 and A2.

In March 2020, the Annual Control Test of automatic measuring systems on A1 stack was done, Report No. E-08/20/Petroprocess/TEKO-A1/ AST, while the Annual Control Test on A2 stack was done in September, Report No. E-20/20/TEKO-A2/ AST by the Mining Institute Belgrade.

Kostolac B TPP

Kostolac B TPP comprises two identical units, each of 348.5 MW. Each unit has its own electrostatic precipitator with two branches. Continuous emission measurement devices for SO₂, NO_x, CO and dust, as well as O₂ content and flue gas flow rate were installed on the flue duct behind the electrostatic precipitator, before ID fan.

New equipment for flue gas and dust emissions measurement has been installed in newly constructed desulphurization plant in Kostolac B (B1 and B2) TPP units downstream of stack desulphurization plant. Trial run of the plant was performed in the first quarter of 2019. After the trial run, performance measurements were done. After the performance measurements, QAL 2 and QAL 3 measurements were performed at TEKO B1 and B2 unit. After obtaining the results in 2018, the request for continuous measurements approval was submitted to the Ministry of Environmental Protection on 23rd May 2018. Due to incomplete documentation submitted, the Ministry of Environmental Protection requested its supplementation. Kostolac TPPs and OCMs Branch supplemented everything that had been missing, so that the consent to the continuous measurement of emissions from stationary source (after the desulphurization plant) was obtained by the Decision no. 353-01-01225 / 2018-03 dated 20.12.2019 for units B1 and B2. In October 2020, the Report of the Commission for technical inspection of the works executed on construction of the plant for FGD in TPP Kostolac B, No. 12.03.-

517595/1-2020. dated 23.10.2020 with a certificate of the Commission for technical inspection on putting into trial run was submitted to the Ministry of Construction, Transport and Infrastructure.

The flue gas desulphurization plant in TPP Kostolac B was put into trial run in October 2020.

Table 71 summarises the data related to the unit equipped with the equipment for continuous measuring of emissions affecting air quality in organizational units of Kostolac TPPs & OCMs Branch, as of 2020.

Table 71

Kostolac TPPs & OCMs Branch									
Level of unit being equipped with devices for continuous emission measurement as of 2020									
Analysers		Particulate matters	Emitted matters		Parameters				
			Gases		Content			p and t	Flow rate
			SO ₂ , NO _x (NO ₂), CO; particulate matters	HCl и HF	Humidity	CO ₂	O ₂		
TPP KOSTOLAC A	A1	Devices installed on the unit A1 stack, 4 parameters monitored Stack height is 105 m. Platform is located at the level 60 m.	Devices installed for both boilers on the stack	-	-	-	Devices on the stack		Measurement exists
	A2	A2: ESP left and right side (branch), on the stack, at the level of 63 m, external stack lining. Platform is located on the level of around 61m. Stack height – 110m. Total: 3 devices	One device installed	-	-	-	Devices installed on the stack, Total: 1 device In 2015, devices were installed for measurement of wet O ₂ and flue gas flow rate on the stack		Measurement at this unit exists
TPP KOSTOLAC B	B1	Devices installed on each unit on flue gas ducts behind each ESP, before (IDF). Total:2 devices B1: ESP1 and B2: ESP2	Devices installed on each unit behind ESP, before ID fan. Total: 2 sets	-	-	-	Devices installed on each unit behind ESP, before ID fan. Total: 2 sets		2 devices Installed on each of the units
	B2			-	-	-			
TPP KOSTOLAC B	B1	Devices installed after desulphurization plant (new stack height 180 m). Each unit has its own flue gas pipe. Devices for continuous emission measurement installed on each flue gas pipe	Devices installed on each flue gas pipe	-	-	-	Devices installed on each flue gas pipe (2 sets)		Devices installed on each flue gas pipe
	B2			-	-	-			

Data acquisition and processing equipment is an integral part of this equipment.

HF and HCl continuous measurement equipment has not been installed on any of the Kostolac TPP units.

Software performing statistical analysis of continuous measurements data (SO₂, NO_x (NO₂), CO and dust) is in operation on Kostolac A and Kostolac B TPP units. New flue gas and dust emission monitoring equipment has been installed (on the stack) after the FGD plant and new data processing software package has been installed, as well.

▪ Annual emissions of matters affecting air quality

Table 72 gives overview of dust emission, SO₂, NO₂, CO for TPP Kostolac in 2020. In unit A1 mean values of mass concentration and volume flow are calculated on the base of received results from continuous emission measurements in period between 1st January and 31st December 2020. In units B1 and B2 mean values of mass concentration and volume flow were calculated based on data of periodic measurements of air pollutant emissions (inspection report by Vinca). Data on operating hours for TPP Kostolac B1 and B2 were taken from the Process Analysis Department.

Table 72

Kostolac TPPs and OCMs Branch					
Emissions of matters affecting air quality (t/year) in 2020					
Organisational unit	Particulate matters	SO ₂	NO _x (NO ₂)	CO	CO ₂
TPP Kostolac A					
A1	201,73	15.675,58	1.079,89	158,09	759.645,22
A2	352,57	26.742,86	2.587,88	124,39	1.339.876,77
Total: Kostolac A	554,30	42.418,44	3.667,77	282,48	2.099.521,99
TPP Kostolac B					
B1	389,13	48.494,57	2.741,72	2.200,55	2.440.595,98
B2	674,50	46.602,19	2.467,28	846,29	2.500.096,00
Total: Kostolac B	1.063,63	95.096,76	5.209,00	3046,84	4.940.691,99
TOTAL: Kostolac TPPs and OCMs Branch	1.617,93	137.515,20	8.876,77	3.329,32	7.040.213,97

Table 73 gives fuel consumption in 2020.

Table 73

Kostolac TPPs and OCMs Branch		
Fuel consumption in 2020		
Fuel	Unit	Fuel consumption (t/year)
KOSTOLAC A TPP		
COAL	A1 - K1	-
	A1 - K2	-
	A1	879.894
	A2	1.552.884
	TOTAL	2.432.778
PETROLEUM	A1 - K1	-
	A1 - K2	-
	A1	1.563
	A2	1.064
	TOTAL	2.627
KOSTOLAC B TPP		
COAL	B1	2.742.700
	B2	2.810.524
	TOTAL	5.553.224
HEAVY FUEL OIL	B1	2.645
	B2	2.157
	TOTAL	4.802

▪ Harmonization of emissions of matters affecting air quality with EU legislation

Units B1 and B2 of TPP Kostolac are on the final list of old big plants for combustion in National plan for emission reduction according to the letter of the Environmental Protection Ministry no. 353-01-00122/2017-03 dated 29.12.2017.

Particulate matters

To date electrostatic precipitators were reconstructed on all Kostolac TPP units: on units A1 and A2 - Kostolac A TPP, units B1 and B2 - Kostolac B TPP. Guaranteed mass concentration for dust defined by the equipment supplier at the electrostatic precipitator outlet is $\leq 50 \text{ mg/Nm}^3$ which is in line with the EU and Serbian legislation.

Sulphur dioxide

During the design and construction of Kostolac A and B TPP, no measures were taken to reduce SO_2 emissions, given that at the time no SO_2 emission limit values (ELVs) were stipulated.

Mass concentration of SO_2 in the flue gas are well above ELVs prescribed by Serbian and EU regulations. In order to reduce sulphur oxide emissions below 200 mg/Nm^3 in accordance with EU legislation desulphurization plant construction was finished at the end of December 2016, as well as new stack with two pipes (each unit, B1 and B2, has its own pipe). Performance measurements were executed during operation of each unit individually and during simultaneous operation of units. Since October 2020, the flue gas desulphurisation plant is in trial run.

Nitrogen oxides

New burners were installed on TEKO B unit B1 during unit revitalisation in 2014 to reduce nitrogen oxides emissions below the level of 200 mg/Nm^3 . Measurement results indicate considerable nitrogen oxides emission reduction. Emissions prior to reconstruction ranged from 450 to 600 mg/Nm^3 , average value of two occasional measurements of nitrogen oxides in Unit B1 was $228,2 \text{ mg/Nm}^3$ in 2020.

During 2019, system for reduction of nitrogen oxides on TPP Kostolac B2 was installed. After major overhaul, B2 unit was started on 19.12.2019, while periodical measurement on B1 and B2 units was done on 25.12.2019. Average measured value in two occasional measurements of nitrogen oxides in Unit B2 was $239,2 \text{ mg/Nm}^3$ in 2020.

It is planned to implement a measure on secondary reduction of nitrogen oxide emission by controlled adding of urea in TPP Kostolac B.

4.2.3. Emission Measurements of Matters Affecting Water Quality

Water used to cool condensers' steam has the highest share in process water used by Kostolac TPPs. Water used for this process is captured from the Danube River. To be precise, the captured river water is first used to cool the condensers and subsequently discharged into the recipient (Danube - Kostolac A or Mlava - Kostolac B) via the return channel.

A small share, about 2.5% of water is used for hydraulic transport of ash and slag. By transition to, i.e. connecting the Kostolac B TPP units to the thick slurry transport system (solids: water ratio - 1:1) water consumption is reduced. Under the thick slurry transportation system in place at the Kostolac B TPP there is no overflow water, while the created drainage water is recycled (returned) from the ash landfill to the thermal power plant and reused for hydraulic transport of ash and slag. Wastewater drained from Cirikovac ash landfill and then discharged into the Mlava river was sampled and tested in 2020.

Decarbonised water of Kostolac A TPP is partly used for cooling while the other part is treated with ion exchangers (ion mass) to obtain demineralised water.

Demineralised water (demi water) used by the boiler water-vapour system is produced by chemical water treatment plants. Demi water is produced by chemical purification of groundwater - Kostolac B TPP or by purification of river water (Danube) - Kostolac A TPP in ion exchangers.

Plant for water preparation for the purpose of supplementing the remote heating system of the cities of Kostolac and Pozarevac was put in operation.

Raw water is captured from tube wells located along the Mlava River bank. HCl or NaOH solution is used to regenerate ion masses in ion-exchange columns, resulting in acid and alkaline wastewater partly used by the

ash and slag transportation system of Kostolac B TPP, while in the case of Kostolac A TPP regeneration products are discharged into the return cooling water channel (hot water channel).

Sanitary wastewater is discharged directly or indirectly into the river (Mlava) after mechanical-biological treatment under aerobic conditions by treatment devices (Kostolac B TPP). Sanitary wastewater of Kostolac A TPP is discharged into the municipal sewage system which is subsequently discharged into the Kostolac A TPP return cooling water channel.

After water containing oil and/or heavy fuel oil and/or petroleum is collected, only water containing petroleum is pumped back into the tank. Wastewater is discharged through storm sewage into the Kostolac A TPP hot water channel while waters containing heavy fuel oil are transported to the slurry station and subsequently to the OCM Cirikovac ash landfill.

The Kostolac OCMs and TPPs Branch Wastewater Management Programme includes physical, chemical, bacteriological and radiological measurements of the following parameters: air and water temperature, water turbidity, pH, electrical conductivity, soluble O₂, % of O₂ saturation, COD, BOD₅, unfiltered water evaporation residue, filtered water evaporation residue, total suspended particulate matter, particulate matter, total surfactants, mineral oils, phenols, alkalinity, F, Cl, NO₂, NO₃, SO₄, PO₄, NH₄, Ca, Mg, hardness, Al, Fe, Mn, Cd, Cr⁶⁺, total Cr, Cu, Ni, Zn, Pb, Hg, As, B, α and β activity, microbiological analysis of the waters in the recipient.

Monitoring also includes:

- Wastewater at the source and/or at the point of discharge into the river and/or at the point of discharge of hot water into the channel;
- River water - water recipient on profiles upstream and downstream of wastewater discharge;
- Groundwater around the ash and slag landfill SKO and OCM Cirikovac, at coal landfill – Kostolac B TPP, around the oil tanks at OCM and TPP A and around gas station at OCM Drmno.
- Sanitary waters from the plant in TPP Kostolac B

Long-term studies have shown that concentrations of sulphate and arsenic are essential parameters used to monitor the ash landfill impact on groundwater. Sulphate ions originating from the landfill migrates fastest, and is considered to be an excellent tracer to monitor the groundwater impact of landfills. On the other hand, arsenic reaches groundwater much slower because it is previously adsorbed by the aluminosilicate surface (landfill ash and/or clay making an integral part of the soil). Drmno OCM dewatering water quality is also monitored. Drmno OCM dewatering water is discharged to the Mlava and/or Danube rivers, and partly used as cooling water by Kostolac B TPP.

Kostolac OCMs and TPPs Branch wastewater quality and its impact on recipients is controlled 12 times a year and 4 times a year for groundwater and sanitary water in line with the Law on Waters (Official Gazette of RS, no. 30/2010, 93/2012, 101/2016, 95/2018) and The Rulebook on Methods and Conditions for Wastewater Quantity Measurement and Quality Testing, and the Content of the Measurement Report (Official Gazette of RS, no. 33/2016), Regulation on pollutants' emission limit values in waters and deadline for their achievement (Official Gazette of RS, no. 67/2011, 48/2012, 1/2016).

Annual surface and ground water quality reports for each organizational unit of the Kostolac OCMs and TPPs Branch are made available on request to competent inspectors and relevant institutions when providing opinions required for the issuing of water conditions and water permits.

Water quality measurement results are presented in the Environmental Report prepared every year for each organisational unit. In addition, results are presented in the National Pollution Sources Register of Serbia sent by the Kostolac OCMs and TPPs Branch each year in accordance with the legal obligation to the Environmental Protection Agency.

Kostolac OCMs and TPPs Branch surface and ground water quality was controlled in 2020 by the accredited legal person for chemical testing, Mining and Metallurgy Institute Bor and Institute for Occupational Safety Novi Sad.

Table 74 provides the analysis of wastewater and recipient watercourse quality data in 2020 in terms of their legal compliance.

In the case of surface waters, legal compliance is evaluated by comparing the measured values of substances affecting water quality with the limits defined by the Regulation stipulating limit values for pollutants in surface and ground waters and sediments, and deadlines for their achievement (OG RS № 50/2012) while wastewater values are compared with the limits defined by the Regulation stipulating limit values of pollutants emissions in water and deadlines for their achievement (OG RS № 67/2011, 48/2012 and 1/2016).

Table 74

Kostolac TPPs & OCMs Branch		
Wastewater and watercourses-recipient quality in 2020		
Organisational unit	Kostolac A TPP	Kostolac B TPP
Water type		
Drainage wastewater from the ash landfill	<ul style="list-style-type: none"> Electrical conductivity: 902-1128 µs/cm Arsenic: 10 - 14 µg/l Sulphates: 356,3-455,3 mg/l 	Main watersump at OCM Cirikovac landfill <ul style="list-style-type: none"> Electrical conductivity: 1689-1982 µs/cm Arsenic: 10-21 µg/l Sulphates: 454,4-600,4 mg/l
Overflow wastewater from the ash landfill	<ul style="list-style-type: none"> Electrical conductivity: 610,0-888,0 µs/cm Arsenic: 27-71 µg/l Sulphates: 182,3 -341,6 mg/l 	
Watercourse (recipient)	There were no significant changes in the Danube River quality upstream – downstream from Kostolac A TPP: Danube upstream <ul style="list-style-type: none"> Arsenic: <25 µg/l, below MPC-50µg/l, upstream and downstream from the discharge point Sulphates: 20,03 -30,55 mg/l upstream and 20,05 – 33,3 mg/l downstream Mineral oil, at the Danube testing points upstream and downstream < 20µg/l No temperature increase of the Danube River water	There were no significant changes in the Mlava River quality downstream - upstream from Kostolac B TPP: <ul style="list-style-type: none"> arsenic: 10-25µg/l, upstream and 10 -15 µg/l downstream from the discharge point sulphates: 20,03-30,5mg/l upstream and 20,05-33,3 mg/l downstream Mineral oil in the Mlava River upstream and downstream was < 10 µg/l No temperature increase of the Danube River water

Table 75 provides the analysis of groundwater quality data in the piezometers at the locations of Kostolac TPPs and OCMs Branch. During 2020, groundwater quality was controlled in 14 piezometers.

Table 75

Kostolac TPPs and OCMs Branch			
Groundwater quality in 2020			
Concentration	Permitted values		Organisational unit
	MPC	RV	TPP Kostolac A and TPP Kostolac B
Sulphates (mg/l)	250		in piezometers around cassette B ranging 10,47-385,90 in piezometers around the cassette C ranging 278,6-436,6 in piezometers around the Cirikovac ash landfill: 0,61-414,80 piezometers away from the SKO landfill: 328,0-494,70 around the coal yard D5: 25,24-40,37 piezometers around oil tanks TPP A: 23,38-168,2 piezometers around gas station OCM Drmno: -67,93-415,10
Arsenic (µg/l)	10	60	in piezometers around cassette B ranging 16-64 in piezometers around the cassette C ranging 10-30 in piezometers around the Cirikovac ash landfill: 10-29 piezometers away from the SKO landfill: 10-20 around the coal yard D5: 10 piezometers around oil tanks TPP A 10-19 piezometers around gas station OCM Drmno - :<10

Zink (mg/l)	3.000	800	in piezometers around cassette B ranging 30-127 in piezometers around the cassette C ranging 30-206 in piezometers around the Cirikovac ash landfill: 30-28480 piezometers away from the SKO landfill: 30-7226 around the coal yard D5: 1680-3320 piezometers around oil tanks TPP A - 30-95 piezometers around gas station OCM Drmno – 3-610
Manganese (mg/l)	50		in piezometers around cassette B ranging 0,014-0,193 in piezometers around the cassette C ranging 0,01-0,081 in piezometers around the Cirikovac ash landfill: 0,0044-0,873 piezometers away from the SKO landfill: 0,009-1,73 around the coal yard D5: 0,118-0,161 piezometers around oil tanks TPP A - 0,047-0,123 piezometers around gas station OCM Drmno: 0,004-1,640
Ammonia (mg/l)	0.1		in piezometers around cassette B ranging 0,037-0,10 in piezometers around the cassette C ranging 0,078-4,99 in piezometers around the Cirikovac ash landfill: 0,078- 4,24 piezometers away from the SKO landfill: 0,0780-0,42 around the coal yard D5: 0,078-0,102 piezometers around oil tanks TPP A : 0,078-5,38 piezometers around gas station OCM Drmno: 0,78-0,469
Nitrites (mg/l)	0.03		in piezometers away from the SKO landfill: 0,010-0,038 in piezometers within the SKO landfill (cassette B): 0,003-0,02 mg/l piezometers around gas station OCM Drmno: 0,003-0,307 in other piezometers the values range was 0,001-0,01 mg/l
Nitrates (mg/l)	0.05		in piezometers around cassette B ranging 0,04-0,50 in piezometers around the cassette C ranging 0,11-0,50 in piezometers around the Cirikovac ash landfill: 0,11-8,45 piezometers away from the SKO landfill: 0,11-9,13 around the coal yard D5: 0,11-0,50 piezometers around oil tanks TPP A: 0,11-3,71 piezometers around gas station OCM Drmno: 1,16-7,41
Copper (µg/l)	2000	75	in piezometers around cassette B ranging :< 20 in piezometers around the cassette C ranging :< 20 in piezometers around the Cirikovac ash landfill: 20 - 42 piezometers away from the SKO landfill: < 20 around the coal yard D5: < 20 piezometers around oil tanks TPP A: < 20 piezometers around gas station OCM Drmno: 20-28
Cadmium (µg/l)	3	6	in piezometers around cassette B ranging < 0,4 in piezometers around the cassette C ranging <0,4 in piezometers around the Cirikovac ash landfill : 0,4 - 0,8 piezometers away from the SKO landfill: 0,4 -1,3 around the coal yard D5: 0,4 - 2 piezometers around oil tanks TPP A : < 0,4 piezometers around gas station OCM Drmno : 0,4- 0,7
Lead (µg/l)	10	75	in piezometers around cassette B ranging :< 10 in piezometers around the cassette C ranging : <10 in piezometers around the Cirikovac ash landfill : 10-134 piezometers away from the SKO landfill: 10-73 around the coal yard D5: 10-16 piezometers around oil tanks TPP A – :<10 piezometers around gas station OCM Drmno : 10-89
Mercury (µg/l)	1	0,3	in piezometers around cassette B ranging :< 0,3 in piezometers around the cassette C ranging from :<0,3 in piezometers around the Cirikovac ash landfill: <0,3 piezometers away from the SKO landfill: <0,3 around the coal yard D5:< 0,3 piezometers around oil tanks TPP A – <0,3 piezometers around gas station OCM Drmno - <0,3

Mineral oil (µg/l)		600	in piezometers around cassette B ranging 10-305 in piezometers around the cassette C ranging <10 in piezometers around the Cirikovac ash landfill : 10-54 piezometers away from the SKO landfill: 10-26 around the coal yard D5: 10-20 piezometers around oil tanks TPP A: 10-168 piezometers around gas station OCM Drmno: 10-23
---------------------------	--	------------	---

MPC – drinking water;

RV - Remediation values of hazardous and harmful substances concentration and values indicating severe groundwater contamination.

Legal compliance is evaluated by comparing the groundwater measured values of hazardous and harmful substances concentration from piezometers, remediation values of hazardous and harmful substances concentration and values indicating severe groundwater contamination in line with the Regulation on Limit Values for Polluting, Harmful and Hazardous Substances in the Soil (OG RS № 30/2018 and 64/2019) pursuant to the Law on Soil Protection.

Table 76 provides analysis of data related to sanitary waste water quality at the inlet and outlet of the plant for treatment (BIODISK) for 2020.

Table 76

Kostolac TPPs and OCMs Branch	
Sanitary wastewater treatment plant operation in 2020	
Pollutants concentration (mg/l)	BIODISK plant Kostolac B TPP
Suspended solids (mg/l)	
Plant inlet	16,0
Plant outlet	4,8
5-day biological oxygen demand (BOD₅)	
Plant inlet	3,1
Plant outlet	2,0
Operation efficiency evaluation	Meeting guaranteed values for suspended solids for all measurements

Emission limit values according to the facility capacity, based on the Regulation on Emission Limit Values of Pollutants in Water are within allowable limits, (ELV for biological oxygen consumption is 50mg/l and total suspended matter 75mg/l).

According to the instructions provided by the manufacturer, the primary sedimentation tanks should be emptied once a year, while all devices should be regularly maintained and overhauled.

▪ Water amounts

Table 77 provides an overview of water amounts captured and discharged by the organizational units of Kostolac OCMs and TPPs Branch for 2020.

Table 77

Kostolac TPPs and OCMs Branch					
Water amounts in 2020 (m³/year x10³)					
Organizational unit	Water intake		Discharged wastewater		
	Used amounts		Return cooling water	Overflow and drainage water from the ash landfill	Sanitary wastewater
	Surface	Ground*			
KOSTOLAC A TPP	301.500	-	295.232	5.412	82
KOSTOLAC B TPP	775.800	808	767.809	1.054	213
TOTAL: Kostolac OCMs and TPPs Branch	1.077.300	808	1.063.041	6.466	295

*for the purposes of technical and potable water preparation

For the purposes of hydro mixture transportation from TPP-OCM A and TPP-OCM B to Cirikovac ash landfill, part of return cooling water is used and returned by recirculation.

Annual amount is calculated on the basis of data on the capacity and water capture and discharge pumps operating time. In cases of gravitational wastewater discharge calculations are made on the basis of previously measured wastewater amounts.

▪ **Improvements aimed at reducing wastewater impacts on surface and groundwater**

A new ash and slag handling system at Kostolac A TPP was put in operation during 2019. Upon system commissioning, new system performances were under proof.

Ash and slag were disposed to the Srednje Kostolacko Ostrvo landfill. Commissioning of the new system (thick slurry transportation) Kostolac A TPP moved to ash and slag disposal to ash and slag landfill of Cirikovac OCM. The Srednje Kostolacko Ostrvo landfill serves as back-up until the phase of its shutdown.

Kostolac B TPP units were connected to the new thick slurry collection, transportation and disposal system. Ash and slag are disposed to the Cirikovac OCM. Thick slurry transportation system is of circulation type, because water serves to transport ash and slurry and circulates the system.

During 2020, in the course of operation of the new flue gas desulfurization facility, before its mixing with other wastewaters, a control was performed on wastewater of this facility in accordance with the Regulation about limits for wastewater from FGD system. A temporary solution for the discharge of this wastewater is into ash - slurry pumping station until the construction of wastewater treatment facility.

During 2020, the construction of TPP Kostolac B Wastewater Treatment Facility has commenced. Previously the construction permit was issued by the Ministry of Construction, Transport and Infrastructure no. 351-02-00028/2019 as of 16th April 2019, as well as the Decision of the Ministry of Environmental Protection on the approval on the updated Environmental Impact Assessment Study for the Wastewater Treatment Facility (no.353-02-00252/2019-03 as of 11th July 2019).

At the location of TPP Kostolac B, the Project "Construction of a wastewater treatment plant" is in the final phase. The decentralized wastewater treatment system consists of three major plants:

1. Sanitary wastewater treatment plant
2. Oily and fuel oily wastewater treatment plant, with the capacity of 2x 30m³/h
3. Wastewater treatment plant from flue gas desulphurisation and acid-alkaline water from a chemical water treatment plant, with the capacity of 2 x 45m³/h.

The sanitary wastewater treatment plant was built in 2020. and put into trial operation which is still in progress.

The oily and fuel oily wastewater treatment plant has been completed and staff training and technical inspection (dry and wet tests) are underway.

The plant for purification of wastewater from desulphurization of flue gases and acid-alkaline water from the facility Chemical preparation of water is in the final phase of construction. Commissioning is expected soon.

Within the mentioned Project, the construction of 4 oil separators is planned, which are installed on the atmospheric sewage.

4.2.4. Emission Measurements of Matters Affecting Soil Quality

During 2020. testing of soil quality and content of the total and available forms of heavy metal pollutants in soil were carried out, as well as the chemical composition control in the vicinity of the Kostolac TPPs and OCMs Branch aimed at monitoring the ash and slag landfill impact. Kostolac TPPs and OCMs Branch monitors the content of pollutants in soil annually.

Annual reports about the ash and slag landfill impacts on soil are made available to inspection upon request. Soil quality measurement results are presented in the Environmental Report for the relevant year for each organizational unit. They are also presented in the National Cadaster of Polluters of the Republic of Serbia, delivered by PE EPS each year in accordance with the legal obligation to the Environmental Protection Agency.

Sampling and testing were carried out during 2020 by the authorized legal entity the Mining and Metallurgy Institute Bor for the Kostolac TPPs and OCMs Branch. Testing includes the following characteristics: physical soil properties, chemical soil properties, soil reaction, humus content, total nitrogen and organic carbon content, nitrate and nitrite ions content, available phosphorus and potassium content, content of heavy metals and other toxic elements.

Soil control program covered: field and laboratory measurements on representative measuring points shown on the topographic map (GPS identified points), allowing the monitoring of parameter changes on these measuring points in the future. Measuring points are defined depending on the distance from the landfill.

- landfill (ash)
- inside the impact zone as follows:
 - Zone 1 - up to 1km from the landfill,
 - Zone 2 - from 1km to 3km from the landfill and
 - Zone 3 - from 3km to 5km from landfill
- outside the landfill zone (checkpoints).

Based on the results obtained from soil analysis with sampling according to sampling plan during vegetative period (August) and non-vegetative period (December) at the Kostolac TPPs and OCMs Branch location, at 70 measuring points of sampling depth of 0 – 30 cm, 7 measuring points of sampling depth of 30 – 60 cm and 2 measuring points of sampling depth of 0 – 50 cm, the conclusion is as follows:

- Soil acidity of samples ranged between 5,6 and 8,6 in H₂O and between 5,1 and 8,2 in KCl.
- Total nitrogen content in samples ranged between 0,04% and 0,68%.
- Organic carbon compounds in soil samples ranged between 0,25% and 9,82%.
- Nitrite ion NO₂⁻ content in samples ranged between 0,5 mg/kg and 65,7 mg/kg.
- Nitrate ion NO₃⁻ content in samples ranged between 0,5 mg/kg and 3434,97 mg/kg.
- The amount of readily available phosphorus in samples ranged between 0,42mg/kg and 519,9 mg/kg.
- The amount of readily available potassium in tested samples ranged between 4,8 and 345,8 mg/100g.
- In tested soil samples, the content of iron ranged between 0,02% and 3,8%. The total concentration of iron in soil was normal and of geochemical origin.
- In tested samples, the content of organic matters samples ranged between 0.43% and 16.90%.
- In tested samples the clay content ranged between 0,00% and 24%.

The comments related to obtained results are based on maximum allowed concentrations and limit and remediation values of concentration of hazardous and harmful substances also prescribed by Regulation identifying threshold values of polluting, harmful and hazardous substances in soil (OG RS no. 30/2018 and 64/2019, pursuant to the Law on Soil Protection, Annex 1 Limit, maximal and remediation values of polluting, harmful and hazardous substances in soil).

Table 78 shows measurement results evaluation in accordance with the aforementioned regulations.

Table 78

KOSTOLAC TPPs and OCMs BRANCH			
Content of hazardous and harmful substances in soil in 2020			
Matter (mg/kg)	MPC	LV	RV
	mg/kg		
Chromium (Cr)	100	100	380
Chromium content in tested samples ranged between 13,9 mg/kg and 110,4mg/kg. In 8 soil samples values of chromium <i>exceed</i> MPC, and in 22 samples LV are exceeded, and in all tested oil ssamples concentration of chromium are <i>bellow</i> RV.			

Nickel (Ni)	50	35	210	Nickel content in tested samples ranged between 20,9mg/kg and 220,4 mg/kg. In 71 tested soil samples values of nickel exceed MPC, while in 146 tested soil samples values of nickel exceed HV. In tested soil samples concentration of nickel are bellow RV. Increased nickel values (above MPC) in all tested soil samples most likely depend on geochemical soil content since earlier research showed that naturally elevated nickel content is present in alluvial deposits of our rivers (Kolubara, Great Morava).
Lead (Pb)	100	85	530	Lead content in tested samples ranged between 8,1mg/kg and 121,2 mg/kg. In 2 soil samples values of lead exceed MPC, in 8 samples values of lead exceed LV. In all tested soil samples, concentration of lead are bellow RV.
Copper (Cu)	100	36	190	In tested samples the concentration of copper ranged between 8,0mg/kg and 160,7mg/kg. In 71 soil samples, the concentration of copper exceeds LV. In tested soil samples the copper values were bellow RV. In 6 tested samples copper content exceeds MPC.
Zinc (Zn)	300	140	720	In tested samples the concentration of zinc ranged between 34,0 mg/kg and 160,7 mg/kg. In 42 soil samples, the concentration of zinc exceeds LV. In tested soil samples the zinc values were bellow RV. In all tested sample the content of zinc does not exceed maximum permissible concentration. The concentration of zinc in all tested soil samples was bellow MPC and remediation levels, so this soil cannot be deemed polluted with this element..
Cadmium (Cd)	3	0.8	12	Cadmium content in tested samples ranged between 0,4 mg/kg and 2,2 mg/kg. At 52 soil samples values of cadmium exceed LV. In tested soil samples cadmium levels were <i>bellow RV and MPC</i> .
Arsenic (As)	25	29	55	Arsenic content in tested samples ranged between 2,3 mg/kg and 42,3mg/kg. Arsenic content in 42 tested soil samples exceeded limit values. There was no samples exceeding MPC, so that all samples were lower than remediation values within the prescribed values for arsenic content..

Note: Kostolac TPP and OCM environmental monitoring plan and program foresees monitoring of Kostolac TPP and OCM Branch operation impact every second year.

4.2.5. Environmental Noise Measurements

Noise measurements were performed in 2020 on eight measurement points in accordance with the Noise Protection Act (OG RS № 36/2009 and OG RS № 88/2010), Rules stipulating noise measurement methodology, the content and form of noise measurement reports (OG RS № 72/2010) and the Rules stipulating noise indicators, limits, methods for evaluating noise indicators, disturbance and harmful environmental noise effects (Official Gazette of RS, No. 75/2010). Noise measurement on the locations of thermal power plants was carried out by an authorized legal entity on 6 measurement points, while on the location of open cast mines, on two measurement points it is presented in the Report for OCM.

Measurements were carried out on the following measuring points:

1. TEKO A – Intersection towards „Dragulj“
2. TEKO A - FIO Minel
3. TEKO A – „Prim“ Kostolac
4. TEKO B – container park
5. TEKO B – ship lock on Mlava River
6. TEKO B – Drmno village – Crushing plant

Table 79 shows the measured environmental noise levels in 2020 for the Kostolac TPPs and OCMs Branch (organisational unit Thermal Power Plant Kostolac A and Thermal Power Plant Kostolac B), especially during winter and summer seasons.

During noise levels measuring, the units operated at full capacity (TPP A1 – 100MW; A2 - 210 MW; B1 - 348,5 MW; B2 - 348,5 MW).

Local government of city municipalities of Kostolac and Pozarevac did not perform acoustic zoning in accordance with the Noise Protection Act (OG RS № 36/09 and 88/10).

Due to the lack of clearly limited acoustic zones, measuring points cannot be precisely determined, as well as the limits for these measuring points. For this reason, legal compliance of the Kostolac OCMs and TPPs Branch in this respect cannot be assessed.

Table 79

Kostolac TPPs and OCMs Branch						
Noise levels in 2020 (dB) (A)						
I measuring – winter						
Measuring point	TPP - OCM A			TPP - OCM B		
	Intersection towards „Dragulj“	FIO Minel	Prim Kostolac	Container park	Mlava River ship lock	Crushing facility
day	44,9	41,0	45,5	49,0	51,8	45,5
day	45,2	39,8	45,9	44,3	50,3	46,2
evening	45,9	43,7	53,8	53,7	53,8	52,9
night	45,4	37,0	41,9	52,5	54,9	52,1
night	43,5	39,9	43,1	53,7	54,7	52,8
II measuring – summer						
day	58,9	50,8	52,4	56,3	55,4	58,6
day	58,3	51,6	54,2	58,0	57,9	57,4
evening	54,1	58,4	57,0	58,4	53,5	49,3
night	54,4	52,1	50,9	54,7	51,5	43,9
night	52,2	54,1	53,4	53,1	54,3	44,2

In the upcoming period, the Study of Noise Reduction in Environment will be prepared for TPP and CHPP.

4.2.6. Waste

Table 80 shows waste production in 2020 for Kostolac TPPs and OCMs Branch (parts of the TPP Kostolac A and Kostolac B Branch).

Table 81 shows quantities of waste from Kostolac TPPs and OCMs Branch delivered in 2020 (parts of the TPP Kostolac A and Kostolac B Branch).

Table 80

Kostolac TPPs and OCMs Branch						
Waste generated in 2020						
SN	defining waste categories, its testing and classification OG RS № 56/2010 and 93/2019	Index number	Organizational unit			Note
	Назив		TPP-OCM A	TPP-OCM B	TOTAL (t)	
1.	Waste printer cartridges other than the ones indicated under 08 03 17	08 03 18	0,090	0,200	0,290	-
2.	Fly ash from coal	10 01 02	510.883,38	1.166.177,04	1.677.060,42	-
3.	Solid waste based on calcium in the process of flue gas desulphurization	10 01 05	0,000	55.113,3	55.113,3	Gypsum
4.	Mineral non-chlorinated hydraulic oil	13 01 10*	3,660	7,340	11,000	-
5.	Other emulsions	13 08 02*	0,580	0,000	0,580	Oil, water, grease, soil
6.	Packaging containing residues of hazardous substances or contaminated by hazardous substances	15 01 10*	0,140	0,300	0,440	Hydrazine packing
7.	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing, contaminated with hazardous substances	15 02 02*	0,100	0,600	0,700	Cotton
8.	Oil filters	16 01 07*	0,050	0,000	0,050	-
9.	Lead batteries	16 06 01*	0,630	0,200	0,830	Batteries
10.	Copper, bronze, brass	17 04 01	2,500	8,000	10,500	-
11.	Aluminum	17 04 02	2,730	9,680	12,410	-
12.	Iron and steel	17 04 05	251,550	1.178,05	1.429,60	Various thickness
			119,00	340,62	459,62	Impact plates and billets
13.	Cables different than those stated in 17 04 10	17 04 11	2,290	0,100	2,390	-
14.	Insulation material different than those stated in 17 06 01 and 17 06 03	17 06 04	68,580	187,06	255,64	Mineral wool
15.	Insulation material different than those stated in 17 06 01 and 17 06 03	17 06 04	7,349	0,000	7,349	Preinsulation pipes
16.	Construction materials containing asbestos (asbestos cement boards)	17 06 05*	0,150	0,000	0,150	Asbestos cement boards
17.	Plastic and rubber	19 12 04	15,000	0,000	15,000	Rubber tape
18.	Fluorescent tubes and other waste containing mercury	20 01 21*	0,200	0,300	0,500	-

19.	Rejected electric and electronic equipment other than that indicated under 20 01 21 and 20 01 23 which contains dangerous components	20 01 35*	0,275	0,500	0,775	Electric, electronic waste
-----	--	-----------	-------	-------	-------	----------------------------

Table 81

Kostolac TPPs and OCMs Branch							
Waste delivered in 2020							
SN	Official nomenclature of the Rules defining waste categories, its testing and classification OG RS № 56/10 and 93/2019)		Index number	Organizational unit			
				TPP-OCM A	TPP-OCM B	Total(t)	Note
	Sale with financial compensation						
1	Fly ash from coal		10 01 02	-	26.467,12	26.467,12	Sale with financial compensation
2	Solid waste based on calcium in the process of FGD		10 01 05	-	8.093,06	8.093,06	Sale with financial compensation
3	Mineral non-chlorinated hydraulic oil		13 01 10*	2,820	8,420	11,240	Sale with financial compensation
4	Iron and steel	Different thickness	17 04 05	547,88	1.177,79	1.725,67	Sale with financial compensation
		Impact plates	17 04 05	148,54	340,62	509,16	Sale with financial compensation
5	Aluminum		17 04 02	5,100	9,680	14,780	Sale with financial compensation
6	Lead batteries(batteries)		16 06 01*	8,800	0,000	8,800	Sale with financial compensation
7	Copper, bronze, brass		17 04 01	10,000	12,000	22,000	Sale with financial compensation
8	Cables other than stated in 17 04 10		17 04 11	18,300	0,000	18,300	Sale with financial compensation
9	Insulation materials other than stated in 17 06 01 and 17 06 03 (mineral wool)		17 06 04	7,420	92,06	99,480	Sale with financial compensation

4.3. Working Environment Monitoring, Safety and Health

Occupational Safety and Health Reports for 2020 include the following elements:

- **Working environment monitoring**
 - working environment noise measurements
- **Safety**
 - training
 - work injuries
- **Health**

4.3.1. Working Environment Monitoring

▪ Working environment noise measurements

In 2020 in TPP Kostolac A working environment conditions tests were not performed, i.e. working environment noise measurements were not performed. In 2020 in TPP Kostolac B periodic measurements and working environment tests at 119 work posts were performed. Measurements were performed for the following working environment parameters:

- Microclimate in summer (temperature, relative humidity, flow rate)

In 2020, noise measurements in TPP „Kostolac B“ were not performed.

4.3.2. Occupational safety

▪ Training

Employees are trained according to the Health and Safety Training Programme in PE „Elektroprivreda Srbije“ and in accordance with the procedures of the Health and safety management system, according to the requirements of ISO 45001 standard. Testing of occupational safety competence and knowledge is carried out minimum once a year in compliance with the Act on Kostolac TPPs and OCMs Branch risk assessment and Occupational Health and Safety Act. According to Occupational Health and Safety Act training within Kostolac TPP is performed whenever new workers are recruited, deployed to new workplaces, in the process of technological changes and the introduction of new equipment and work tools. Revision and knowledge tests were conducted for the employees working at high risk posts. Table 82 shows the number of employees foreseen for training and the number of trained employees in 2020.

Table 82

Kostolac TPPs and OCMs Branch					
Training in 2020					
Organizational unit	Number of employees	Foreseen for training		Trained	
		No.	%	No.	%
TPP Kostolac A	357	326	91,32	326	100,00
TPP Kostolac B	377	247	65,52	247	100,00
TOTAL: TPP KOSTOLAC BRANCH	734	573	78,06	573	100,00

Note: Some workers went through more than one training, for example due to relocation to other jobs or as a post injury measure

▪ Work injuries

Table 83 provides work injuries data for 2020.

Table 83

Kostolac TPPs and OCMs Branch						
Work injuries in 2020.						
Organizational unit	Number of employees	Injuries – Number of employees' ratio				
		Light	Serious	Fatalities	Total	%
KOSTOLAC A TPP	357	1	0	0	1	0,28
KOSTOLAC B TPP	377	1	1	0	2	0,53
TOTAL: Kostolac OCMs and TPPs Branch	734	2	1	0	3	0,41

4.3.3. Health

All employees at Kostolac TPPs are conducted to pre-employment and periodic medical examinations. Workers are directed to pre-employment medical examinations before they are hired and when they are deployed to a different workplace that has a higher risk factor. Employees working at high risk posts are directed to periodic medical examinations once a year. Periodic examinations in 2020 were performed at Occupational healthcare center Pozarevac.

Table 84. provides periodic examination data verifying the work capability of employees in 2020.

Table 84

Kostolac TPPs and OCMs Branch											
Work capability in 2020											
Organizational unit	Number of employees	Periodical examinations				Work capability					
		Referred to examination		Examined		Capable		Limited capability		Not capable	
		број	%	број	%	број	%	број	%	број	%
KOSTOLAC A TPP	357	107	29,97	107	100,00	97	90,65	10	9,35	0	0,00
KOSTOLAC B TPP	377	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
TOTAL: Kostolac OCMs and TPPs Branch	734	107	14,58	107	100,00	97	90,65	10	9,35	0	0,00

Note: Due to the declared pandemic of infectious disease, the number of employees referred for periodic medical examinations is not in line with the planned number.

4.4. Public complaints

Public complaints in 2020. are shown in the Table 85.

Table 85

Kostolac TPPs and OCMs Branch		
Public complaint in 2020		
Organizational unit	Complaint (made by)	Subject of complaint Measures taken
KOSTOLAC A TPP KOSTOLAC B TPP	Complaint by the citizens of Klenovik village	<p>The complaint refers to the increased noise emission at the location of the ash dump of OCM Cirkovac due to construction works and due to the increased frequency of mechanization necessary for the execution of works at the landfill.</p> <p>On December 31st, 2020, due to the worsened weather conditions, the works on the landfill were suspended.</p> <p>The Republic Inspector of Environmental protection ordered a measure of noise measurement while the works are in progress.</p> <p>In the Environmental impact study of Cirkovac ash landfill, Chapter 9 does not prescribe the measurement of noise at the location. Noise is created due to construction works (installation of protective foils on the ash dump).</p> <p>Measures taken: When the works start, the control of the speed of the truck and mechanization will be intensified.</p>

5. PANONSKE CHPPs BRANCH

Panonske CHPPs Branch comprises the following organizational units:

- **Novi Sad CHPP**
- **Zrenjanin CHPP and**
- **Sremska Mitrovica CHPP.**

5.1. Overview and Status of Permits

Overview and status of permits for 2020. are in Table 86.

Table 86

PANONSKE CHPPS BRANCH			
Overview and Status of Permits for 2020			
Organizational unit	Obtained permits and approvals (number and date)	New requestes for obtaining or extension of valid permits	Note
NOVI SAD CHPP	Decision on Water permit of Provincial Secretariat for Agriculture, Water Management and Forestry, No. 104-325-666/2020-04 , dated September 11, 2020		
ZRENJANIN CHPP	Water permit from the Public Water Management Company Vode Vojvodine for Zrenjanin CHPP, No. I-1539/3-18 dated August 13, 2019		Permit validity until 2024
SREMSKA MITROVICA CHPP	Decision on legalization of an illegally constructed facility in the process of production of industrial and decarbonized water, No. 351-29/2020-VI dated February 25, 2020		

5.2. Monitoring and Environmental Impact

5.2.1. Air quality measurements

Air quality monitoring in the vicinity of the Panonske CHPPs Branch organizational units is carried out as part of the monitoring financed and organized by individual organizational units (as requested by inspection). It should be noted that the air quality monitoring is within the competence of the competent authorities, public administration and authorized legal entities; therefore, air quality monitoring is carried out as part of the national automatic air quality monitoring network, comprising measuring points located in the vicinity of CHPP within Panonske CHPPs Branch.

Monthly and annual air quality reports in the vicinity of the Panonske CHPPs organisational units (when there are measurements) are made available to the local government and public administration upon request.

Novi Sad CHPP

No air quality measurements have been carried out in 2020.

Zrenjanin CHPP

No air quality measurements have been carried out in Zrenjanin CHPP since 2011.

Sremska Mitrovica CHPP

No air quality measurements in 2020.

5.2.2. Emission Measurements of Matters Affecting Air Quality

Flue gases containing sulphur dioxide, nitrogen oxides and dust are emitted through stacks:

- 160m – Novi Sad CHPP
- 160m - Zrenjanin CHPP
- Sremska Mitrovica CHPP
 1. 105m – concrete stack
 2. 77,5 m – brick stack, and

Auxiliary boiler room (3 boilers, each having its own stack – total 3 small metal stacks)

- 2 metal stacks – 7m,
- 1 metal stack – 4.7m.

In accordance with the legislation individual measurements of air pollutants are performed regularly, control measurements as required. Continuous measurements are carried out on boilers of Panonske CHPPs Branch organizational units only for the purpose of internal monitoring. In September 2019, organizational unit CHPP Novi Sad obtained the consent issued by the competent authority to carry out individual continuous measurements of the emissions of sulfur dioxide, nitrogen oxides, carbon monoxide and particulate matter.

▪ Individual emissions measurements of matters affecting air quality

Emissions of air pollutants for 2020 are given for each CHP individually based on measurements performed by an authorized legal entity "Vatrogas Institut", Novi Sad, in line with the Individual Air Emission Measurement programme. The programme includes measurement of flue gas condition (temperature, pressure and humidity), volume flow, oxygen content, as well as mass concentration and calculation of emission factors for sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matters. Since 2019, Novi Sad CHPPs has been independently performing continuous measurements of air emissions and, in accordance with that, has not performed occasional measurements. The control program includes measurement of flue gas condition (temperature, pressure and humidity), volume flow, oxygen content, as well as mass concentration and calculation of emission factors for sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), and particulate matter.

Table 87. summarizes the results of individual measurements of matters emissions affecting air quality for the Panonske CHPPs Branch conducted in 2020.

Table 87

PANONSKE CHPPs BRANCH		
Individual air emission measurements that impact on air quality in 2020		
Mass concentrations of pollutants that impact on air quality (mg/Nm ³)		
Novi Sad CHPP		
Unit	A1 (K1 и K2)	A2(K3)
Heat output	2x279 MWth	320 MWth
Heat output at stack	878 MWth	
Fuel	Gas	
SO ₂	-	-
NO _x (NO ₂)	-	-
CO	-	-
Particulate matter	-	-
Zrenjanin CHPP		
Unit	A1(K1 и K2)	A2 – out of operation
Heat output	2x250 MWth	
Fuel	Gas	-
SO ₂	-	-
NO _x (NO ₂)	-	-
CO	-	-

Particulate matter	-		-	
Sremska Mitrovica CHPP				
Unit	A3(K3 и K4)		Auxilliary Boiler Room	Biomass boiler TE.K - 405
Heat output	2x80 MWth		3x15 MWth	18 MWth
Fuel	Gas	Crude oil	Gas	Sunflower husk
ELV				
SO ₂			2,0	2,7
CO			2,7	145,8
NO _x (NO ₂)			148,3	452,9
Particulate matter			-	7,9

Boilers 2 and 3 of the Novi Sad CHPP fired natural gas during the entire 2020.

In 2020 no air pollutant emissions measurements were performed in Zrenjanin CHPP since generation unit was not in operation. Unit A2 has not been in operation nor in function since 1st November 2010.

The last emission measurement in Zrenjanin CHPP was conducted on boiler K1, heat output of 250 MW, Unit A1, in 2012. Since 2012, Unit A1 was not engaged in operation by EPS. For heating purposes of the Zrenjanin CHPP facilities, boiler T110 is used, heat output of 8.5 MW, which was in operation during the heating season of 2020. The average heat output used to heat own facilities is approximately 500 kW. Emissions were measured by an internal TESTO device, however due to the low boiler generation, the TESTO device was unable to register any pollutants. This means that emissions of pollutants were below the detection limit of the device.

During 2020 in the Sremska Mitrovica CHPP, one boiler fired biomass TE.K – 405 (sunflower husk) operated for 2643 hours, while auxiliary boiler in the auxiliary boiler room S-2400/2 operated exclusively on natural gas for 622 hours. Unit A3 was not in operation. Steam boilers S-2400/1 и S-2400/3 operated on natural gas less than 100 hours

Continuous emissions measurements of matters affecting air quality

In addition to the basic equipment consisting of analyses measuring mass concentrations of dust and gases, additional equipment was installed on stacks measuring oxygen, carbon dioxide and humidity content as well as temperature, pressure and flue gas flow rate, SO₂, CO, NO₂, NO_x, HCl, HF. Data acquisition and processing equipment was also installed.

Table 88 shows the continuous air emissions measurement equipment data for all the Panonske CHPPs Branch organizational units.

Table 88

PANONSKE CHPPs BRANCH										
Continuous air emissions measuring equipment in 2020										
Organisational unit	Particulate matters	Pollutants			Parameters					
		Gases		HCl and HF	Content			p	t	Flow
		SO ₂ , NO _x (NO ₂), CO			Humidity	CO ₂	O ₂			
Novi Sad CHPP	1 analyzer	1 analyzer	1 analyzer each			1 device each				
	Equipment installed at the level of 41.8 m, external stack lining. Platform located at the level of 40.0 m, external stack lining. Stack height - 160 m									
Zrenjanin CHPP	1 analyzer	1 analyzer	1 analyzer each			1 device each				
	Equipment installed at the level of 38 m, external stack lining. Platform located at the level of 37.0 m, external stack lining. Stack height - 160 m.									
Sremska Mitrovica CHPP	1 device each					1 device each				
	Equipment installed on the horizontal rectilinear flue gas duct of the biomass boiler TE.K – 405, connected to the brick stack (77.5 m height).									

Continuous measurements are aligned with the EN 14181_QAL1 standard. Statistical continuous measurements data analysis software prepares daily, monthly and annual reports.

During 2019, the consent for continuous measurements was obtained by the decision of the Ministry of Environmental Protection for independent performance of continuous emission measurements in Novi Sad CHPP, number 353-01-00293 / 2019-03 dated 19th September 2019.

Table 89 provides an overview of the results of continuous measurements of air emissions for Novi Sad CHPP in 2020.

Table 89

PANONSKE CHPPS BRANCH				
Continuous measuring of emissions affecting air quality in 2020.				
Organisational unit	Particulate matter	SO ₂	CO	NO _x (NO ₂)
Novi Sad CHPP	1,274	0,000	57,6	289,3

▪ Annual emissions of matters affecting air quality

Table 90 summarizes air pollutants emissions: dust, SO₂, NO₂ and CO₂ for the Panonske CHPPs Branch in 2020.

Annual SO₂ and NO₂ emissions were calculated on the basis of the measured mass concentrations, flue gas flow rate and operating time of each unit, while CO₂ emissions were calculated based on the fuel consumption data shown in Table 91 and ECF – emission correction factor.

Table 90

PANONSKE CHPPs BRANCH				
Emissions affecting air quality in 2020 (t/year)				
Organisational units	Particulate matter	SO ₂	NO _x (NO ₂)	CO ₂
NOVI SAD CHPP				
STACK, BOTH UNITS –CONTINUOUS MEASUREMENT	0,9825	0,000	245,36	138.938,42
TOTAL: NOVI SAD CHPP	0,9825	0,000	245,36	138.938,42
ZRENJANIN CHPP				
Unit A1	0,000	0,000	0,000	0,000
Unit A2	0,000	0,000	0,000	0,000
Total: Zrenjanin CHPP	0,000	0,000	0,000	0,000
SREMSKA MITROVICA CHPP				
Unit A3, B3/B4	0,000	0,000	0,000	0,000
S-2400/1	0,000	0,000	0,000	68,53
S-2400/2	0,000	0,034	1,831	1.369,88
S-2400/3	0,000	0,000	0,000	1,81
Biomass-fired boiler	0,790	0,258	43,679	121,74*
Total: Sremska Mitrovica CHPP	0,790	0,292	45,510	1.561,96
TOTAL: PANONSKE CHPPs	1,7725	0,292	290,87	140.500,38

Table 91

PANONSKE CHPPs BRANCH			
Fuel consumption in 2020			
Organisational unit	Fuel type		
NOVI SAD CHPP			
	Gas (kStm ³ /year)	Heavy fuel oil (kt /year)	Biomass (kt/year)
Stack, both units-continuous measurement	74.592,032	0,000	0,000
Total: Novi Sad CHPP	74.592,032	0,000	0,000
ZRENJANIN CHPP			
Unit A1	0,000	0,000	0,000
Unit A2	115,698*	0,000	0,000
Total: Zrenjanin CHPP	115,698*	0,000	0,000
SREMSKA MITROVICA CHPP			

Unit A3, B3/B4	0,00	0,000	0,000
S-2400/1	36,830	0,000	0,000
S-2400/2	736,135	0,000	0,000
S-2400/3	0,971	0,000	0,000
Biomass boiler	65,417	0,000	5,241
Total: Sremska Mitrovica CHPP	839,353	0,000	5,241
TOTAL: PANONSKA CHPPs	75.547,083	0,000	5,241

▪ Harmonization of air emissions with EU legislation

Sulphur dioxide

To reduce the Panonske CHPPs SO₂ emissions, the use of heavy fuel oil with Sulphur content of up to 1% was planned together with the combined cycle operation – gas/heavy fuel oil.

Novi Sad CHPP

Heat output of boilers is 2x279 MW and 1x320MW, whereby when one boiler fires heavy fuel oil with Sulphur content up to 1% ELVs will not be exceeded which is in line with EU legislation.

Zrenjanin CHPP

Heat output of the boiler is 2x250MW, whereby when one boiler fires heavy fuel oil with Sulphur content up to 1% ELVs will not be exceeded which is in line with EU legislation.

Sremska Mitrovica CHPP

Heat output of the boiler and auxiliary boiler are 2x80MW and 3x15MW respectively. When one boiler fires heavy fuel oil with Sulphur content up to 1% ELVs will not be exceeded which is in line with EU legislation. There is also an 18MW biomass-fired boiler where an authorized legal entity measured low SO₂ emission during its operation which is below proposed ELV.

Nitrogen oxides

Novi Sad CHPP, Zrenjanin CHPP and Sremska Mitrovica CHPP

In order to reduce the content of nitrogen oxides, the study is planned: "Conceptual solution for reducing the content of nitrogen oxides in the steam boiler TGM-84 / B" and "Feasibility study with the preliminary design for reducing the NO_x content in the boiler TGME 464 / C" in Novi Sad CHPP.

5.2.3. Emission Measurements of Matters Affecting Water Quality

Measurement of emissions that affected water quality in 2020 are provided for every CHPP separately, based on research done by authorized legal entities Vatrogas Institute - Novi Sad and Institute for Occupational Safety Novi Sad.

Novi Sad CHPP

Highest consumption of process water in Novi Sad CHPP is the water for steam cooling in condensers, there is a circulating cooling system, while water is supplied from the Danube. Return cooling water and all other industrial wastewater (water from the demineralization process and oily water after primary and secondary treatment) is after treatment discharged into the Danube. A small share of water is used to produce demineralized and soft water.

Sanitary-sewage water is from November 2012 discharged into the city wastewater collector. Storm drainage is from November 2012 discharged into the city wastewater collector. The Danube water belongs to Class II.

Wastewater quality and its Danube impact is controlled 4 times a year pursuant to the Law on Water. Novi Sad CHPP wastewater is discharged over three outlets:

- Storm drainage;
- Sanitary-sewage water system. From 2013, quality of this water is not controlled, given that it is discharged into the city wastewater collector;

- Cooling water channel.

Monitoring programme includes the following physical-chemical parameters: temperature, pH, turbidity, ammonia, inorganic nitrogen, cyanides, suspended substances, dissolved oxygen, COD, BOD₅, total phosphorus, mineral oils, Pb, Cd, Cu, Cr, Ni and Zn.

Wastewater sampling is performed on 7 measuring points, as follows:

1. Storm drainage – last manhole inside the Novi Sad CHPP grounds;
2. Return cooling and process water – Danube discharge point
3. Danube water - 100m downstream from the cooling water discharge;
4. Danube water - 100m upstream from the cooling water discharge;
5. Neutralisation basin;
6. Oily water at the oily water treatment plant inlet – primary treatment;
7. Oily water after secondary treatment (carbon filters).

In 2020 wastewater quality was controlled on 4 occasions.

Zrenjanin CHPP

Water used for condenser water vapour cooling has the highest share in the total amount of process water used by the Zrenjanin CHPP. Zrenjanin CHPP cooling water system is of the recirculation type including a turbine condenser, cooling towers, cooling water pumps, pipes and valves. Decarbonized water is used as an operating fluid by the cooling water system. Begej River water is used to produce demineralized and decarbonized water.

Wastewater (from boiler chemical cleaning, cleaning and passivation of water channels and oily water) is discharged after treatment into the Aleksandrovac channel and subsequently into the Begej River. Aleksandrovac channel belongs to Category IV, while the Begej River water belongs to Category II.

Decarbonisation and clarification processes wastewater is fed back to the process while the resulting sludge cake is transported and disposed at the landfill.

Acid-alkaline water originating from the demineralization process is neutralized and discharged into the Aleksandrovac channel. Acid-alkaline wastewater from regenerative air heater washing is processed (neutralization and sedimentation) and returned to the process as filtrate.

Oily wastewater is also treated (through carbon-anthracite filters) and subsequently discharged into the Aleksandrovac channel.

Sanitary-sewage water is after mechanical-biological treatment by the PUTOX plant discharged over a special channel into the Aleksandrovac channel.

Zrenjanin CHPP wastewater quality and its water recipient impact is controlled 4 times a year. Wastewater is sampled on 5 measuring points, as follows:

- Sanitary-sewage water (PUTOX) – before treatment and after treatment;
- Neutralization pit;
- Aleksandrovac channel before discharge;
- Aleksandrovac channel after discharge;
- Oily water – before inlet in the treatment plant and at the outlet of the treatment plant.

After all measurements performed during the year, an authorized legal entity issues a certificate for the efficiency of the wastewater treatment plant operation (Putox) and oily and oily water treatment plants operation.

Monitoring programme includes the following physical-chemical parameters: temperature, pH, electrical conductivity, dissolved oxygen, turbidity, suspended substances, sedimentary matter, alkalinity, acidity, COD, BOD₅, permanganate demand, chloride demand, total nitrogen, total phosphorus, ammonia, nitrites, nitrates, phosphates, sulphates, phenol index, hardness, grease and oil. Sampling was conducted within the Zrenjanin CHPP grounds, Aleksandrovac channel and Begej River.

In 2020 wastewater quality was controlled on 4 occasions.

Sremska Mitrovica CHPP

Water used for T/G 32 MW turbine condenser cooling has the highest share in the total amount of process water used by the Sremska Mitrovica CHPP. Sremska Mitrovica CHPP has a continuous cooling system, and is supplied by water from the Sava River. Return cooling water is discharged into the Sava River. The Sava River is classified as a Class II watercourse.

One drilled well is located on the land jointly owned by the ISTEP Company and Sremska Mitrovica CHPP. Water from this well acquires quality of drinking water upon deferrization process.

A part of wastewater is not discharged directly into the recipient but after processing in waste water treatment plant (oily waste water and heavy fuel oil contaminated waste water plant and sludgy water treatment plant) and from the neutralization pool in the plant for chemical water treatment is discharged through the pipeline network for waste, process and purified water, through control-gauging manhole into the city industrial-sewage collector. A use permit has been obtained for the pipeline network for waste, process and treated water with a connection point to the city sewage network.

After processing in sewage water treatment plant sanitary water is discharged through sewage pipeline network into the city industrial-sewage collector.

Sremska Mitrovica CHPP wastewater quality is controlled 4 times a year. Wastewater from Sremska Mitrovica CHPP is discharged via three outlets as:

- Cooling water into recipient the Sava River,
- Part of wastewater from the accelerator is joined with the wastewater from ISTEP Company and subsequently as one discharged into the recipient;
- Sanitary waste water is discharged through a separate pipeline into the city industrial-sewage collector;
- Wastewater (from HPV plant, from boilers desludging, water from oil-containing water separators, treated sludgy water) is discharged through control-gauging manhole into the city industrial-sewage collector.

Monitoring programme includes the following physical-chemical parameters: temperature, pH, ammonia, nitrates, nitrites, total inorganic nitrogen, cyanides, suspended solids, dissolved oxygen, COD, BOD₅, total phosphorus, mineral oils, Pb, Cu, Ni, Zn, Cr, Fe, Cd.

Wastewater sampling is carried out four times a year at 9 measuring points:

1. Wastewater coming from control-gauging manhole at the discharging point into the city collector;
2. Wastewater coming from the last manhole before pouring into the Sava River;
3. Wastewater after boiler sludge removal;
4. Wastewater at the inlet and outlet of the plant for oily water treatment;
5. Wastewater at the inlet and outlet of the plant for sludgy water treatment;
6. Wastewater at the inlet and outlet of the plant for sewage water treatment.

Recipient, Sava River, sampling was carried out at 2 measuring points:

- At the water inlet into the water intake and
- After the wastewater discharge into the recipient.

Wastewater quality in 2020 was controlled on four occasions.

Table 92 shows analysis of wastewater, watercourse - recipient water quality data for 2020 in terms of their legal compliance for Panonske CHPPs Branch.

In the case of surface waters, legal compliance is evaluated by comparing the measured values of hazardous and harmful substances with the limits defined by the Regulation stipulating limit values for pollutants in surface and ground waters and sediments, and deadlines for their achievement (OG RS № 50/2012) while wastewater values are compared with the limits defined by the Regulation stipulating limit values of pollutants in water and deadlines for their achievement (OG RS № 67/2011, 48/2012 and 1/2016).

Table 92

PANONSKE CHPPs BRANCH			
Wastewater and water recipient quality in 2020			
Water type	Organizational unit		
	Novi Sad CHPP	Novi Sad CHPP	Novi Sad CHPP
Wastewater	No exceedance in 2020	Exceedance in I quarter 2020: total inorganic nitrogen in sewage water - Putox	There wasn't any ELV exceedance in tested parameters in 2020
Recipient	No exceedance in 2020	<p>Before inflow: suspended solids, ammonia nitrogen, total inorganic nitrogen, total phosphorus, dissolved oxygen and iron, HPK, BOD₅,</p> <p>After inflow: total inorganic nitrogen, ammonia nitrogen, HPK, total phosphorus, dissolved oxygen, electrical conductivity and belongs to class V surface waters</p>	<p>In the I quarter there wasn't any ELV exceedance in tested parameters.</p> <p>In II and III quarter the parameter for iron in the river Sava corresponds to class III of watercourses, while all other examined parameters correspond to class II of watercourses, for river Sava.</p> <p>In IV quarter parameters for BOD₅, HPK, nitrate, nitrite and ammonium ions, do not correspond to class II watercourses.</p>

Water amounts

Table 93 summarizes the amount of water captured and discharged by organizational units of Panonske CHPPs Branch in 2020. Annual amounts are calculated on the basis of the capacity, water capture and discharge pumps' operating time and flow gauges data.

Table 93

PANONSKE CHPPs BRANCH								
Captured and discharged water amounts in 2020 (m ³ /year x10 ³)								
Organizational unit	Captured wastewater				Discharged wastewater			
	Used amounts		Permitted amounts		Return cooling water	Oily water	Sanitary wastewater	Other water (neutralisation pit and luvu washing)
	Surface	Ground	Surface	Ground				
Novi Sad CHPP	23.086,246	-	24.732,42	-	22.645,293	1,283	7,826	5,250
Zrenjanin CHPP	131,210	-	-	-	-	1,979	3,764	1,900
Sremska Mitrovica CHPP	24,691	22,865	-	*72,533	-	-	12,400	8,870
TOTAL: Panonske CHPPs Branch	23.242,147	22,865			22.645,293	3,262	23,990	16,020

* Data taken from the Book of Records on the status of groundwater reserves at the source of Sremska Mitrovica CHPP

Improvements aimed at reducing surface and groundwater wastewater impacts

In 2020, the installation of piezometers and testing of groundwater in the Panonske CHPP Branch was performed, and no contamination of groundwater with pollutants that could be discharged by the activities of production facilities was determined.

Novi Sad CHPP

In order to reduce the impact of wastewater, it is planned to develop: Preliminary design, Feasibility study with Preliminary design, Environmental impact assessment study of Novi Sad CHPP wastewater treatment plant.

Zrenjanin CHPP

In order to improve the quality parameters of the discharged water, a device has been obtained for determination of NRK consumption to maintain and improve the quality of discharged water.

Sremska Mitrovica CHPP

The sludgy water treatment plant has been legalized.

5.2.4. Measuring the concentration of pollutants, harmful and hazardous substances in the soil

Novi Sad CHPP, Zrenjanin CHPP and Sremska Mitrovica CHPP

No soil testings were conducted in 2020.

So far, the soil has been tested as part of the study: „Monitoring of soil contamination around the tanks and unloading stations for liquid fuel and oil and lubricants storage within subsidiaries of the Public Enterprise Electric Power Industry of Serbia“ and „Monitoring of the system of oil baths and pits in the PE EPS facilities“.

Novi Sad CHPP

For the purposes of the study: "Monitoring of the system of oil baths and pits in the PE EPS facilities aimed at preventing environmental pollution - I phase", the testing of soil and groundwater was executed. In total 8 (eight) drillings were carried out and 8 (eight) composite soil samples were taken. According to the results of physical and chemical tests it can be concluded that the ground in the direct vicinity of oil baths and pits at the Novi Sad CHPP site is neither contaminated with arsenic and metals, such as chromium, nickel, lead, copper, zinc, cadmium, mercury and cobalt, nor with organic pollutants – mineral oils C₁₀-C₄₀, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and aromatic hydrocarbons (benzene, xylene, toluene and ethylbenzene).

For the purposes of the study: "Monitoring of soil contamination around the tanks and unloading stations for liquid fuel and oil and lubricants storage within subsidiaries of the Public Enterprise Electric Power Industry of Serbia", the testing of soil and groundwater was executed. In total 7 (seven) drillings were carried out and 7 (seven) composite soil samples were taken. According to the results of physical and chemical tests it can be concluded that the ground in the direct vicinity of heavy oil tank at the Novi Sad CHPP site is neither contaminated with arsenic and metals, such as chromium, nickel, lead, copper, zinc, cadmium, mercury and cobalt, nor with organic pollutants – mineral oils C₁₀-C₄₀, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and aromatic hydrocarbons (benzene, xylene, toluene and ethylbenzene).

Zrenjanin CHPP

For the purposes of the study: "Monitoring of the system of oil baths and pits in the PE EPS facilities aimed at preventing environmental pollution - I phase", the testing of soil and groundwater was executed. In total 3 (three) drillings were carried out and 3 (three) composite soil samples were taken and sampling of groundwater from drillings was performed. According to the results of physical and chemical tests it can be concluded that the ground in the direct vicinity of oil baths and pits at the Zrenjanin CHPP site is neither contaminated with arsenic and metals, such as chromium, nickel, lead, copper, zinc, cadmium, mercury and cobalt, nor with organic pollutants – mineral oils C₁₀-C₄₀, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and aromatic hydrocarbons (benzene, xylene, toluene and ethylbenzene).

For the purposes of the study: "Monitoring of soil contamination around the tanks and unloading stations for liquid fuel and oil and lubricants storage within subsidiaries of the Public Enterprise Electric Power Industry of Serbia", the testing of soil and groundwater was executed. In total 11 (eleven) drillings were carried out and 11 (eleven) composite soil samples were taken and the testing of groundwater from the drillings was also executed.

According to the results of physical and chemical tests it can be concluded that the ground in the direct vicinity of oil baths and pits at the Zrenjanin CHPP site is neither contaminated with arsenic and metals, such as chromium, nickel, lead, copper, zinc, cadmium, mercury and cobalt, nor with organic pollutants – mineral oils C₁₀-C₄₀, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and aromatic hydrocarbons (benzene, xylene, toluene and ethylbenzene).

Sremska Mitrovica CHPP

For the purposes of the study: "Monitoring of the system of oil baths and pits in the PE EPS facilities aimed at preventing environmental pollution - I phase", the testing of soil and groundwater was executed. In total 2 (two) drillings were carried out and 2 (two) composite soil samples were taken. According to the results of physical and chemical tests it can be concluded that the ground in the direct vicinity of oil baths and pits at the Sremska Mitrovica CHPP site is neither contaminated with arsenic and metals, such as chromium, nickel, lead, copper, zinc, cadmium, mercury and cobalt, nor with organic pollutants – mineral oils C₁₀-C₄₀, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and aromatic hydrocarbons (benzene, xylene, toluene and ethylbenzene).

For the purposes of the study: "Monitoring of soil contamination around the tanks and unloading stations for liquid fuel and oil and lubricants storage within subsidiaries of the Public Enterprise Electric Power Industry of Serbia", the testing of soil and groundwater was executed. In total 10 (ten) drillings were carried out and 10 (ten) composite soil samples were taken. According to the results of physical and chemical tests it can be concluded that the ground in 7 (seven) drillings in the direct vicinity of crude oil tanks at the Sremska Mitrovica CHPP site is neither contaminated with arsenic and metals, such as chromium, nickel, lead, copper, zinc, cadmium, mercury and cobalt, nor with organic pollutants – mineral oils C₁₀-C₄₀, polychlorinated biphenyls (PCB), polycyclic aromatic hydrocarbons (PAH) and aromatic hydrocarbons (benzene, xylene, toluene and ethylbenzene). Soil from 3 (three) drillings is contaminated with mineral oil, C₁₀-C₄₀. Repeated control test showed no contamination.

5.2.5. Environmental Noise Measurements

Environmental noise measurements at the Panonske CHPPs Branch (Novi Sad CHPP and Zrenjanin CHPP) were carried out by an accredited laboratory of the Novi Sad Occupational Safety Institute from 2008 to 2009 when the Rulebook on allowed environmental noise levels ("Official Gazette of RS" no. 54/92) was in force.

The legislation does not prescribe any definite noise measurement periods, unless the relevant authority orders otherwise, as deemed necessary.

Novi Sad CHPP

Novi Sad CHPP environmental noise levels were not measured in 2020. The last measurement was carried out on 30th December 2008.

Zrenjanin CHPP

Zrenjanin CHPP environmental noise levels were not measured in 2020. The last measurement was carried out on 11th March 2009.

Sremska Mitrovica CHPP

In Sremska Mitrovica CHPP environmental noise measurement is envisaged by the Environmental Impact Assessment Study. Noise measurements were performed in 2020 according to the Law on Environmental Noise Protection ("Official Gazette of RS", No. 36/09 and 88/10), the Decree on Noise Indicators, Limit Values, Methods for Assessing Noise Indicators, harassment and adverse effects of environmental noise ("Official Gazette of RS", No. 75/2010) and the Rulebook on methods of noise measurement, content and scope of noise measurement reports ("Official Gazette of RS", No. 72/2010).

5.2.6. Waste

Waste produced in 2020 is shown in Table 94 in line with the Serbian waste management regulations.

Table 94

PANONSKE CHPPs BRANCH								
Waste generated in 2020								
No	Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS № 56/2010 and 93/2019)		Unit	Organisational unit				Note
				Novi Sad CHPP	Zrenjanin CHPP	Sremska Mitrovica CHPP	Total Panonske CHPP Branch	
	Name	Index number		Amounts				
1.	Used printer cartridges other than indicated under 08 03 17	08 03 18	t	0,000	0,150	0,048	0,198	Waste printer cartridges
2.	Ash, slag and dust from the boiler (other than the one from the boiler indicated under 10 01 04)	10 01 01	t	3,000	0,000	0,000	3,000	Waste ash
3.	Slag and dust from the boiler from co-incineration other than the one indicated under 10 01 14	10 01 15	t	0,000	0,000	177,260	177,260	Waste ash from biomass fired boiler
4.	Mixed material packaging	15 01 06	t	0,000	0,000	0,140	0,140	Jumbo bags
5.	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing, contaminated by hazardous substances	15 02 02*	t	0,185	0,000	0,013	0,198	Waste oily adsorption agent - sawdust and wiping cloths
6.	Absorbents, filter materials, wiping cloths and protective clothing other than those indicated under 15 02 02	15 02 03	t	0,000	0,000	0,012	0,012	Filter bags from biomass boiler bag filter
7.	Lead batteries	16 06 01*	t	0,155	0,000	0,005	0,160	Lead batteries
8.	Alkaline batteries (other than 16 06 03)	16 06 04	t	0,000	0,000	0,0004	0,0004	Alkaline batteries
9.	Bricks	17 01 02	t	0,000	0,000	11,203	11,203	Chamotte from boiler
10.	Aluminum	17 04 02	t	1,510	0,000	0,065	1,575	Aluminum sheet and window frames
11.	Zinc	17 04 04	t	0,850	0,000	0,140	0,990	Galvanized sheet
12.	Iron and steel	17 04 05	t	2,500	2,780	0,000	5,280	Different fittings; Pipes; Sheets; Valves
13.	Cables other than those indicated under 17 04 10	17 04 11	t	0,000	0,050	0,004	0,054	Copper insulated cables
14.	Insulation materials other than those indicated under 17 06 01 and 17 06 03	17 06 04	t	9,500	0,000	1,471	10,971	Waste mineral wool
15.	Saturated or exhausted ion exchange resins	19 09 05	t	2,000	0,000	0,000	2,000	Waste ion exchange resins
16.	Paper and cardboard	20 01 01	t	0,000	0,000	0,019	0,019	-
17.	Fluorescent tubes and mercury-containing waste	20 01 21*	t	0,0875	0,100	0,013	0,2005	Waste fluorescent tubes

18.	Discarded electronic and electrical equipment which contains hazardous components	20 01 35*	t	0,000	0,120	0,010	0,130	-
19.	Discarded electrical and electronic equipment other than the one indicated under 20 01 21 and 20 01 23 and 20 01 35	20 01 36	t	0,000	0,000	0,014	0,014	-
20.	Plastics	20 01 39	t	0,000	0,000	0,155	0,155	-

Note: Waste quantities presented here were determined by using free estimate. The actual quantities are determined when the waste is handed to authorised operators who weigh it on a scale certified by authorised organisations

Sold/delivered waste in 2020 is presented in Table 95.

Table 95

PANONSKE CHPPs BRANCH								
Sold/delivered waste in 2020								
№	Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS № 56/2010 and 93/2019).		Unit	Organisational unit				Note
				Novi Sad CHPP	Zrenjanin CHPP	Sremska Mitrovica CHPP	Total Panonske CHPP Branch	
	Name	Index number		Amounts				
1.	Slag and dust from the boiler from co-incineration other than the one indicated under 10 01 14	10 01 15	t	0,000	0,000	177,260	177,260	Waste ash from biomass fired boiler
2.	Aluminum	17 04 02	t	0,760	0,000	0,020	0,760	-

5.3. Working Environment Monitoring, Safety and Health

Occupational Safety and Health Reports for 2020 include the following elements:

- **Working environment monitoring**
 - working environment noise measurements
- **Safety**
 - training
 - work injuries
- **Health**

5.3.1. Working Environment Monitoring

- **Working Environment Noise Measurements**

Novi Sad CHPP

Working environment noise measurements were not conducted in 2020.

Zrenjanin CHPP

Working environment noise measurements in 2020 are shown in Table 96.

Sremska Mitrovica CHPP

Working environment noise measurements were not conducted in 2020.

Table 96

PANONSKE CHPP BRANCH			
Working environment noise in 2020			
Organizational unit	Operating plant	Registered noise level (dB(A))	Permissible noise level (dB(A))
NOVI SAD CHHP	-	-	85
	-	-	85
	-	-	85
	-	-	85
	-	-	85
ZRENJANIN CHHP	Mechanical maintenance workshop	75	85
	Electrical maintenance workshop	72	85
	Control room – chemical plant	53	85
	Pumping facility – chemical plant	75	85
	Raw water pumping station	55	85
SREMSKA MITROVICA CHHP	-	-	85
	-	-	85
	-	-	85
	-	-	85
	-	-	85

5.3.2. Occupational Safety

Training

Health and safety training – internal general OHS trainings are shown in Table 97.

Table 97

PANONSKE CHPP BRANCH		
Training in 2020		
Organizational unit	Number of trained employees	Note-internal trainings
Main office	10	Due to the change of workplaces
Novi Sad CHPP	140	Workplaces with increased risk, change of workplaces and workplaces without risk and agencies
Novi Sad CHPP	80	Hazards, harmfulness, OHS measures and code of conduct familiarization for contractors and services
Novi Sad CHPP	40	Practical classes, professional practice for students and pupils regarding hazards, harmfulness, OHS measures and code of conduct.
Zrenjanin CHPP	86	Workplaces with increased risk, change of workplaces, shift due to vacancies and retirements, OHS general internal training.
Zrenjanin CHPP	76	Hazards, harmfulness, OHS measures and code of conduct familiarization for contractors and services
Zrenjanin CHPP	37	Practical classes, professional practice for students and pupils regarding hazards, harmfulness, OHS measures and code of conduct, OHS measures and code of conduct familiarization for contractors and visitors
Sremska Mitrovica CHPP	70	Workplaces with increased risk, change of workplaces, shift due to vacancies and retirements, OHS general internal training..
Sremska Mitrovica CHPP	35	Hazards, harmfulness, OHS measures and code of conduct familiarization for contractors and services
Main office	27	OHS measures and code of conduct familiarization for contractors and visitors

Other trainings in 2020 – external trainings are shown in Table 98.

Table 98

PANONSKE CHHP BRANCH			
Other trainings in 2020			
No.	Type of training	Number of persons	Note
1	First aid training of employees Panonske CHPP, Advanced training Novi Sad CHHP	38	Completed
2	First aid training of employees Panonske CHPP, Advanced training Zrenjanin CHHP	40	Completed
3	First aid training of employees Panonske CHPP, Advanced training Sremska Mitrovica CHHP	30	Completed

Work injuries

Table 99 provides work injuries data for 2020.

Table 99

PANONSKE CHPPs BRANCH						
Work injuries in 2020						
Organizational unit	No. of employees	Injuries – Number of employees ratio				
		Light	Serious	Fatalities	Total	%
Head office	37	0	0	0	0	0,00
Novi Sad CHPP	158	3	0	0	3	1,90
Zrenjanin CHPP	106	1	0	0	1	0,94
Sremska Mitrovica CHPP	70	1	0	0	1	1,43
TOTAL: PANONSKE CHPPs BRANCH	371	5	0	0	5	1,35

5.3.3. Health

Table 100 provides periodical examinations data for high-risk workplaces in Panonske CHPP Branch in 2020.

Table 100

PANONSKE CHPPs BRANCH											
Work capability in 2020											
Organizational unit	Number of employees	Periodical examinations				Work capability					
		Referred to examination		Examined		Capable		Limited capability		Not capable	
		No	%	No	%	No	%	No	%	No	%
Head office	37	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
Novi Sad CHPP	158	132	83,54	132	100,00	54	40,91	78	59,09	0	0,00
Zrenjanin CHPP	106	93	87,74	93	100,00	60	64,52	33	35,48	0	0,00
Sremska Mitrovica CHPP	70	56	80,00	53	94,64	22	41,51	31	58,49	0	0,00
TOTAL: PANONSKE CHPPs BRANCH	371	281	75,74	278	98,93	136	48,92	142	51,08	0	0,00

5.4. Public complaints

There were no public complaints regarding the environment in 2020.

6. DJERDAP HPPs BRANCH

6.1. Overview and Status of Permits

Overview and status of permits, licenses and other necessary approvals as well as new applications for obtaining or extending the valid permits and approvals in 2020 are shown in Table 101.

Table 101

DJERDAP HPPs BRANCH			
Overview and Status of Permits in 2020			
Objekat	Obtained permits and approvals (number and date)	New applications for obtaining or extending the valid permits	Note
DJERDAP 2 HPP	Djerdap 2 HPP Negotin obtained the following Decisions during 2020: - By the Decision No. 01.02.17651 / 1-2020 of 13 th January 2020 the Ministry of Agriculture, Forestry and Water Management, Republic Directorate for Water issues on 08 th January 2020 the DECISION ON ISSUANCE OF WATER PERMIT – PE EPS, Djerdap HPP Branch, Djerdap 2 HPP, Negotin, for a limited time, with the validity until 08 th January 2023.	-	-
PIROT HPP	Decision on issuance of water permit for HPP Piroć, No: 325-04-00289/2020-07 of 19 th May 2020. Decision on approval of a part of the Protection and Rescue Plan of the Public Enterprise „Electric Power Industry of Serbia“, Branch „Djerdap“ HPP, „Piroć“ HPP, Piroć, No. 09-217-1711/20 of 08 th December 2020.	-	-

6.2. Monitoring and Environmental Impact

Environmental protection of the Djerdap HPPs Branch during 2020 followed the defined procedures and other documents of the environmental management system (EMS).

6.2.1. Identified Negative Impact on the Flow and Ecological System under the Accumulation

During 2019 there were no registered negative impacts on the flow and ecological system under the accumulation in the Djerdap HPPs Branch facilities, except in the facility Djerdap 2 HPP, where three negative impacts have been registered, without the impact on the flow and without significant and proven impact on ecological system under the accumulation. These are events that were recorded during July, August and September 2020. On 20th July 2020 penetration of oil into the Danube watercourse occurred through drainage channels at elevation 46.00mm near the facility A5 in the zone of the siphon shutter (Report No. 01.02.-343051/1-2020). On 02nd August 2020 the oil stain was decomposed which was caused by the cracking of the seal on the A7 unit below the O.E. (Report No. 01.02.-354948/1-2020). On 01st September 2020 oil stain was decomposed on the Danube watercourse in zone A1 downstream from O.E. (Report No. 01.02.-403776/1-2020). Defects were repaired.

6.2.2. Water

• Water amounts

Water used for hydropower generation, process and sanitary (waste) water did not exceed the permitted amounts. Amounts of allowed water and water used to generate electricity, along with water amounts discharged after electricity generation in 2020 are provided in Table 102.

Table 102

Table 102

DJERDAP HPPs BRANCH							
Water amounts in 2020							
Organisational unit		Number of units	Permitted water amounts (installed discharge per unit) m³/s	Discharged water amounts			
				Water used for electricity generation in 2020 m³/y x 10⁶	Process water m³/ y x10⁶	Sanitary water m³/ y x10³	Total discharged water m³/ y x10⁶
DJERDAP 1 HPP		6	800	70.328,000	312,569	285,930	74.550,499
DJERDAP 2 HPP		10	422	68.927,600	90,300	69.215,600	69.213,100
PIROT HPP		2	22,5	92.918	0,042	5,362	88,721
VLASINSKE HPPs	Vrla 1	4	I и II – 8,1 III и IV - 10	104,896	1,126	7,300	104,903
	Vrla 2	2	I – 8,5 II - 10	135,097	0,868	3,700	135,101
	Vrla 3	2	I – 8,5 II - 10	161,656	1,277	10,300	161,666
	Vrla 4	2	I – 8,4 II - 10	178,297	0,961	3,700	171,301
	Lisina PSP	2	I – 3,6 II – 3,6	71,357	0,907	3,500	71,361

• Water quality

Following contractual obligations regarding wastewater management, Institute for Occupational Safety Novi Sad, executed sampling of wastewater from all PE EPS facilities, Djerdap HPP Branch in 2020.

3 samples were taken from each of the Djerdap HPP Branch facilities from the following points:

- wastewater sample at the discharge point;
- surface water sample upstream from the facility;
- surface water sample downstream from the facility;

Chemically and biologically analyzed, while the results were interpreted in accordance with Regulation stipulating the limit values of pollutants in surface and ground waters and sediments, and the deadlines for their achievement (OG RS № 50/2012), Regulation setting the parameters of the ecological and chemical status of surface waters and the parameters of chemical and quantitative status of groundwater (OG RS № 74/2011), Regulation stipulating the limit values of pollutant emissions in water and deadlines for their achievement (OG RS № 67/2011 and 48/2012) and Water Classification Regulation (OG SFRY № 6/1978), Regulation classifying water of inter-republic watercourses, international waters and coastal waters of Yugoslavia (OG SFRY № 6/78), Decision defining maximum permissible concentrations of radionuclides and hazardous substances in inter-republic watercourses, international waters and coastal waters of Yugoslavia (OG SFRY № 8/78) and the Water Law (OG RS № 30/2010, 93/2012, 101/2016, 95/2018 and 95/2018 – other law). Results obtained by chemical and microbiological analysis of wastewater samples in 2020 are summarized in Table 103.

Table 103

DJERDAP HPPs BRANCH															
Wastewater in 2020															
Organisational unit	Testing parameters (unit))	Wastewater and surface water quality testing results for 2020													Test results comment and conclusion (Review of chemical and bacteriological analysis of samples from the sewage system and surface water upstream and downstream of the facility and its impact on water class defined by Water Classification Regulation)
		1 st quarter			2 nd quarter			3 rd quarter			4 th quarter			Limit values for surface water (class II)	
		From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility	From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility	From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility	From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility		
DJERDAP 1 HPP	MPN coliform bacteria cfu/100ml	-	1x10 ²	9,4x10 ²	-	2,7x10 ³	2,2x10 ³	-	1,2x10 ³	6,2x10 ²	-	-	-	5 x10 ² -1 x10 ⁴	In 1 st , 2 nd and 3 rd quarter based on obtained results for wastewater samples (from sewerage system – before discharge), it can be concluded that tested parameters meet the values defined by the aforementioned Regulation. In 1 st , 2 nd and 3 rd quarter based on obtained results for surface water upstream and downstream, it can be concluded that tested parameters meet the values defined by the aforementioned Regulation. Note: 4 th quarter test has not been done since the Contract with the Institute for Occupational Safety Novi Sad has ended.
	Dissolved O ₂ (mg/l)	-	10,52	10,41	-	8,56	8,23	-	8,02	8,80	-	-	-	7	
	Suspended substances (mg/l)	12,8	<1,0	<1,0	18,4	<1,0	<1,0	9,2	<1,0	<1,0	-	-	-	25	
	COD(mg/l)	134	4,4	4,8	46	4,2	4,5	79	4,2	4,0	-	-	-	15	
	BOD5(mg/l)	80	1,7	1,7	7,8	1,2	1,6	30	1,1	1,2	-	-	-	5	
	pH value	8,26	8,05	8,14	7,76	7,81	7,77	7,73	7,84	7,82	-	-	-	6.5-8.5	
	Total oil and grease (mg/l)	0,109	0,022	<0,01	0,213	0,077	<0,01	0,028	<0,01	<0,01	-	-	-	-	
DJERDAP 2 HPP	MPN coliform bacteria cfu/100ml	-	-	-	-	<1x10 ² c fu/100m l -	<1x10 ² c fu/100m l -	-	9x10 ³ cf u/100m l -	3.7x10 ⁴ cfu/100 ml -	-	1.6x10 ⁴ cfu/100 ml -	1.8x10 ⁴ cfu/100 ml -	5 x10 ² -1 x10 ⁴	In 2 nd , 3 rd and 4 th quarter based on obtained results for waste water (from the sewerage system - before the inflow) it can be stated that the tested parameters meet the values prescribed by the aforementioned Regulation
	Dissolved O ₂ (mg/l)	-	-	-	-	10.62	11,5	-	8,26	8,96	-	8,87	8,27	7.0	

	Suspended substances (mg/l)	-	-	-	76.4	<1.0	<1,0	135.6	<1.0	<1,0	2.026	<1.0	<1,0	25	In 2 nd , 3 rd and 4 th quarter based on obtained results for groundwater upstream and downstream it can be stated that the tested parameters meet the values prescribed by the aforementioned Regulation. Note: 1 st quarter test has not been done.
	COD(mg/l)	-	-	-	330	4,2	4,5	164	< 4,0	< 4,6	10.350	< 4,0	< 4,2	15	
	BOD5(mg/l)	-	-	-	160	1,5	1,5	77,9	0,8	0,9	1.300	0,9	1,0	5,0	
	pH value	-	-	-	7,70	8,14	8,16	7,50	7,76	7,80	6,59	7,84	7,89	6,5-8,5	
	Total oil and grease (mg/l)	-	-	-	1,324	<0,001	<0,01	0,790	<0,001	<0,050	10,33	<0,001	<0,050	5	
PIROT HPP	MPN coliform bacteria cfu/100ml	-	1x10 ²	2x10 ²	-	1,6 x10 ⁴	1,1 x10 ⁴	-	9,8 x10 ³	8 x10 ³	-	-	-	1x10 ² – 1x10 ⁴ cfu100	For the sample upstream from the inflow, the tested physical and chemical parameters meet the values stipulated by the Regulation on Threshold Values of Pollutants in Surface Waters, Groundwaters and Sediment and Deadlines for their Achievement ("OG RS" No. 50/2012) of the limit values for pollutants for water class II. For the sample downstream from the inflow, the tested physical and chemical parameters meet the values stipulated by the Regulation on Threshold Values of Pollutants in Surface Waters, Groundwaters and Sediment and Deadlines for their Achievement ("OG RS" No. 50/2012) of the limit values for pollutants for water class II. Note: 4 th quarter has not been done since the Contract with the Institute for Occupational Safety Novi Sad has ended.
	Dissolved O ₂ (mg/l)	-	8,10	8,71	-	8,12	8,41	-	8,89	8,67	-	-	-	7,0	
	Suspended substances (mg/l)	1,2	7,2	4,8	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	< 1,0	-	-	-	25	
	COD(mg/l)	11,1	5,4	5,1	6,2	5,2	5,4	10,7	4,2	5,1	-	-	-	15	
	BOD5(mg/l)	4,79	1,6	1,6	1,2	1,2	1,1	2,4	1,0	1,1	-	-	-	5,0	
	pH value	7,42	8,00	7,88	7,80	7,90	7,81	7,56	8,12	8,00	-	-	-	6,5-8,5	
	Total oil and grease (mg/l)	-	<0,01	<0,01	-	<0,01	<0,01	-	<0,01	<0,01	-	-	-	-	
VLASINSKE HPPs Entrance building Vlasina lake VRLA 1 HPP	MPN coliform bacteria cfu/100ml	-	8.1x10 ²	2.9x10 ³	-	1x10 ⁴	5.3x10 ⁴	-	9,6x10 ³	4.7x10 ³	-	-	-	5x10 ² -1x10 ⁴	Sample analysis established that the measured values of the samples comply with the legal requirements stipulated by the Regulation on Water Classification ("OG RS" no. 5/68) for class I and comply with the values stipulated by the Rulebook on
	Dissolved O ₂ (mg/l)	-	8,32	7,83	-	7,64	8,27	-	8,59	8,33	-	-	-	8	

	Suspended substances (mg/l)	-	<1,0	<1,0	-	<1,0	<1,0	-	<1,0	<<1,0	-	-	-	10	<p>Hazardous Matters in Waters ("OG RS" no. 31/82) for class I and II. The tested samples predominantly match the classes II and III of ecological potential.</p> <p>Note: 4th quarter tests have not been done since the Contract with the Institute for Occupational Safety Novi Sad has ended.</p>
	COD(mg/l)	-	5,1	7,6	-	4,5	<4,0	-	<4,0	<4,0	-	-	-	-	
	BOD5(mg/l)	-	2,1	1,2	-	0,9	0,55	-	0,7	-	-	-	-	2	
	pH value	-	7,89	7,78	-	7,69	7,37	-	8,56	7,71	-	-	-	6,5-8,5	
	Total oil and grease (mg/l)	-	<0,01	<0,014	-	<0,01	<0,01	-	<0,01	<0,01	-	-	-	<0,05	
VLASINSKE HPPs VRLA 2 HPP	MPN coliform bacteria cfu/100ml	-	2,9x10 ³	1,9x10 ⁴	-	5,3x10 ⁴	2,1x10 ⁴	-	4,7x10 ³	3,9x10 ³	-	-	-	5x10 ² -1x10 ⁴	<p>Sample analysis established that the measured values of the samples comply with the legal requirements stipulated by the Regulation on Water Classification ("OG RS" no. 5/68) for class I and comply with the values stipulated by the Rulebook on Hazardous Matters in Waters ("OG RS" no. 31/82) for class I and II. The tested samples predominantly match classes II and III of ecological potential.</p> <p>Note: 4th quarter tests have not been done since the Contract with the Institute for Occupational Safety Novi Sad has ended.</p>
	Dissolved O ₂ (mg/l)	-	7,83	7,27	-	8,27	7,76	-	8,59	8,05	-	-	-	8	
	Suspended substances (mg/l)	-	<1,0	<1,0	-	<1,0	<1,0	-	<1,0	<1,0	-	-	-	10	
	COD(mg/l)	-	7,6	8,2	-	<4,0	<4,0	-	<4,0	<4,0	-	-	-	-	
	BOD5(mg/l)	-	1,2	1,3	-	0,55	1,0	-	0,7	0,7	-	-	-	2	
	pH value	-	7,78	7,39	-	7,37	7,36	-	8,56	7,55	-	-	-	6,5-8,5	
	Total oil and grease (mg/l)	-	<0,014	<0,01	-	<0,01	<0,01	-	<0,01	<0,01	-	-	-	<0,3	
VLASINSKE HPPs VRLA 3 HPP	MPN coliform bacteria cfu/100ml	-	1,9x10 ⁴	6,7x10 ³	-	2,1x10 ⁴	1,3x10 ⁴	-	3,9x10 ³	2,2x10 ³	-	-	-	5x10 ² -1x10 ⁴	<p>Sample analysis established that the measured values of the samples comply with the legal requirements stipulated by the Regulation on Water Classification ("OG RS" no. 5/68) for class I and comply with the values stipulated by the Rulebook on Hazardous Matters in Waters ("OG RS" no. 31/82) for class I and II. The tested samples predominantly match classes II and III of ecological potential.</p>
	Dissolved O ₂ (mg/l)	-	7,27	8,53	-	7,76	9,06	-	8,05	8,39	-	-	-	8	
	Suspended substances (mg/l)	-	<1,0	<1,0	-	<1,0	<1,0	-	<1,0	<1,0	-	-	-	10	

	COD(mg/l)	-	8,2	5,9	-	<4,0	<4,0	-	<4,0	<4,0	-	-	-	-	Note: 4 th quarter tests have not been done since the Contract with the Institute for Occupational Safety Novi Sad has ended.
	BOD5(mg/l)	-	1,3	1,4	-	1,0	0,8	-	0,7	0,6	-	-	-	2	
	pH value	-	7,39	7,69	-	7,36	7,33	-	7,55	7,59	-	-	-	6,5-8,5	
	Total oil and grease (mg/l)	-	<0,01	<0,012	-	<0,01	<0,01	-	<0,01	<0,01	-	-	-	<0,05	
VLASINSKE HPPs VRLA 4 HPP	MPN coliform bacteria cfu/100ml	-	6,7x10 ³	2,9x10 ³	-	1,3x10 ⁴	1x10 ⁴	-	2,2x10 ³	4,8x10 ³	-	-	-	5x10 ² -1x10 ⁴	Sample analysis established that the measured values of the samples comply with the legal requirements stipulated by the Regulation on Water Classification ("OG RS" no. 5/68) for class I and comply with the values stipulated by the Rulebook on Hazardous Matters in Waters ("OG RS" no. 31/82) for class I and II. The tested samples predominantly match classes II and III of ecological potential. Note: 4 th quarter tests have not been done since the Contract with the Institute for Occupational Safety Novi Sad has ended.
	Dissolved O ₂ (mg/l)	-	8,53	8,34	-	9,06	8,20	-	8,39	8,02	-	-	-	8	
	Suspended substances (mg/l)	-	<1,0	<1,0	-	<1,0	<1,0	-	<1,0	<1,0	-	-	-	10	
	COD(mg/l)	-	5,9	<4,0	-	<4,0	<4,0	-	<4,0	<4,0	-	-	-	-	
	BOD5(mg/l)	-	1,4	1,5	-	0,8	0,6	-	0,6	0,6	-	-	-	2	
	pH value	-	7,69	7,62	-	7,33	7,21	-	7,59	7,49	-	-	-	6,5-8,5	
	Total oil and grease (mg/l)	-	<0,012	<0,030	-	<0,01	<0,01	-	<0,01	<0,01	-	-	-	<0,03	
VLASINSKE HPPs LISINA PSP ⁴	MPN coliform bacteria cfu/100ml	-	6x10 ³	8,1x10 ²	-	3x10 ⁴	1x10 ⁴	-	1,6x10 ⁴	4,7x10 ³	-	-	-	5x10 ² -1x10 ⁴	Sample analysis established that the measured values of the samples comply with the legal requirements stipulated by the Regulation on Water Classification ("OG RS" no. 5/68) for class I and comply with the values stipulated by the Rulebook on Hazardous Matters in Waters ("OG RS" no. 31/82) for class I and II. The tested samples predominantly match classes II and III of ecological potential. Note: 4 th quarter tests have not been done since the Contract with the Institute for Occupational Safety Novi has ended.
	Dissolved O ₂ (mg/l)	-	8,52	8,32	-	8,27	7,64	-	8,60	8,59	-	-	-	8	
	Suspended substances (mg/l)	-	<1,0	<1,0	-	<1,0	<1,0	-	1,0	<1,0	-	-	-	10	
	COD(mg/l)	-	<4,0	5,1	-	<4,0	4,5	-	<4,0	<4,0	-	-	-	-	
	BOD5(mg/l)	-	1,66	2,1	-	0,55	0,9	-	0,8	0,7	-	-	-	2	

	pH value	-	7,60	7,89	-	7,37	7,69	-	7,41	8,56	-	-	-	6,5-8,5	
	Total oil and grease (mg/l)	-	<0,01	<0,01	-	<0,01	<0,01	-	<0,01	<0,01	-	-	-	<0,05	

6.2.3. Waste

Waste management followed the defined procedures. Waste amounts generated in 2020 are shown in Table 104.

Table 104

DJERDAP HPPS BRANCH										
Generated Waste in 2020										
№	Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS № 56/2010 and 93/2019)		Unit	Facility					Total	Note
				Djerdap 1 HPP	Djerdap 2 HPP	Piroć HPP	Vlasinske HPPs	SCM Požarevac		
	Name	Index number		Amounts						
1.	Wastes from forestry	02 01 07	t	0,000	0,000	0,000	174,380	0,000	174,380	White pine - waste
2.	Waste printing toner other than those mentioned in 08 03 17	08 03 18	t	0,002	0,000	0,000	0,050	0,000	0,052	Toner cassettes and ink cartridges
3.	Waste adhesives and sealants containing organic solvents or other hazardous substances	08 04 09*	t	0,005	0,000	0,000	0,000	0,000	0,005	Waste adhesives
4.	Spent waxes and fats	12 01 12*	t	0,310	0,000	0,000	0,000	0,000	0,310	Waste lubricating fat
5.	Mineral based non-chlorinated hydraulic oils	13 01 10*	t	0,908	0,000	0,000	0,037	0,000	0,945	Waste hydraulic oil
6.	Mineral-based non-chlorinated engine, gear and lubricating oils	13 02 05*	t	0,180	0,180	0,000	0,000	0,000	0,360	Motor oil
7.	Mineral-based non-chlorinated insulating and heat transmission oils	13 03 07*	t	1,649	0,000	0,000	0,000	0,000	1,649	Waste transformer oil
8.	Other emulsions	13 08 02*	t	4,361	2,29	0,000	0,000	0,000	6,651	

	Oily water from oil/water separators	13 05 07*								Oil emulsion (mixed with adsorbents and other impurities)
9.	Mineral based non-chlorinated hydraulic oils Wastes not otherwise specified	13 01 10*	t	11,251	0,000	0,000	0,000	0,000	11,251	Waste turbine oil
		13 08 99*		0,194	0,000	0,000	0,000	0,000	0,194	Compressor oil
10.	Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances	15 02 02*	t	0,260	0,000	0,000	1,305	0,000	1,565	Cloths, adsorbents contaminated by hydrocarbons
11.	End-of-life tyres	16 01 03	t	1,810	3,400	0,0004	1,512	0,000	6,7224	End-of-life tyres
12	Plastic	16 01 19	t	0,119	0,076	0,0003	0,058	0,000	0,2533	Waste plastics
	Plastic packaging	15 01 02								
13.	Copper, bronze, brass	17 04 01	t	36,420	0,000	0,000	0,082	0,000	36,502	Copper
			t	0,009	0,440	0,000	0,000	0,000	0,449	Brass
			t	2,540	0,000	0,000	0,000	0,000	2,540	Bronze
14.	Cables other than those mentioned in 17 04 10	17 04 11	t	0,130	0,108	0,860	3,954	0,000	5,052	Copper cable
15.	Aluminium	17 04 02	t	0,220	0,000	0,001	0,000	0,000	0,221	Aluminium
	Non-ferrous metal	19 12 03								
16.	Iron and steel	17 04 05		115,770	0,000	0,0004	0,499	0,000	116,2194	Steel sheets
				0,103	0,000	0,000	0,000	0,000	0,103	Prochrome
				150,506	2,479	3,896	16,933	0,000	173,814	Waste iron
				2,479	0,000	0,000	0,034	0,000	2,513	Metal scrapings
17.	Cables other than those mentioned in 17 04 10	17 04 11	t	0,200	0,000	0,000	0,000	0,000	0,200	Aluminium cables
18.	Paper and cardboard	20 01 01	t	0,384	0,000	0,000	0,000	0,000	0,384	Paper waste material
19.	Fluorescent tubes and other mercury-containing waste	20 01 21*	t	0,098	0,080	0,000	0,019	0,000	0,197	Waste fluorescent lamps
20.	Batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and	20 01 33*	t	0,189	0,000	0,000	1,820	0,000	2,009	Waste lead accumulators

	accumulators containing these batteries									
	Lead batteries	16 06 01*								
21.	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	13,850	1,303	0,0518	0,861	0,128	16,1938	Disposed electrical and electronic equipment and parts
	Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12	16 02 13*								
22.	Wood other than that mentioned in 20 01 37	20 01 38	t	0,020	0,040	0,000	1,693	0,000	1,753	Discarded wood and plywood
23.	Wood other than that mentioned in 20 01 37	20 01 38	t	1.270,700	0,000	0,000	0,000	0,000	1.270,700	Discarded wood taken out of Danube
24.	Glass	20 01 02	t	4,100	0,000	0,000	0,000	0,000	4,100	Glass

The waste generated by the hydroelectric power plants facilities of the Djerdap HPPs during the year is temporarily stored and sold to authorised operators in accordance with the Regulation stipulating storage, packaging and labelling methods of hazardous waste (OG RS № 92/10 dated 05.12.2010), Regulation stipulating categories, testing and classification of waste (OG RS № 56/10 dated 10.08.2010), Regulation stipulating the conditions and manner of collection, transportation, storage and treatment of waste used as secondary raw material or for energy generation (OG RS № 98/10 dated 24.12.2010), Regulation stipulating the conditions, manner and procedure for waste oil management (OG RS № 71/10 dated 04.10.2010) and the Regulation stipulating the methods and procedures for waste management containing asbestos (OG RS № 74/10 dated 15.10.2010).

Waste amounts delivered to authorized operators in 2020 are as follows in Table 105.



Table 105

DJERDAP HPPS BRANCH										
Waste delivered in 2020										
№	Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS № 56/2010 and 93/2019)		Unit	Facility					Total	Note
				Djerdap 1 HPP	Djerdap 2 HPP	Pirot HPP	Vlasinske HPPs	SCM Pozarevac		
	Name	Index number		Amounts						
1.	Wastes from forestry	02 01 07	t	0.000	0.000	0.000	174,380	0.000	174,380	White pine- waste
2.	Wooden packaging	15 01 03	t	29,410	0.000	0.000	0.000	0.000	29,410	
3.	End-of-life tyres	16 01 03	t	6,450	5,447	0,344	3,400	0.000	15,641	
4.	Plastics	16 01 19	t	2,349	0,363	0,012	0,116	0.000	2,840	
5.	Copper, bronze, brass	17 04 01	t	0,740	0,440	0.000	0.000	0.000	1,180	Waste brass
				5,560	0.000	0.000	0.000	0.000	5,560	Waste bronze
				55,751	0,113	0.000	2,984	0.000	58,848	Waste copper
6.	Aluminium	17 04 02	t	4,480	0.000	0.000	0,103	0.000	4,583	
7.	Iron and steel	17 04 05	t	6,020	0.000	0,075	3,056	0.000	9,151	Waste steel sheets
				0.000	0,500	0,050	0,110	0.000	0,660	Waste metal scrapings
				161,020	44,208	5,580	27,074	0.000	237,882	Waste iron
				0.000	1,550	0.000	0.000	0.000	1,550	Stainless steel
				0,640	0.000	0.000	0.000	0.000	0,640	Waste prochrome
				0,860	0.000	0.000	0.000	0.000	0,860	Waste cable
8.	Cables other than those mentioned in 17 04 10	17 04 11	t	8,070	0,178	1,360	5,720	0.000	15,328	Waste copper cable
			t	0.000	0.000	0.000	0,280	0.000	0,280	Waste aluminium cable
9.	Paper and cardboard	20 01 01	t	0,580	0.000	0.000	0.000	0.000	0,580	
10.	Glass	20 01 02	t	0.000	0.000	0.000	0.000	0.000	0,030	Waste glass
11.	Wood other than that mentioned in 20 01 37	20 01 38	t	8,600	0,450	1,315	4,300	0.000	14,665	Waste wood
		20 01 38	t	2.410,00	0.000	0.000	0.000	0.000	2.410,000	Discarded wood taken out of Danube

6.2.4. Environmental Noise Measurement

Noise in the environment (near the electric power facilities operated by the Djerdap HPPs) has not been measured, because the facilities are dislocated from the settlement and as such do not threaten the environment.

6.3. Working Environment Monitoring, Occupational Safety and Health Protection

Occupational Safety and Health Protection Reports in 2020 include the following elements:

- **Working Environment Monitoring**
 - noise measurements in the working environment
- **Occupational Safety**
 - training of employees
 - occupational injuries
- **Health Protection**

6.3.1. Working Environment Monitoring

- **Noise measurements in the working environment**

In 2020, in organisational units Djerdap 1 HPP, Djerdap 2 HPP, Pirot HPP, Vlasinske HPPs, SCM Pozarevac, DMR Beograd measurements of physical hazards in working environment were not carried out.

6.3.2. Occupational Safety

- **Training of employees**

Specific training of health protection and occupational safety for the employees has been conducted under the Training program, including both theoretical and practical workshops. During 2020 the following types of training were:

• Training of the employees for safety and health at work.....	293
• Visitors training	009
• Fire protection training.....	208
• Contractors' employees training (O.O.IMS.0.8.5.1.0.2 procedure).....	201
• Training of students and pupils on practical classes.....	006
• Training for safe work with the equipment.....	000
• IMS training	105

Introduction to the dangers and hazards, i.e. the risk factors, in the Branch of Djerdap is carried out in accordance with the Regulations on Safety and Health at Work and the Risk Assessment Act. The same applies to the contractors with whom a special agreement is signed regarding the implementation of occupational safety and health measures during the performance of contractual works in a common according to the law.

The number of employees trained in the field of occupational health and safety is given in Table 106.

Table 106

DJERDAP HPPS BRANCH					
Training of employees in 2020					
Organisational unit	Number of employees	For training		Trained	
		Number	%	Number	%
Djerdap 1 HPP	348	0	0,00	0	0,00
Djerdap 2 HPP	208	128	61,54	128	100,00
Pirot HPP	34	0	0,00	0	0,00
Vlasinske HPPs	105	85	80,95	85	100,00
SCM Pozarevac and DMR Beograd	76	0	0	0	0,00
TOTAL: DJERDAP HPPS BRANCH	769	213	27,70	213	100,00

Occupational injuries

Number of occupational injuries in 2020 is presented in Table 107.

Table 107

DJERDAP HPPS BRANCH						
Occupational injuries in 2020						
Organisational unit	Number of employees	Injuries in relation to the number of employees				
		Light	Severe	Fatal	Total	%
Djerdap 1 HPP	348	6	0	0	6	1,72
Djerdap 2 HPP	206	0	0	0	0	0,00
Pirot HPP	34	0	0	0	0	0,00
Vlasinske HPPs	105	0	0	0	0	0,00
SCM Pozarevac and DMR Beograd	76	0	0	0	0	0,00
TOTAL: DJERDAP HPPS BRANCH	769	6	0	0	6	0,78

6.3.3. Health Protection

During 2020, periodic medical examinations were performed for employees in the Djerdap HPPS Branch. The data are shown in the Table 108.

Table 108

DJERDAP HPPS BRANCH											
Work ability of employees in 2020											
Organisational unit	Number of employees	Periodic examination				For work					
		Referred for examination		Examined		Capable		Limited ability		Incapable of work	
		број	%	број	%	број	%	број	%	Број	%
Djerdap 1 HPP	348	327	93,97	327	100,00	327	100,00	0	0,00	0	0,00
Djerdap 2 HPP	206	108	52,43	107	99,07	103	96,26	4	3,74	0	0,00
Pirot HPP	34	34	100,00	34	100,00	34	100,00	0	0,00	0	0,00
Vlasinske HPPs	105	88	83,81	87	98,86	87	100,00	0	0,00	0	0,00
SCM Pozarevac and DMR Beograd	76	26	34,21	26	100,00	26	100,00	0	0,00	0	0,00
TOTAL: DJERDAP HPPS BRANCH	769	583	75,81	581	99,66	577	99,31	4	0,69	0	0,00

6.4. Public Complaints

There were no public complaints related to the environment in 2020.

7. DRINSKO-LIMSKE HPPS BRANCH

The Drinsko-Limske HPPs Branch comprises the following hydropower plants:

BAJINA BAŠTA HPPs:

- **Bajina Bašta HPP**
- **Bajina Bašta PSHPP**
- **Vrelo SHPP**

ZVORNIK HPP:

- **Zvornik HPP**
- **Radaljska Banja SHPP**

ELEKTROMORAVA HPPs:

- **Međuvršje HPP**
- **Ovčar Banja HPP**

LIMSKE HPPs:

- **Uvac HPP**
- **Kokin Brod HPP**
- **Bistrica HPP**
- **Potpeć HPP**

7.1. Overview and Status of Permits

Overview and status of permits, licences and other necessary approvals as well as applications for obtaining new ones or extending the valid permits and approvals in 2020 are shown in Table 109.

Table 109

DRINSKO-LIMSKE HPPS BRANCH			
Overview and Status of Permits in 2020			
Facility	Obtained permits and approvals (number and date)	Applications for obtaining new ones or extending the valid permits	Note
BAJINA BAŠTA HPPS			
Bajina Bašta HPP	No new permits obtained in 2020	No new applications	-
Bajina Bašta PSHPP	Decision on Building permit for the construction of a facility for the accommodation of frequency converter equipment for starting of generator in pump operating mode of RHPP Bajina Bašta no. 351-02-00287/2019-07 ROP-MSGI-21134-CPIH-4/2019 of 13.01.2020. Certificate of registration of works, Building permit for the construction of a facility for the accommodation of frequency converter equipment for starting of generator in pump operating mode of RHPP Bajina Bašta no.	No new applications	-

	351-06-00306/2020-07 ROP-MSGI-21134-WA-5/2020 of 22.01.2020		
Vrelo SHPP	No new permits obtained in 2020	No new applications	-
ELEKTROMORAVA HPPS			
Ovčar Banja HPP	No new permits obtained in 2020	On 29.06.2020 a request for issuance of water permit was submitted	-
Međuvršje HPP	No new permits obtained in 2020	On 29.06.2020 a request for issuance of water permit was submitted	-
ZVORNIK HPP			
ZVORNIK HPP	No new permits obtained in 2020	On 22.12.2020 a request for issuance of water permit was submitted	-
Radaljska Banja SHPP	No new permits obtained in 2020	On 28.01.2020 a request for issuance of water permit was submitted	-
LIMSKE HPPS			
Kokin Brod HPP	No new permits obtained in 2020	No new applications	
Uvac HPP	No new permits obtained in 2020	No new applications	-
Bistrica HPP	No new permits obtained in 2020	No new applications	
Potpeć HPP	No new permits obtained in 2020	No new applications	-
Miscellaneous			-

7.2. Monitoring and Environmental Impact

In 2020, Drinsko – Limske HPPs Branch had the re-certification audit according to the requirements of the ISO standard 14001: 2015. The re-certification audit was performed on 10th December 2020. Remote audit was performed. The results have shown that Drinsko – Limske HPPs Branch continuously maintain and improve their integrated management system in accordance with the ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 standards' requirements.

In the period 21st – 20rd December 2020, the first control audit *EnMS – Energy management system ISO 50001:2018 (Energy efficiency)* was performed.

The successful audit was performed by SGS (*Systems & Services Certification Zurich - Switzerland*).

7.2.1. Identified Negative Impacts on the Flow and Ecological System below the Accumulation

The identified negative impacts in the flows downstream the dams are mainly twofold: with very low water levels (low discharge) caused by annual climate and meteorological conditions and otherwise, when there are very large inflows, there is a tendency to realize transfer of hydro power with as higher as possible efficiency through the planning of electricity production.

7.2.2. Water

• Water amounts

Utilization of water for hydropower generation, process and sanitary water was performed within permitted amounts. Amounts of permitted and amounts of water used for electricity generation, as well as amounts of water discharged after electricity generation in 2020 are provided in Table 110.

Table 110

DRINSKO-LIMSKE HPPS BRANCH							
Water amounts in 2020							
Facility		No. of units	Permitted water amounts (Installed discharge per unit) m³/ s	Discharged water amounts			
				Water used for electricity generation in 2020. m³/ year x 10 ⁶	Process water m³/ year x 10 ⁶	Sanitary water m³/ year x 10 ³	Total discharged water m³/ year x 10 ⁶
Bajina Bašta HPP		4	175	7161	0,000	18,649	7699
Bajina Bašta PSHPP		2	55	538	0,000	0,000	0,000
Vrelo SHPP		1	0,74	0,000	0,000	0,000	0,000
ZVORNIK HPP		4	170	8.013	0,124	2,43	8015,5
Radaljska Banja SHPP		1	0,400	0,000	0,000	0,000	0,000
ELEKTROMORAVA HPP	Međuvršje HPP	3	I-19,5 II-30 III-3,75	616,305	0,0085159	0,006465	616,31998095
	Ovčar Banja HPP	2	I-19,5 II-30	581,882	0,00521199	0,006202	581,89341399
LIMSKE HPPS	Uvac HPP	1	43	230,618	0,235	0,1	230,853
	Kokin Brod HPP	2	18,7	257,582	0,985	0,2	258,567
	Bistrica HPP	2	18	279,616	1,633	0,5	281,249
	Potpeć HPP	3	55	3,494	1.597,639	0,5	1.601,133

• Water quality

Pursuant to the contractual obligations regarding the control management of wastewater and surface water from the riverflows and accumulations, Occupational Safety Institute in 2020 conducted the sampling of waste and surface waters from all power plants operating within the Drinsko – Limske HPPs Branch.

The sampling was made for three quarters of 2020. The following number of samples was taken: Bajina Bašta HPP 11 samples, Limske HPPs 12 samples, Elektromorava HPP 6 samples and Zvornik HPP 3 samples as follows:

- wastewater sample
- surface water sample upstream from the facility
- surface water sample downstream from the facility

The water samples were chemically and biologically analysed, while the results were interpreted in accordance with Regulation on stipulating pollutants limit values in surface and ground waters and sediments, and the deadlines for their achievement (OG RS № 50/2012), Regulation on stipulating hazardous substances in water (OG RS № 31/1982), Water Classification Regulation and Watercourse Categorisation Regulation (OG SFRY № 5/1968). The wastewater and surface water quality test results are presented in Table 111.

Table 111

DRINSKO – LIMSKE HPPs BRANCH															
Water quality in 2020															
Facility	Testing parameters (unit)	Wastewater and surface water quality testing results for 2020													
		1 st quarter			2 nd quarter			3 rd quarter			4 th quarter			Reference values	Test results comment and conclusion (Comment on chemical and bacteriological analysis of the samples from the sewage system and surface water upstream and downstream of the facility and its impact on water class defined by Water Classification Regulation)
		From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility	From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility	From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility	From the sewage system before discharge	Surface water upstream from the facility	Surface water downstream from the facility		
BAJINA BAŠTA HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	5,1 x102	4,9x10 ²	-	1,5x10 ⁴	5,1x10 ³	-	1,6x10 ³	5,5x10 ³	-	The Drina River belongs to Class II. The tested parameters meet the values defined by the Regulation.
	Dissolved O ₂ (mg/l)	-	-	-	0,51	10,43	8,53	5,9	9,11	8,15	3,41	8,94	7,07	min. 7,0	
	Suspended substances (mg/l)	-	-	-	<1	<1	<1	<1	<1	<1	<1	<1	<1	25	
	COD (mg/l)	-	-	-	10	4,8	4,8	12,7	<4	<4	19,7	<4	<4	15	
	BOD ₅ (mg/l)	-	-	-	2	<0,5	0,96	4,21	2,11	0,7	13	0,7	0,82	5	
	pH value	-	-	-	7,6	8,22	7,88	7,72	8,38	7,85	7,53	8,28	7,85	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
ZVORNIK HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	4,7x10 ³	1x10 ³	-	3,1x10 ³	6,2x10 ³	-	5,1x10 ³	5,5x10 ³	-	The Drina River belongs to Class II. The tested parameters meet the values defined by the Regulation.
	Dissolved O ₂ (mg/l)	-	-	-	-	8,82	8,90	-	8,57	8,67	-	8,56	8,40	min. 7,0	

	Suspended substances (mg/l)	-	-	-	-	<1	<1	-	<1	<1	-	<1	<1	25	
	COD (mg/l)	-	-	-	-	<4	<4	-	4,5	4,8	-	<4	4,2	15	
	BOD ₅ (mg/l)	-	-	-	-	0,81	0,65	-	1,47	1,09	-	0,68	0,74	5	
	pH value	-	-	-	-	7,98	8,02	-	8,24	8,16	-	8,20	8,09	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
OVČAR BANJA HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	2 x10 ⁴	6 x10 ⁴	-	2,3x10 ⁴	3,1x10 ⁴	-	1x10 ³	1,6 x10 ⁴	-	The River of Zapadna Morava belongs to Class II. The tested parameter of COD in the third quarter - below the dam does not meet the values defined by the Regulation.
	Dissolved O ₂ (mg/l)	-	-	-	-	8,51	8,6	-	7,51	7,97	-	6,79	6,06	min. 7,0	
	Suspended substances (mg/l)	-	-	-	-	2,4	<0,1	-	14	13,6	-	<0,1	<0,1	25	
	COD (mg/l)	-	-	-	-	11	5,5	-	9,4	19,1	-	<4	5,1	15	
	BOD ₅ (mg/l)	-	-	-	-	2,4	1,05	-	1,47	1,18	-		0,85	5	
	pH value	-	-	-	-	7,83	7,83	-	7,89	7,65	-	7,76	7,57	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEĐUVRŠJE HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	2,8 x10 ⁴	4,4x10 ⁴	-	4,9x10 ³	1,1x10 ⁴		6 x10 ³	7,1 x10 ³	-	The River of Zapadna Morava belongs to Class II. The tested parameters meet the values defined by the Regulation.
	Dissolved O ₂ (mg/l)	-	-	-	-	8,04	8,08	-	7,24	7,15	-	7,81	7,79	min. 7,0	
	Suspended substances (mg/l)	-	-	-	-	<1	<1	-	<1	25	-	<1	<1	25	
	COD (mg/l)	-	-	-	-	5,8	6,5	-	4,8	8,7	-	4,5	4,8	15	
	BOD ₅ (mg/l)	-	-	-	-	2,11	1,14	-	1,02	2,02	-	0,91	0,80	5	

	pH value	-	-	-	-	7,75	7,75	-	7,62	7,69	-	7,74	7,73	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
UVAC HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	3,5x10 ³	1x10 ²	-	2,2x10 ⁴	1x10 ⁵	-	1x10 ²	1,1x10 ³	-	The Uvac River belongs to Class II. The tested parameter pH value in the third quarter before the dam does not meet the values defined by the Regulation.
	Dissolved O ₂ (mg/l)	-	-	-	-	9,66	8,52	-	8,88	9,27	-	7,27	8,8	мин. 7,0	
	Suspended substances (mg/l)	-	-	-	-	<1	<1	-	<1	20	-	<1	8	25	
	COD (mg/l)	-	-	-	-	<4	4,2	-	<4	12,5	-	<4	4,3	15	
	BOD ₅ (mg/l)	-	-	-	-	0,65	0,91	-	1,14	1,27	-	0,58	0,56	5	
	pH value	-	-	-	-	8,36	7,67	-	8,57	7,85	-	8,2	7,64	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
KOKIN BROD HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	<1x10 ²	<1x10 ²	-	4,1x10 ³	2,3x10 ⁴	-	6,2x10 ²	1,2x10 ³	-	The Uvac River belongs to Class II. The tested parameters meet the values defined by the Regulation.
	Dissolved O ₂ (mg/l)	-	-	-	-	9,61	5,49	-	9,28	8,11	-	8,5	7,22	мин. 7,0	
	Suspended substances (mg/l)	-	-	-	-	<1	<1	-	<1	<1	-	<1	<1	25	
	COD (mg/l)	-	-	-	-	4,5	4,6	-	<4	5,1	-	<4	<4	15	
	BOD ₅ (mg/l)	-	-	-	-	0,81	0,6	-	1,31	1,72	-	0,61	0,54	5	
	pH value	-	-	-	-	8,19	7,81	-	8,26	8,02	-	8,28	7,56	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
BISTRICA HPP	MPN coliform bacteria (E.coli/100 ml)	-	-	-	-	2x10 ²	3x10 ²	-	3,9x10 ⁴	8,1x10 ³	-	5,1x10 ³	7,9x10 ³	-	The Uvac River belongs to Class II. The tested parameters meet

	Dissolved O2 (mg/l)	-	-	-	-	8,33	10,06	-	8,99	9,08	-	8,36	8,37	мин. 7,0	the values defined by the Regulation.
	Suspended substances (mg/l)	-	-	-	-	<1	<1	-	<1	<1	-	<1	<1	25	
	COD (mg/l)	-	-	-	-	<4	<4	-	<4	<4	-	<4	<4	15	
	BOD ₅ (mg/l)	-	-	-	-	0,66	0,54	-	1,18	1,16	-	<0,5	<0,5	5	
	pH value	-	-	-	-	8,27	8,22	-	8,24	8,21	-	8,11	8,12	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-	-	-	-	-	-	-	-	-	-	
ПОТРЕЋ HPP	Dissolved O2 (mg/l)	-	-	-	-	7,91	8,96	-	8,03	8,42	-	5,61	9,81	мин. 7,0	
	Suspended substances (mg/l)	-	-	-	-	<1	<1	-	<1	<1	-	<1	<1	25	
	COD (mg/l)	-	-	-	-	<4	<4	-	4,9	4,8	-	4,9	5,2	15	
	BOD ₅ (mg/l)	-	-	-	-	0,71	0,91	-	1,79	<0,5	-	1,12	0,62	5	
	pH value	-	-	-	-	7,85	8,12	-	7,67	8,27	-	7,62	8,29	6,8-8,5	
	Total oil and grease (mg/l)	-	-	-	-			-	-	-	-	-	-	-	

Water quality control for Vrelo SHPP and Radaljska Banja SHPP was not carried out in the Drinsko-Limske HPPs Branch, since for their size and structure they are not able to produce waste water.

7.2.3. Waste

Waste at the Drinsko – Limske HPPs Branch is mostly produced in the process of hydro power plants maintenance.

The generated waste in 2020 is shown in the Table 112.

Table 112

DRINSKO-LIMSKE HPPS BRANCH									
Generated waste in 2020									
No.	Official nomenclature of the Rules defining waste categories, its testing and classification (OG RS № 56/2010 and 93/2019)		Unit (t)	Facility				Total	Note
				Bajina Bašta HPP and PSHP	LIMSKE HPPs	Elektromorava HPP	Zvornik HPP		
	Name	Index number		Amounts					
1.	Waste toner for printing other than that specified in 08 03 17	08 03 18	t	0,342	0,000	0,000	0,000	0,342	Toners
2.	Aluminium	17 04 02	t	0,000	0,000	0,000	0,020	0,020	Aluminium
3.	Iron and steel	17 04 05	t	0,000	0,000	0,000	39,020	39,020	Steel
4.	Mixed metals	17 04 07	t	0,000	0,000	0,000	10,560	10,56	Mixed metals

Waste management was performed following the waste management procedures and according to the following waste handling legislation: Regulation on method of storage, packaging and labeling hazardous waste "Official Gazette of RS", No. 92/10 dated 05.12.2010; Regulation on categories, testing and classification of waste ("Official Gazette of the Republic of Serbia", No. 56/10 dated 10.08.2010); Regulation on the conditions and methods of collection, transport, storage and treatment of waste used as secondary raw material or for energy generation ("Official Gazette of the Republic of Serbia", No. 98/10 dated 24.12.2010); Regulation on waste oils management methods ("Official Gazette of the Republic of Serbia", No. 71/10 dated 04.10.2010) and Regulation on manner and procedures for waste management containing asbestos ("Official Gazette of the Republic of Serbia" No. 74/10 dated 15.10. 2010).

The waste generated in Drinsko – Limske HPP Branch was tested – the categorization of waste was done. During the year, the collected waste is stored within the plants and delivered to the authorized companies registered for such activity. The delivered waste in 2020 is shown in the Table 113.

Table 113

DRINSKO – LIMSKE HPPS BRANCH									
Delivered waste in 2020									
No.	Official nomenclature of the Rules defining waste categories, its testing and classification OG RS № 56/2010 and 93/2019)		Unit (t)	Facility				Total	Note
				Bajina Bašta HPP and PSHPP	Limske HPPs	Elektromorava HPP	Zvornik HPP		
	Name	Index number		Amounts					
1.	Waste toner for printing other than that specified in 08 03 17	08 03 18	t	0,342	0,000	0,000	0,000	0,342	Toners
2.	Aluminium	17 04 02	t	0,000	0,000	0,000	0,020	0,020	Aluminium
3.	Iron and steel	17 04 05	t	0,000	0,000	0,000	39,02	39,02	Steel
4.	Mixed metals	17 04 07	t	0,000	0,000	0,000	10,560	10,560	Mixed metals

7.2.4. Environmental Noise Measurement

Environmental noise measurements nearby the electric power facilities were not performed in 2020, because they are dislocated from the settlement and as such do not represent a risk factor for the environment from this aspect.

7.3. Working Environment Monitoring, Occupational Safety and Health Protection

Occupational Safety and Health Protection Reports in 2020 include the following elements:

- **Working Environment Monitoring**
 - Noise measurements in the working environment
- **Occupational Safety**
 - Training of employees
 - Occupational injuries
- **Health Protection**

7.3.1. Working Environment Monitoring

- **Noise measurements in the working environment**

Within the framework of testing of working environment, physical and microclimatic parameters, noise measurements in the working environment were made in all facilities of Drinsko - Limske hydro power plants, during regular periodic inspections for the summer period of 2019. Noise measurement was not performed in 2020.

7.3.2. Occupational Safety

- **Training of employees**

Employee training has been conducted under the Training program and complementing the knowledge of employees from occupational safety is performed periodically depending on the workplace, which is in compliance with the applicable legal regulations. The number of employees scheduled for training and the number of employees who have been trained is shown in Table 114.

Table 114

DRINSKO – LIMSKE HPPS BRANCH					
Training of employees in 2020.					
Facility	Number of employees	For training		Trained	
		No.	%	No.	%
Bajina Bašta HPP	196	156	79,59	156	100,00
Bajina Bašta PSHPP					
Elektromorava HPP	39	7	17,95	7	100,00
Zvornik HPP	53	41	77,36	41	100,00
Limske HPPs	110	110	100,00	110	100,00
TOTAL: DRINSKO – LIMSKE HPPS BRANCH	398	314	78,89	314	100,00

Table 115. gives numbers of individuals sent for other trainings.

Table 115

DRINSKO – LIMSKE HPPS BRANCH			
Other trainings in 2020			
No.	Type of training	Number of persons	Note
1.	Introducing the contractors with the dangers and hazards, OSH measures and rules of conduct	BBHPP/355 LHPP/238 ZVHPP/42 EMHPP/41 TOTAL: 676	-
2.	First aid training	LHP/P/20 EMHPP/18 TOTAL: 38	-
3.	Training for OSH of workers engaged in auxiliary overhaul works	BBHPP/99 LHPP60 ZVHPP/18 EMHPP/4 TOTAL 181	-
4.	Introducing the students and pupils at practice with OSH measures and rules of conduct	LHPP/10 ZVHPP/5 TOTAL: 15	-
5.	Training of employees in case of change of workplace	BBHPP/3 TOTAL: 3	
6.	Fire protection trainings	LHPP/3 ZVHPP/3 TOTAL: 6	-

Occupational injuries

Table 116. provides number data occupational injuries in 2020.

Table 116

DRINSKO – LIMSKE HPPS BRANCH						
Occupational injuries in 2020.						
Facility	Number of employees	Injuries in relation to the number of employees				
		Light	Severe	Fatal	Total	%
Bajina Bašta HPP	196	3	1	0	4	2,04
Bajina Bašta RHPP						
Elektromorava HPP	39	0	0	0	0	0,00
Zvornik HPP	53	0	0	0	0	0,00
Limske HPPs	110	0	0	0	0	0,00
TOTAL: DRINSKO – LIMSKE HPPS BRANCH	398	3	1	0	4	1,01

7.3.3. Health protection

Medical examinations results are provided in Table 117.

Table 117

DRINSKO – LIMSKE HPPS BRANCH											
Work ability of employees in 2020.											
Facility	No.of employees	Periodical examination				Work capacity					
		For medical examination		Examined		capable		Limited capability		Not capable	
		No.	%	No.	%	No.	%	No.	%	No.	%
Bajina Bašta HPP	196	122	62,24	114	93,44	90	78,95	23	20,18	1	0,88
Bajina Bašta RHPP											
Elektromorava HPP	39	3	7,69	3	100,00	3	100,00	0	0,00	0	0,00
Zvornik HPP	53	23	43,40	23	100,00	20	86,96	2	8,70	1	4,35
Limske HPPs	110	33	30,00	33	100,00	30	90,91	3	9,09	0	0,00
TOTAL: DRINSKO – LIMSKE HPPS BRANCH	398	181	45,48	173	95,58	143	82,66	28	16,18	2	1,16

7.4. Public complaints

Several requests for compensation for the damage caused by the landslide were submitted by the residents of Zaovina.

8. RENEWABLE ENERGY SOURCES BRANCH

The Renewable Energy Sources (RES) Branch comprises the following small hydropower plants, some are in operation, whilst larger part is in the process of reconstruction.

Small hydropower plants in operation:

- Sicevo HPP
- Sokolovica HPP
- Gamzigrad HPP
- Prvonek HPP

Small hydropower plants that are out of operation:

- Seljašnica HPP
- Sveta Petka HPP
- Moravica HPP
- Turica HPP
- Pod gradom HPP
- Kratovska reka HPP
- Raška HPP
- Temac HPP
- Vučje HPP
- Jelašnica HPP
- Stanica Spasoević HPP
- Crna HPP
- Krasava HPP
- Manastirište HPP

According to the plans of PE EPS, HPP Gamzigrad is exempt from reconstruction, small hydropower plants that are out of service at different stages of reconstruction, and the last four small hydropower plants are not currently in the reconstruction plans of PE EPS due to the state they are in at the moment.

8.1. Overview and Status of Permits

In 2020. reconstruction of Kratovska reka HPP, Moravica HPP, Pod Gradom HPP, Temac HPP, Raška HPP, Vučje HPP, i Jelašnica HPP was continued. Based on plans, reconstruction of Sveta Petka HPP started in 2020.

Prvonek HPP has a Use permit no. 351-398/2012-07 issued on June 13th 2013 by the competent Secretariat of the City of Vranje.

8.2. Monitoring and Environmental Impact

8.2.1. Identified Negative Impacts on the Flow and Ecological System below the Accumulation

The identified negative impacts in streams downstream the dams are mainly twofold: with very low water level (low flow rate), causing by annual climate and meteorological conditions and otherwise, when there are very large inflows, there is a tendency to realize transfer of hydro power with as higher as possible efficiency through the planning of electricity production.

8.2.2. Water

• Water quantity

Utilisation of water for hydropower generation, process and sanitary water did not exceed the permitted amounts. Amounts of permitted and amounts of water used for electricity generation, as well as amounts of water discharged after electricity generation in 2020 are provided in Table 118.

The data which are not indicated in the table are unavailable due to impossibility of measurement or lack of measuring equipment in the listed hydropower plants.

Table 118

RENEWABLE ENERGY SOURCES BRANCH						
Water amounts in 2020.						
Organizational unit	Installed power kW	Permitted water amount (installed flow per unit) m ³ /s	Discharged water amounts			
			Water used for electricity generation in 2020. m ³ /y.x10 ⁶	Technical water m ³ /y.x10 ⁶	Sanitary water m ³ /year.x10 ³	Total discharged water ¹ m ³ /year.x10 ⁶
Raška SHPP	6.256	4,5	In reconstruction			
Seljašnica SHPP	Completed reconstruction		Out of service			
Moravica SHPP	160	2,50	In reconstruction			
Turica SHPP	Completed reconstruction		Out of service			
Pod Gradom SHPP	364	2,30	In reconstruction			
Kratovska reka SHPP	In reconstruction					
Sveta Petka SHPP	In reconstruction		In reconstruction			
Sićevo SHPP	1.348	20,60	-	-	-	-
Temac SHPP	752	6,10	In reconstruction			
Sokolovica SHPP	3.724	40	-	-	-	-
Gamzigrad SHPP	224	4,20	-	-	-	-
Vučje SHPP	928	1,25	In reconstruction			
Jelašnica SHPP	400	0,42	In reconstruction			
Prvonek SHPP	932	1,45	Out of service			

• Water quality

During 2020, water quality control was not carried out in the Renewable Energy Sources Branch. SHPPs in the RES Branch for their size and structure are not able to produce waste water.

8.2.3. Waste

During 2020, the works on reconstruction of previously mentioned small hydropower plants were being executed, where a part of the equipment was properly stored after dismantling. The stored equipment will, after the decision of the competent authorities, be further used by the institutions interested in using this equipment for teaching or museum purposes.

In the process of production and maintenance of small hydroelectric power plants in operation we had no waste.

8.2.4. Environmental Noise Measurement

Noise level in the environment near the hydropower electric facilities operated by the RES Branch was not measured in 2020, because the facilities are dislocated from the settlement.

8.3. Working Environment Monitoring, Occupational Safety and Health Protection

Occupational Safety and Health Protection Reports in 2020 include the following elements:

- **Working Environment Monitoring**
 - noise measurements in the working environment
- **Occupational Safety**
 - Training of employees
 - Occupational injuries
- **Health protection**

8.3.1. Working Environment Monitoring

- **Noise measurements in the working environment**

No noise measurement were made in the working environment in 2020.

8.3.2. Occupational Safety

- **Training of employees**

Employee training, which was done, is training employees for safe and healthy work, and is done according to the Training Program, theoretically and practically.

- Training of employees for safe and healthy work - 55 employees.

- **Occupational injuries**

In table 119. are given data on number of occupational injuries in 2020.

Table 119

RENEWABLE ENERGY SOURCES BRANCH						
Occupational injuries in 2020						
Organizational unit	Number of employees	Injuries in relation to the number of employees				
		Light	Severe	Fatal	Total	%
Renewable Energy Sources	55	0	1	0	1	1,82
TOTAL: RENEWABLE ENERGY SOURCES BRANCH	55	0	1	0	1	1,82

8.3.3. Health protection

Table 120 shows the results of medical examinations for the employees.

Table 120

RENEWABLE ENERGY SOURCES BRANCH											
Work ability of employees in 2020.											
Branch	Number of employees	Periodical examination				Work capability					
		For medical examination		Examined		Capable		Limited capability		Not capable	
		No.	%	No.	%	No.	%	No.	%	No.	%
Branch management	9	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
Istok SHPP	32	27	84,38	27	100,00	27	100,00	0	0,00	0	0,00
Zapad SHPP	14	10	71,43	10	100,00	10	100,00	0	0,00	0	0,00
TOTAL: RENEWABLE ENERGY SOURCES BRANCH	55	37	67,27	37	100,00	37	100,00	0	0,00	0	0,00

8.4. Public complaints

There was no public complaints regarding environment in 2020.

9. TECHNICAL CENTER BEOGRAD

Distribution network has not become a part of Technical Center Beograd. Transformer stations and cables lines are ownership of DSO "EPS Distribucija".

9.1. Overview and Status of Permits

Overview and status of permits, licences and other necessary approvals in 2020 were not carried out. There were no new applications for permits.

9.2. Monitoring and Environmental Impact

Environmental impact factors of TC Beograd are:

- **Electromagnetic fields;**
- **Environmental noise;**
- **Waste;**
- **Surface and groundwater quality;**
- **Soil quality.**

9.2.1. Electromagnetic Fields

During 2020, electromagnetic field measurements were not performed.

9.2.2. Living Environment Noise Measurements

During 2020, living environment noise measurements were not performed.

9.2.3. Waste

During 2020, the waste was not generated in TC Belgrade.

9.2.4. Surface, Ground Waters and Soil Monitoring

Monitoring of surface and groundwater, as well as monitoring of soil in 2020 was not defined-included on the territory of TC Beograd.

9.3. Working Environment Monitoring, Occupational Safety and Health Protection

Occupational Safety and Health Protection Reports in 2020 include the following elements:

- **Working Environment Monitoring**
 - noise measurements in the working environment
 - working environment electromagnetic fields
 - working environment parameters
- **Occupational Safety**
 - training of employees
 - occupational injuries
- **Health protection**

9.3.1. Working Environment Monitoring

- **Noise measurements in the working environment**

Working environment noise measurements were not performed in 2020.

▪ Working environment electromagnetic fields

Working environment electromagnetic fields measurements were not performed in 2020.

▪ Working environment parameters

Microclimate in the workplace and in the work environment were not performed in 2020.

9.3.2. Occupational Safety

▪ Training of employees

OHS training for employees is performed. Training of employees is carried out according to the Program for training employees for safe work. Checking the skills of employees in the field of OHS, working at the workplace with increased risk is carried out in accordance with the newly adopted Risk Assessment Act for Technical Centers.

Training of employees, shown in Table 121, included checking employees' qualifications as well as training of newly recruited employees.

Table 121

TECHNICAL CENTER BEOGRAD					
Training of employees in 2020.					
TC Beograd	No.of employees	For training		Trained	
		No.	%	No.	%
Safe and healthy work of employees (working places with high risk of injuries)	834	426	51,08	426	100,00

▪ Occupational injuries

The status of work injuries in 2020 is presented in Table 2020.

Table 122

TECHNICAL CENTER BEOGRAD						
Occupational injuries in 2020.						
Sector for technical services/Facility	No.of employees	Injuries in relation to the number of employee				
		Light	Severe	Fatal	Total	%
STS CENTAR	128	2	1	0	3	2,34
STS BANOVO BRDO	134	2	1	0	3	2,24
STS ZEMUN	114	0	0	0	0	0,00
STS KRNJACA	33	2	0	0	2	6,06
STS MLADENOVAC	79	0	1	0	1	1,27
STS OBRENOVAC	68	2	1	0	3	4,41
HQ	278	2	1	0	3	1,08
TOTAL: TECHNICAL CENTER BEOGRAD	834	10	5	0	15	1,80

9.3.3. Health protection

Periodical medical examinations of employees are shown in Table 123.

Table 123

TECHNICAL CENTER BEOGRAD											
Work ability of employees in 2020.											
Sector for technical services/Facility	No. of employees	Periodical examination				Work capability					
		Referred to examination		Examined/ referred		Capable		Limited capability		Not capable	
		No.	%	No.	%	No.	%	No.	%	No.	%
STS CENTAR	128	81	63,28	81	100,00	80	98,77	1	1,23	0	0,00
STS BANOVO BRDO	134	96	71,64	96	100,00	91	94,79	3	3,13	2	2,08
STS ZEMUN	114	81	71,05	81	100,00	76	93,83	4	4,94	1	1,23
STS KRNJACA	33	17	51,51	17	100,00	16	94,12	1	5,88	0	0,00
STS MLADENOVAC	79	50	63,29	50	100,00	48	96,00	1	2,00	1	2,00
STS OBRENOVAC	68	46	67,65	46	100,00	45	97,83	1	2,17	0	0,00
HQ	278	55	19,78	55	100,00	53	96,36	1	1,82	1	1,82
TOTAL: TECHNICAL CENTER BEOGRAD	834	426	51,08	426	100,00	409	96,01	12	2,82	5	1,17

9.4. Public complaints

There were no public complaints for environment in 2020.

GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
STS SREMSKA MITROVICA Environmental Noise Measurement were not carried out in 2020						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
STS ZRENJANIN Environmental Noise Measurement were not carried out in 2020.						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
STS RUMA Environmental Noise Measurement were not carried out in 2020.						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)

MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
STS NOVI SAD Environmental Noise Measurement were not carried out in 2020.						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
Measuring points						
	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						
STS PANČEVO Environmental Noise Measurement were not carried out in 2020.						
Measuring points						
Room for printing accounts	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)	Measured level Leq dB(A)	Relevant level dB(A)
MEASURED VALUES	-	-	-	-	-	-
GVI						

10.2.3. Waste

Produced amount of waste in 2020 is presented in Table 125.

Table 125

TEHICAL CENTER NOVI SAD												
Waste types generated in 2020.												
SERIAL NUMBER	RULEBOOK ON CATEGORIES. TESTING AND CLASSIFICATION OF WASTE ("Official Gazette of the Republic of Serbia". no. 56/2010 and 93/2019))	INDEX NUMBER	UNIT OF MEASURE	Sector for technical services							Total	Note
				SUBOTICA	SOMBOR	ZRENJAIN	NOVI SAD	SREMSKA MITROVICA	RUMA	PANČEVO	TOTAL TC NOVI SAD	
				AMOUNTS								
1.	Waste printing toner other than those mentioned in 08 03 17	08 03 18	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
2.	Other insulating and heat transmission oils	13 03 10*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Transformer oils
3.	Other emulsions	13 08 02*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Oiled water from oil pit
4.	Packaging containing residues of or contaminated by hazardous substances	15 01 10*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Plastic bottles used for testing transformer oils in electrical servicing workshop
5.	Absorbents, filter materials (including oil filters which are not otherwise specified), wiping cloths, protective clothing, contaminated with dangerous substances	15 02 02*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste adsorption mediums with oil and fuel oil. Oiled gravel
6.	End-of-life tyres	16 01 03	t	0,000	0,000	0,000	2,872	0,000	0,000	0,000	2,872	Waste tires
7.	Waste vehicles that do not contain any liquid or other dangerous substance	16 01 06	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
8.	Oil filters	16 01 07*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
9.	Ferrous metal	16 01 17	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Scrap iron
10.	Transformers and capacitors containing PCBs	16 02 09*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Scrap PCB transformers
11.	Discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12	16 02 13*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Condenser batteries
12.		16 02 14	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Scrap meters

	Discarded equipment other than those mentioned in 16 02 09 to 16 02 13			0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Scrap transformers without oil
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Electrical devices
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Measuring cabinets
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Measuring devices (ampermeters, volt meters)
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Disconnecter 20 kV
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	LV and HV Units
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Scrap fuses LV and HV
13.	Lead batteries	16 06 01*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Batteries
14.	Wastes containing oil	16 07 08*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste putty for transformer oil testing on RSV
15.	Oily water	16 10 01		0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Aqueous liquid wastes containing hazardous substances from the oil pit
16.	Concrete	17 01 01	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Concrete poles
17.	Wood	17 02 01	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Wooden poles
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste mixed wood
18.	Plastic	17 02 03	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
19.	Glass, plastic and wood containing or contaminated with hazardous substances	17 02 04*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Impregnated wooden poles
20.	Copper, bronze, brass	17 04 01	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste and residues of copper and brass
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste copper
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste copper cables
21.	Aluminium	17 04 02	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste aluminum
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste aluminum cables
22.	Iron and steel	17 04 05	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste parts of substation equipment
23.	Mixed metals	17 04 07	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Al - Fe
24.	Cables containing oil, coal tar and other hazardous substances	17 04 10*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Oil-filled cable
25.	Oiled gravel	17 05 03*		0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
26.	Insulation materials other than those mentioned in 17 06 01 and 17 06 03	17 06 04	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste ceramic insulators

27.	Construction materials containing asbestos	17 06 05*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste asbestos-cement corrugated sheet
28.	Paper and cardboard	20 01 01	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
29.	Glass	20 01 02	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
30.	Fluorescent tubes and other mercury-containing waste	20 01 21*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Fluorescent tubes, bulbs with mercury
31.	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste computers, keyboards, monitors, electronic meters
32.	Bulky waste	20 03 07	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste office furniture

10.2.4. Surface, Ground Waters and Soil Monitoring

Surface and ground waters monitoring, as well as soil monitoring in 2020 is not defined – included in the inspections

10.3. Working Environment Monitoring, Occupational Safety and Health Protection

Occupational Safety and Health Protection Reports in 2020 include the following elements:

- **Working Environment Monitoring**
 - noise measurements in the working environment
 - electromagnetic fields in the working environment
 - working environment parameters
- **Occupational Safety**
 - training of employees
 - occupational injuries
- **Health Protection**

10.3.1. Working Environment Monitoring

- **Noise measurements in the working environment**

Working environment noise measurements in 2020 have not been performed.

- **Working environment electromagnetic fields**

Electromagnetic field measurements were not performed in 2020

- **Working environment parameters**

In 2020, illumination and microclimate at workplace and within working environment have not been performed.

10.3.2. Occupational Safety

- **Training of employees**

Training of employees is presents in Table 126.

Table 126

TECHNICAL CENTER NOVI SAD						
Training of employees in 2020						
No.	Technical service department / Facility	Number of employees	Planned for training		Trained	
			no.	%	no.	%
1	SUBOTICA	138				
	Regular training "general electrical" training performed by NORCEV 2020		63	45,65	17	26,98
	Regular – annual training for positions with acceptable risk- administration. Training performed by responsible person for OHS/FF.		67	48,55	67	100,00
	Regular – annual training for positions with increased risk- electrical technicians. Training performed by responsible person for OHS/FF..		81	58,70	81	100,00
	General OHS training – employment, engagement contract for temporary assignments with Technical Center Novi Sad, EPS Supply, Agencies, temporary assignments. Training performed by responsible person for OHS/FF.		126	91,30	126	100,00
2	TSD SOMBOR	133				
	Regular training "general electrical" NORCEV 2020		48	36,09	12	25,00
	Regular – annual training for positions with increased risk. Training performed by responsible person for OHS/FF		74	55,64	74	100,00
	Training – introducing dangers and harms of third parties		174	130,83	174	100,00
3	TSD ZRENJANIN	118				
	Regular training "general electrical" NORCEV 2020		26	22,03	9	34,62
	** Special general training due to employment – Employer Agency PRO TENT		14	11,86	14	100,00
	** Introducing Contractors with dangers and harms, measures for OHS and rules of conduct		10	8,47	10	100,00
4	TSD NOVI SAD	174				
	* Regular training "general electrical" NORCEV 2020- training performed by: MANAGEMENT TECHNICAL CENTER NOVI SAD		40	22,99	23	57,50
	** Special general training due to employment – Employer PE EPS		20	11,49	20	100,00
	** Special general training due to employment – Employer Agency MONTOP HRS and PRO TENT		94	54,02	94	100,00
	** Special general training due to employment – Employer Agency MONTOP HRS and PRO TENT – EPS Supply		41	23,56	41	100,00
	**Introducing Contractors with dangers and harms, measures for OHS and rules of conduct		73	41,95	73	100,00
	**Introducing students attending practical training with OHS measures and rules of conduct		3	1,72	3	100,00
5	TSD RUMA	101				
	Regular training "general electrical" NORCEV 2020		23	22,77	10	43,48
6	TSD SREMSKA MITROVICA	50				
	Regular training "general electrical" NORCEV 2020		20	40,00	2	10,00
	**General training due to employment		5	10,00	5	100,00
	Special training in accordance with new Instruction for safe and healthy operation at overhead lines for employees employed by PROTENT		14	28,00	14	100,00



7	TSD PANCEVO	130				
	* Regular training "general electrical" NORCEV 2020- training performed by: MANAGEMENT OF TECHNICAL CENTER NOVI SAD Note: Training during 53. and 54. cycle was stopped due to pandemic of Corona virus (this is the reason why the percent of trained is small in NORCEV)		50	38,46	17	34,00
	**General OHS training – employment, engagement based on contract for temporary assignments with Technical Center Novi Sad. Responsible person for OHS department for technical services.		32	24,62	32	100,00
	Special general training due to change of position name.		3	2,31	3	100,00
	****General training – introducing visitors and service providers with OHS measures and rules of conduct					
8	MANAGEMENT OF TECHNICAL CENTER NOVI SAD	195				
	* Regular training "general electrical" NORCEV 2020- training performed by: MANAGEMENT OF TECHNICAL CENTER NOVI SAD		4	2,05	1	25,00
	** Special general training due to employment – Employer PE EPS		10	5,13	10	100,00
	** Special general training due to employment – Employer Agency MONTOP HRS and PRO TENT		74	37,95	74	100,00
	** Special general training due to employment – Employer Agency MONTOP HRS and PRO TENT – EPS Supply		6	3,08	6	100,00
TOTAL: TECHNICAL CENTER NOVI SAD		1.039	1.195	115,01	1.012	84,69

Periodical training of employees on workplaces with higher risk is carried out in NORCEV Educational Center, Iriski Venac. The training is organized in cycles, twice a year, so that 15 groups of employees are trained in one cycle, one group per week (165-230 trainees in total). Target of the training is preventive action and permanent improvement in acquiring new knowledges and skills for performance of working tasks with full implementation of OHS measures.

Theoretical part: includes OHS training, training in fire fighting and work technology. Employees are getting acquainted with issues in accordance with the OHS Rulebook – normative regulation and importance and target of OHS, sources of danger and harmfulness and preventive measures for safe and healthy work, means and equipment for personal protection at work. The second part of the training is to get acquainted with work technologies – works near voltage and in voltage-free state, dangers related to electric energy, fault PF localization, basic principles of PF manipulation, instructions on dispatching management. The third part implies getting acquainted with fire and explosion protection (practical training on simulators is carried out).

Once the theoretical part of training is accomplished, the trainees take knowledge test examination.

Practical part: it is performed in three groups on individually determined locations on polygon for demonstration such as: erection sheet metal transformer station TS 20/10/04 kV, room with measuring devices and ring main unity facility and combined MV, LV, Al/steel, self-supporting cable bundles and public lightening line.

▪ Injuries at work

Status of injuries for 2020 is presented in Table 127.

Табела 127

TECHNICAL CENTER NOVI SAD						
Injuries at work in 2020						
Technical service department / Facility	Number of employees	Injuries in relation to number of employees				
		Minor	Serious	Fatalities	Total	%
STS Subotica	138	1	0	0	1	0,72
STS Sombor	133	2	1	0	3	2,26
STS Zrenjanin	118	3	0	0	3	2,54
STS Novi Sad	174	0	0	0	0	0,00
STS Ruma	101	6	0	0	6	5,94
STS Sremska Mitrovica	50	2	0	0	2	4,00
STS Pančevo	130	4	0	0	4	3,08
Management	195	3	2	0	5	2,56
TOTAL: TECHNICAL CENTER NOVI SAD	1.039	21	3	0	24	2,31

10.3.3. Health

Periodic medical examinations of employees are presented in Table 128.

Table 128

TECHNICAL CENTER NOVI SAD											
Working capacity of employees in 2020											
Technical service department / Facility	Number of employees	Periodical examination				Capability for work					
		Referred to examination		Examined		Capable		Limited capability		Incapable	
		no.	%	no.	%	no.	%	no.	%	no.	%
STS Subotica	138	96	69,57	96	100,00	87	90,62	6	6,25	3	3,13
STS Sombor	133	91	68,42	91	100,00	82	90,11	9	9,89	0	0,00
STS Zrenjanin	118	95	80,51	95	100,00	82	86,32	12	12,63	1	1,05
STS Novi Sad	174	117	67,24	117	100,00	107	91,45	10	8,55	0	0,00
STS Ruma	101	65	64,36	65	100,00	54	83,08	10	15,38	1	1,54
STS Sremska Mitrovica	50	33	66,00	33	100,00	27	81,82	5	15,15	1	3,03
STS Pančevo	130	93	71,54	92	98,92	68	73,91	24	26,09	0	0,00

Management	195	15	7,69	15	100,00	13	86,67	2	13,33	0	0,00
TOTAL: TECHNICAL CENTER NOVI SAD	1.039	605	58,23	604	99,83	520	86,09	78	12,91	6	0,99

10.4. Public complaints

There were no public complaints regarding environment in 2020.

11. TECHNICAL CENTER KRALJEVO

Distribution network has not become a part of Technical Center Kraljevo. Transformer stations and cables lines are ownership of DSO "EPS Distribucija".

11.1. Overview and Status of Permits

Overview and status of permits, licences and other necessary approvals in 2020 were not carried out. There were no new applications for permits.

11.2. Monitoring and Environmental Impact

Environmental impact factors of TC Kraljevo are the following:

- **Electromagnetic fields**
- **Environmental noise**
- **Waste**
- **Surface and groundwater quality**
- **Soil quality**

11.2.1. Electromagnetic Fields

During 2020, electromagnetic field measurements were not performed.

11.2.2. Living Environment Noise Measurements

During 2020, living environment noise measurements were not performed.

11.2.3. Waste

Waste was not generated by TC Kraljevo in 2020.

11.2.4. Surface, Ground Waters and Soil Monitoring

Monitoring of surface and ground water, as well as monitoring of soil was not defined-included by tests in TC Kraljevo in year 2020.

11.3. Working Environment Monitoring, Health and Safety

Reports on 2020 Health and Safety include the following items:

- **Working Environment Monitoring**
 - working environment noise measurements
 - working environment electromagnetic fields
 - working environment parameters
- **Safety**
 - training of employees
 - injuries at work
- **Health**

11.3.1. Working Environment Monitoring

- **Working environment noise measurement**

Noise measurement was not performed in 2020.

- **Working environment electromagnetic fields**

Electromagnetic field measurements were not carried out during 2020.

▪ Working environment parameters

Monitoring of temperature, relative humidity and air flow velocity for summer 2020 was not performed in TC Kraljevo. Monitoring of chemical hazards in summer 2020 was not performed in TC Kraljevo. Monitoring of lighting for summer 2020 was not performed in TC Kraljevo.

11.3.2. Occupational Safety

▪ Training of Employees

Training of employees is carried out according to the Program of training of employees for safe and healthy work. Training of employees is presented in the Table 129 below and includes training of newly recruited employees and training of employees with narrow professional occupations.

Table 129

TECHNICAL CENTER KRALJEVO					
Training of employees in 2020					
Department of Technical Services / Facility	Number of employees	For training		Trained	
		no.	%	no.	%
Arandjelovac	63				
Safety and health at work training		19	30,16	19	100,00
Firefighting training		19	30,16	19	100,00
Valjevo	111				
Safety and health at work training		70	63,06	70	100,00
Jagodina	136				
Safety and health at work training		136	100,00	136	100,00
Kraljevo	181				
Safety and health at work training		27	14,92	26	96,30
Safety and health at work training-V.Banja		22	12,15	12	54,54
FF training		27	14,92	26	96,30
FF training-V.Banja		22	12,15	12	54,54
Training for handling trimmer		3	1,66	3	100,00
Krusevac	148				
Safety and health at work training		109	73,65	109	100,00
FF training		109	73,65	109	100,00
Lazarevac	118				
Safety and health at work training		75	63,56	75	100,00
FF training		7	5,93	7	100,00
Loznica	141				
Safety and health at work training		30	21,28	27	90,00
Novi Pazar	45				
Safety and health at work training of new employees		5	11,11	5	100,00
FF training of new employees		32	71,11	30	93,75
Examination by tests for safety and health at work		14	31,11	14	100,00
Examination by tests for safety and health at work Pro tent		21	46,67	21	100,00
Užice	199				
Safety and health at work training		167	83,92	167	100,00
FF training		48	24,12	48	100,00
Cacak	148				
Safety and health at work training		3	2,03	3	100,00
FF training		3	2,03	3	100,00
Safety and health at work training -V.Banja		19	12,84	7	36,84
FF training-V.Banja		19	12,84	7	36,84
Training for handling trimmer		6	4,05	6	100,00
Šabac	137				
Safety and health at work training		20	14,60	17	85,00
Management	126				
Safety and health at work training		0	0,00	0	0,00
TOTAL: TECHNICAL CENTER KRALJEVO	1.553	1.032	66,45	978	94,77

Work injuries

Table 130 provides data on number of injuries at work in 2020.

Table 130

TECHNICAL CENTER KRALJEVO						
Injuries at work in 2020						
Department of Technical Services/Facility	Number of employees	Injuries in relation to number of employees				
		Minor	Serious	Fatalities	Total	%
Arandjelovac	63	0	0	0	0	0,00
Valjevo	111	0	1	0	1	0,90
Jagodina	136	2	0	1	3	2,21
Kraljevo	181	1	1	0	2	1,10
Kruševac	148	0	0	0	0	0,00
Lazarevac	118	5	0	0	5	4,24
Loznica	141	0	0	0	0	0,00
Novi Pazar	45	0	0	0	0	0,00
Užice	199	3	0	0	3	1,51
Čačak	148	1	0	0	1	0,68
Šabac	137	1	0	0	1	0,73
Management TC Kraljevo	126	2	0	0	2	1,59
TOTAL: TECHNICAL CENTER KRALJEVO	1.553	15	2	1	18	1,16

11.3.3. Health

Results of periodic medical examinations are provided in Table 131.

Table 131

TECHNICAL CENTER KRALJEVO											
Work ability of employees in 2020											
Department of Technical Services/Facility	Number of employees	Periodical examination				Capability for work					
		Referred to examination		Examined/ Referred		Capable		Limited capability		Incapable	
		no.	%	no.	%	no.	%	no.	%	Број	%
Arandjelovac	63	40	63,49	40	100,00	38	95,00	2	5,00	0	0,00
Valjevo	111	70	63,06	70	100,00	65	92,86	5	7,14	0	0,00
Jagodina	136	88	64,71	86	97,73	76	88,37	10	11,63	0	0,00
Kraljevo	181	137	75,69	131	95,62	107	81,68	24	18,32	0	0,00
Kruševac	148	95	64,19	95	100,00	81	85,26	14	14,74	0	0,00
Lazarevac	118	71	60,17	71	100,00	54	76,06	17	23,94	0	0,00
Loznica	141	81	57,45	74	91,36	60	81,08	14	18,92	0	0,00
Novi Pazar	45	22	48,89	21	95,45	18	85,71	3	14,29	0	0,00
Užice	199	117	58,79	117	100,00	113	96,58	4	3,42	0	0,00
Čačak	148	88	59,46	83	94,32	75	90,36	8	9,64	0	0,00
Šabac	137	112	81,75	96	85,71	73	76,04	22	22,92	1	1,04
Management	126	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
TOTAL: TECHNICAL CENTER KRALJEVO	1.553	921	59,30	884	95,98	760	85,97	123	13,91	1	0,11

11.4. Public complaints

There were no public complaints regarding environment in year 2020.

12. TECHNICAL CENTER KRAGUJEVAC

Technical Center Kragujevac comprises:

1. TC Kragujevac headquarters
2. Department for Technical Services (TSD) Kragujevac
3. TDS Požarevac
4. TDS Smederevo

in which the maintenance of the power facilities is performed based on the provision of services under the SLA Contract for the Distribution System Operator (DSO).

From the technical and technological aspects, maintenance is carried out in the following systems:

- Transformer station;
- Distribution – overhead cable lines;
- Distribution – underground cable lines;
- Measuring points (MP).

12.1. Overview and Status of Permits

Overview and status of permits, licenses and other required approvals, as well as new licence requests in 2020, Power facilities, are not in jurisdiction of TC Kragujevac, but in the jurisdiction of DSO as owner of Power facilities.

12.2. Monitoring and Environmental Impact

Environmental impact factors are the following:

- **Electromagnetic fields**
- **Environmental noise**
- **Waste**
- **Surface and ground waters quality**
- **Soil quality**

12.2.1. Electromagnetic Fields

Mesurements of electromagnetic fields were not performed in 2020.

12.2.2. Noise

Mesurements of noise level were not performed in 2020.

12.2.3. Waste

Waste was not generated in TC Kragujevac in year 2020.

12.2.4. Surface, Ground waters and Soil Monitoring

Monitoring of surface and underground waters, as well as monitoring of soil in 2020 was not performed.

12.3. Working Environment Monitoring, Health and Safety

Reports on occupational safety and health protection for 2020. include the following items:

- **Working Environment Monitoring**
 - working environment noise measurements
 - working environment electromagnetic fields

- working environment parameters

▪ Safety

- training of employees
- injuries at work

▪ Health

12.3.1. Working Environment Monitoring

Working Environment noise measurement

Noise measurements was not performed in 2020.

Electromagnetic fields in the working environment

Electromagnetic field testing was not performed in 2020.

▪ Working environment parameters

Testing of chemical hazards, microclimate, illumination both in workplace and in work environment was not performed in 2020.

12.3.2. Occupational safety

▪ Training of employees

Training of employees is presented in Table 132.

Table 132

TECHNICAL CENTER KRAGUJEVAC					
Training of employees in 2020					
Department/Facility	Number of employees	For training		Trained	
		no.	%	no.	%
TC HQ	128	18	14,06	18	100,00
Training for safe and healthy work in the field of first aid - general level		5	3,90	5	100,00
Training for safe and healthy work in the field of first aid - advanced level		2	1,56	2	100,00
Training for safe operation according to the Act on risk assessment – introduction to risks and protection measures, firefighting protection (TC Belgrade)	164	18	10,97	18	100,00
Kragujevac		120	73,17	120	100,00
Training for safe and healthy work in the field of first aid - general level		13	7,93	13	100,00
Training for safe and healthy work in the field of first aid - advanced level	136	18	13,23	18	100,00
Training for safe operation according to the Act on risk assessment – introduction to risks and protection measures, firefighting protection (TC Belgrade)		68	50,00	68	100,00
Pozarevac	94	4	4,25	4	100,00
Training for safe and healthy work in the field of first aid - general level		41	43,61	41	100,00
Training for safe and healthy work in the field of first aid - advanced level		41	43,61	41	100,00
Smederevo	522	307	58,81	307	100,00
TOTAL: TC KRAGUJEVAC					

Training of engaged persons is shown in Table 133.

Table 133

TECHNICAL CENTER KRAGUJEVAC					
Training of engaged persons in 2020					
Department/facility	no. of employees	For training		Trained	
		no.	%	no.	%
Engaged persons by PROTENT	165	135	81,82	135	100,00
Engaged persons by EMPORIO doo- cleaning	34	34	100,00	34	100,00
Engaged persons by Sparta Security doo-FTO	48	48	100,00	48	100,00
TOTAL: TECHNICAL CENTER KRAGUJEVAC	247	217	87,85	217	100,00

▪ Injuries at work

Table 134 provides data on number of injuries at work in 2020.

Table 134

TECHNICAL CENTER KRAGUJEVAC						
Injuries at work in 2020.						
Department/facility	Number of employees	Injuries in relation to number of employees				
		Minor	Serious	Fatalities	Total	%
TC HQ	128	1	0	0	1	0,78
Kragujevac Department	164	4	0	0	4	2,44
Požarevac Department	136	1	0	0	1	0,74
Smederevo Department	94	2	2	0	4	4,26
TOTAL: TECHNICAL CENTER KRAGUJEVAC	522	8	2	0	10	1,92

12.3.3. Health

Results of periodical medical examinations are provided in Table 135.

Table 135

TECHNICAL CENTER KRAGUJEVAC											
Working capacity of employees in 2020											
Department/Facility	Number of employees	Previous and periodical examinations				Capability for work					
		Referred to examination		Examined		Capable		Limited capability		Incapable	
		no.	%	no.	%	no.	%	no.	%	no.	%
TC HQ	128	9	7,03	9	100,00	9	100,00	0	0,00	0	0,00
Kragujevac Department	164	118	71,95	118	100,00	117	99,15	1	0,85	0	0,00
Požarevac Department	136	103	75,74	103	100,00	92	89,32	11	10,68	0	0,00
Smederevo Department	94	73	77,66	73	100,00	71	97,26	2	2,74	0	0,00
TOTAL: TECHNICAL CENTER KRAGUJEVAC	522	303	58,05	303	100,00	289	95,38	14	4,62	0	0,00

12.4. Public complaints

There were no public complaints regarding environment in 2020.

13. TECHNICAL CENTER NIŠ

Distribution network has not become part of Technical Center Niš. Transformer stations and cable lines are owned by DSO "EPS Distribucija".

13.1. Overview and Status of Permits

Overview and status of permits, licences and other necessary approvals in 2019 were not carried out. There were no new applications for permits.

13.2. Monitoring and Environmental Impact

Environmental impact factors of TC Nis are:

- **Electromagnetic fields**
- **Environmental noise**
- **Waste**
- **Surface and groundwater quality**
- **Soil quality**

13.2.1. Electromagnetic Fields

Electromagnetic field measurements were not performed in 2020.

13.2.2. Environmental Noise

Environmental noise measurements were not performed in 2020.

13.2.3. Waste

Technical Center Niš did not generate waste in 2020.

13.2.4. Surface, Ground Waters and Soil Monitoring

Quality analysis of surface and ground water, as well as soil at territory of TC Niš was not performed in 2019.

13.3. Working Environment Monitoring, Occupational Health and Safety

Occupational Health and Safety Reports for 2020 include the following activities:

- **Working environment monitoring**
 - working environment noise measurements
 - electromagnetic fields in the working environment
 - Working environment parameters
- **Occupational Safety**
 - training of employees
 - injuries at work
- **Health**

12.3.1. Working Environment Monitoring

Measurements and testing of the Working Environment are performed in accordance with the Law on Safety and Health at Work („Official Gazette of RS“, No 101/05 and 91/15) and The Rulebook on Procedures for Inspection and Testing of Equipment for Work and Testing of the Working Environment („Official Gazette of RS“, No. 94/06, 108/06-correction, 114/14 and 102/15).

Working Environment noise measurement

During 2020, noise was measured at the Technical Center Niš in the working environment for the winter period, and the measurement results are shown in Table 136. In rooms that are not listed, noise does not appear as a pest.

During 2020, the measurement of noise in the working environment for the summer period was not performed at the Technical Center Niš.

Table 136

TECHNICAL CENTER NIŠ			
Working environment noise measurement 2020 – winter			
Department of Technical Services	Measurement point	Регистровани ниво буке у радним просторијама у dB (A)	Дозвољени ниво буке у dB (A)
Piot	Car repair shop	76,8	85
	Ауто-перионица	62,1	85
	Браварска радионица	81,9	85
	Котларница	79,02	85
	ПО Димитровград – Браварска радионица	88,7	85
	ПО Димитровград – Car repair shop	79,2	85
	ПО Бабушница – Car repair shop	70	85

Electromagnetic fields in the working environment

Electromagnetic field testing was not performed in 2020.

Working environment parameters

Током 2020. године у Техничком центру Ниш вршено је испитивање услова радне околине за зимски период а резултати мерења приказани су у приложеној табели.

Мониторинг параметара температуре, релативне влажности и брзине струјања за зимски период 2020. године дат је у Табели 137.

Мониторинг параметара температуре, релативне влажности и брзине струјања није вршен за летњи период 2020. године.

Table 137

Table 107

TECHNICAL CENTER NIŠ					
Temperature, relative humidity and velocity in 2020 – winter					
No.	Measurement point	Monitoring			Note
		t °C	Rv %	Vm/s	Comfort zone
Department of Technical Services Piot					
1.	Office no.32 – IT worker	21,9	32,4	0,05	Within zone
2.	Coffee bar	23,5	30	0,05	Within zone
3.	Dispatch center - dispatcher	22,8	22,3	0,03	Within zone
4.	Duty room	20,6	25,2	0,04	Within zone
5.	Gatekeepers lodge	18,5	30,8	0,04	Within zone
6.	Accounting	23,9	26,4	0,04	Within zone
7.	Electrical fitters' room	18,4	31	0,04	Within zone
8.	Car repair workshop	15,8	31,9	0,04	Within zone
9.	Car wash	15,1	31	0,04	Within zone
10.	Office of Warehouse clerk	19,4	35,3	0,04	Within zone
11.	Locksmith's shop	15,8	31,9	0,04	Within zone
12.	Boiler room	13,9	30,1	0,04	Not within zone
13.	Hazardous Materials Storage	16,8	34,9	0,05	Within zone
14.	New location – Gatekeepers' lodge	19,5	43	0,05	Within zone
15.	New location – Warehouse clerk	18,1	40,4	0,05	Within zone
16.	New location – Warehouse of goods	10,7	39,7	0,03	Not within zone

17.	New location – Warehouse of oils and lubricants	6,4	48,3	0,03	Not within zone
18.	New location – Warehouse of technical goods	7,2	46,5	0,03	Not within zone
19.	Dimitrovgrad Branch – Gatekeepers' lodge	19	40,1	0,05	Within zone
20.	Dimitrovgrad Branch – Locksmith's shop	18,8	40,3	0,05	Within zone
21.	Dimitrovgrad Branch – Warehouse	18,5	39,2	0,03	Within zone
22.	Dimitrovgrad Branch – Electric fitters' room	19,2	31,3	0,04	Within zone
23.	Dimitrovgrad Branch – Car repair workshop	18,3	24	0,04	Within zone
24.	Dimitrovgrad Branch – Sales clerk's office	19,5	35,5	0,04	Within zone
25.	Dimitrovgrad Branch – Accounting	20,1	29,8	0,04	Within zone
26.	Babušnica Branch – Gatekeepers' lodge	19,1	36	0,05	Within zone
27.	Babušnica Branch – Warehouse clerk's office	18,3	34,3	0,05	Within zone
28.	Babušnica Branch – Warehouse	9,1	40,4	0,03	Not within zone
29.	Babušnica Branch – Car repair workshop	9,1	45,2	0,04	Not within zone
30.	Babušnica Branch – Office no. 12	18,3	36,9	0,04	Within zone
31.	Babušnica Branch – Accounting	19	32,5	0,04	Within zone
32.	Babušnica Branch – Electric fitters' room	19,4	24,8	0,04	Within zone
33.	Bela Palanka Branch – Electric fitters' room	18,5	39,8	0,05	Within zone
34.	Bela Palanka Branch – Car repair workshop	12,7	32,3	0,05	Not within zone
35.	Bela Palanka Branch – Accounting	22	46,4	0,03	Within zone
36.	Bela Palanka Branch – Office no. 16	21,5	34,3	0,04	Within zone
37.	Bela Palanka Branch – Office no. 10, Branch Manager	22,1	41	0,04	Within zone
38.	Bela Palanka Branch – Gatekeepers' lodge	19,4	22,5	0,04	Within zone
Department of Technical Services Niš					
39.	Niš Plant – Electric power facility, MV and LV maintenance service	18,7	35	0,05	Within zone
40.	Niš Plant – Motor winder's workshop	18,5	42,8	0,05	Within zone
41.	Niš Plant – Measuring assemblies workshop	18,9	43,1	0,03	Within zone

Note: In accordance with the Risk Assessment Act, the foreseen personal protective equipment for employees is provided for use (winter work clothing). The organization of work reduces the duration of exposure to low temperature in cases where employees stay within the premises, in order to perform a certain work assignment. Room for warming up employees is provided.

Monitoring of parameters of chemical hazards for winter period of the year 2020 is given in Table 138. In premises included in the table, the stated chemical hazards are not harmful.

Monitoring of parameters of chemical hazards for summer period of the year 2020 was not performed.

Табела 138

TECHNICAL CENTER NIŠ						
Chemical hazards – winter 2020						
No.	Measurement point	Type of chemical hazard	Measured concentration	Exposition (h)	MDK	Exceeding of concentration
Department of Technical Services Pirot						
1.	Hazardous Materials Storage	Mineral dust with less than 1% SiO ₂	0,017	8	10	Sufficient
2.	Dimitrovgrad Branch – Locksmith's workshop	Mineral dust with less than 1% SiO ₂	0,022	8	10	Sufficient

Monitoring of lighting for winter period in 2020 is provided in the Table 139.

Monitoring of lighting for summer period was not performed in 2020.

Table 139

TECHNICAL CENTER NIŠ					
Lighting in 2020 – winter period					
No.	Measurement point	Lighting	Monitoring		Note
			Illumination (lx)		Illumination
		Measured	Measured		
Department of Technical Services Pirot					
1.	Office no.32 – IT worker	Combined	830	500	Sufficient
2.	Coffee bar	Combined	340	300	Sufficient
3.	Dispatch Center - Dispatcher	Combined	510	500	Sufficient
4.	Duty room	Combined	455	300	Sufficient
5.	Guardkeepers' lodge	Combined	850	300	Sufficient
6.	Accounting	Combined	420	300	Sufficient
7.	Electric fitters' room	Combined	420	300	Sufficient
8.	Car repair shop	Combined	540	300	Sufficient
9.	Car wash	Combined	760	300	Sufficient
10.	Warehouse clerk's office	Combined	385	500	Insufficient
11.	Locksmith's workshop	Combined	540	300	Sufficient
12.	Boiler room	Combined	560	300	Sufficient
13.	Hazardous materials storage	Combined	430	300	Sufficient
14.	New location – Gatekeepers' lodge	Combined	670	300	Sufficient
15.	New location – Warehouse clerk	Combined	520	500	Sufficient
16.	New location – Goods warehouse	Combined	480	150	Sufficient
17.	New location – Oil and lubricants warehouse	Combined	380	150	Sufficient
18.	New location – Technical goods warehouse	Combined	450	150	Sufficient
19.	Dimitrovgrad Branch – Gatekeepers' lodge	Combined	250	300	Insufficient
20.	Dimitrovgrad Branch – Locksmith's workshop	Combined	380	300	Sufficient
21.	Dimitrovgrad Branch - Warehouse	Combined	290	150	Sufficient
22.	Dimitrovgrad Branch – Electric fitters' room	Combined	330	300	Sufficient
23.	Dimitrovgrad Branch – Car repair shop	Combined	265	300	Sufficient
24.	Dimitrovgrad Branch – Sales clerk's office	Combined	350	500	Insufficient
25..	Dimitrovgrad Branch - Accounting	Combined	250	500	Insufficient
26.	Babušnica Branch – Gatekeepers' lodge	Combined	850	300	Sufficient
27.	Babušnica Branch – Warehouse clerk's office	Combined	510	500	Sufficient
28.	Babušnica Branch - Warehouse	Combined	900	150	Sufficient
29.	Babušnica Branch – Car repair shop	Combined	1100	300	Sufficient
30.	Babušnica Branch – Office no. 12	Combined	620	500	Sufficient
31.	Babušnica Branch - Accounting	Combined	300	500	Sufficient
32.	Babušnica Branch – Electric fitters' room	Combined	420	300	Sufficient
33.	Bela Palanka Branch – Electric fitters' room	Combined	380	300	Sufficient
34.	Bela Palanka Branch – Car repair shop	Combined	310	300	Sufficient
35.	Bela Palanka Branch – Accounting	Combined	530	500	Sufficient
36.	Bela Palanka Branch – Office No. 16	Combined	1050	500	Sufficient
37.	Bela Palanka Branch – Office No. 10, Head Office	Combined	670	500	Sufficient
38.	Bela Palanka Branch – Gatekeepers' lodge	Combined	520	500	Sufficient
Department of Technical Services Niš					
39.	Niš Plant – Electric power facilit, MV and LV maintenance service	Combined	520	300	Sufficient
40.	Niš Plant – Motor winder's workshop	Combined	530	300	Sufficient
41.	Niš Plant – Measuring assemblies workshop	Combined	510	300	Sufficient

13.3.2. Occupational Safety

▪ Employee training

Training of employees is presented in Table 140.

Table 140

TECHNICAL CENTER NIS					
Training in 2020					
Technical services department/Facility	Number of employees	For training		Trained	
		No.	%	No.	%
Pirot	76				
Periodical check of competences for health and safety at work		76	100,00	76	100,00
Safe work training - transfer to a different work post		3	3,95	3	100,00
Training of the newly employed		2	2,63	2	100,00
Periodical check of competences for health and safety at work for the employees working in fire protection		6	7,89	6	100,00
Vranje	105				
Safe work training		64	60,95	64	100,00
Safe work training for the employees working in fire protection		0	0,00	0	0,00
Training of the newly employed and non-qualified workers		0	0,00	0	0,00
Leskovac	156				
Safe work training		89	57,05	89	100,00
Training of the newly employed and non-qualified workers		0	0,00	0	0,00
Safe work training for the employees working in fire protection		11	7,05	11	100,00
Zaječar	206				
Safe work training		71	34,47	71	100,00
Training of the newly employed and non-qualified workers		2	0,97	2	100,00
Safe work training for the employees working in fire protection		0	0,00	0	0,00
Prokuplje	75				
Safe work training		0	0,00	0	0,00
Training of the newly employed and non-qualified workers		0	0,00	0	0,00
Safe work training for the employees working in fire protection		0	0,00	0	0,00
Niš	237				
Safe work training		152	64,14	152	100,00
Training of the newly employed and non-qualified workers		0	0,00	0	0,00
Safe work training for the employees working in fire protection		5	2,11	5	100,00
Technical Center Niš Headquarters	92				
Safe work training		20	21,74	20	100,00
Training of the newly employed and non-qualified workers		0	0,00	0	0,00
Safe work training for the employees working in fire protection		6	6,52	6	100,00
TOTAL: TECHNICAL CENTER NIŠ	947	507	53,54	507	100,00

Additional trainings not related to permanent staff in TC Niš, which were held in 2020 are presented in Table 141.

Table 141

TECHNICAL CENTER NIŠ				
Additional trainings not related to permanent staff in TC Niš, which were held in 2020				
Technical Center Branch/Unit	For training	Trained		
	No.	%	No.	%
Pirot				
Periodical check of competences for health and safety at work for the employees working at high-risk work posts, via Agency <i>Work and care</i>	25	100,00	25	100,00
Safe work training of the persons engaged via company <i>PRO TENT</i>	52	100,00	52	100,00
Informing the Contractor about the dangers and hazards, health and safety measures and rules of conduct	19	100,00	19	100,00
Informing the visitors and service providers about health and safety measures and rules of conduct	20	100,00	20	100,00
Safe work training for the hired personnel (PE <i>Elektrokosmet</i> , Priština)	1	100,00	1	100,00
Safe work training for the hired personnel from <i>Doberguard</i>	20	100,00	20	100,00
Safe work training for the hired personnel - cleaners	7	100,00	7	100,00
Safe work training for the hired personnel from <i>Sequester</i>	1	100,00	1	100,00
Leskovac				
Informing the Contractor about the dangers and hazards, health and safety measures and rules of conduct	234	100,00	234	100,00
Safe work training for the hired personnel	175	100,00	175	100,00
Informing the visitors and service providers about health and safety measures and rules of conduct	5	100,00	5	100,00
Niš				
Informing the Contractor about the dangers and hazards, health and safety measures and rules of conduct	255	100,00	255	100,00
Informing the visitors and service providers about health and safety measures and rules of conduct	10	100,00	10	100,00

• Work injuries

Number of work injuries in 2020 is presented in Table 142.

Table 142

TECHNICAL CENTER NIŠ						
Work injuries in 2020						
Technical services department/Facility	Number of employees	Injuries- number of employees ratio				
		Light	Serious	Fatalities	Total	%
Leskovac	156	0	0	0	0	0,00
Pirot	76	0	0	0	0	0,00
Zaječar	206	3	0	0	3	1,46
Vranje	105	0	0	0	0	0,00
Prokuplje	75	0	0	0	0	0,00
Niš	237	1	0	0	1	0,42
TC Niš headquarters	92	0	0	0	0	0,00
TOTAL: TECHNICAL CENTER NIŠ	947	4	0	0	4	0,42

13.3.3. Health

Periodic medical examinations of employees, presented in Table 143, are carried out regularly for all newly recruited workers and employees working on jobs with special working conditions.

Table 143

TECHNICAL CENTER NIŠ						
Working capacity in 2020						
Technical services department/Facility	No. of employ	Periodical examination		Capability for work		
		Referred to examination	Examined	Capable	Limited capability	Incapable

		No.	%	No.	%	No.	%	No.	%	No.	%
Leskovac	156	89	57,05	89	100,00	77	86,52	12	13,48	0	0,00
Piroć	76	46	60,53	46	100,00	41	89,13	4	8,70	1	2,17
Zajećar	206	132	64,08	132	100,00	105	79,55	23	17,42	4	3,03
Vranje	105	64	60,95	64	100,00	60	93,75	3	4,69	1	1,56
Prokuplje	75	49	65,33	48	97,96	34	70,83	14	29,17	0	0,00
Niř	237	134	56,54	133	99,25	115	86,47	17	12,78	1	0,75
TC Niř Headquarters	92	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
TOTAL: TECHNICAL CENTER NIř	947	514	54,28	512	99,61	432	84,38	73	14,26	7	1,37

13.4. Public complaints

There were no public complaints related to environmental protection in 2020.

14. PE EPS HQ

14.1. Working Environment Monitoring, Occupational Health and Safety

The 2020 Occupational Safety and Health Reports include the following elements:

- **Working environment monitoring**
 - Working environment noise measurements
- **Safety**
 - Employees training
 - Work injuries
- **Health**

14.1.1. Working Environment Monitoring

- **Working environment noise measurements**

At the measuring points at which measurements were made, the measured noise value does not exceed the limit values.

14.1.2. Occupational Safety

- **Employees training**

Occupational Health and Safety training of employees is carried out according to the Training Programme, theoretically and practically.

- Health and Safety training of employees – 102 employees.

- **Work injuries**

The number of work injuries that occurred in 2020 is presented in Table 144.

Table 144

PE EPS HQ						
Work injuries in 2020						
Organisational unit	Number of employees	Injuries – number of employees ratio				
		Light	Serious	Fatalities	Total	%
PE EPS HQ	786	3	2	0	5	0,64
TOTAL: PE EPS HQ	786	3	2	0	5	0,64

14.1.3. Health

There are no employees in PE EPS HQ working in high-risk workplaces. Periodic medical examinations of employees are shown in Table 145.

Table 145

PE EPS HQ											
Work capability in 2020											
Organisational unit	Number of employees	Periodical examination				Capability for work					
		Referred to examination		Examined		Capable		Limited capability		Incapable	
		број	%	број	%	број	%	број	%	број	%
PE EPS HQ	786	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
TOTAL PE EPS HQ	786	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00

14.2. Public complaints

There were no public complaints related to environmental protection in 2020.

15. EPS SNABDEVANJE BRANCH

15.1. Working Environment Monitoring, Occupational Health and Safety

The 2020 Occupational Safety and Health Reports include the following elements:

- **Working environment monitoring**
 - Working environment noise measurements
- **Safety**
 - Employees training
 - Work injuries
- **Health**

15.1.1. Working Environment Monitoring

- **Working environment noise measurements**

In 2020 Working environment noise measurements were not performed.

15.1.2. Occupational Safety

- **Training**

Specific Occupational Health and Safety training of employees is carried out according to the Training Program, theoretically and practically. The following trainings were carried out in 2020:

- Health and Safety training of employees.....230

Informing the employees about the dangers and hazards, i.e. risk factors, is performed in compliance with Rulebook on Occupational Health and Safety as well as with Risk Assessment Act.

- **Work injuries**

The number of work injuries that occurred in 2020 is presented in Table 146.

Table 146

EPS SNABDEVANJE BRANCH						
Work Injuries in 2020						
Organisational unit	Number of employees	Injuries - number of employees ratio				
		Light	Serious	Fatalities	Total	%
TOTAL:	1.140	2	1	0	3	0,26

15.1.3. Health

In EPS Snabdevanje there are no employees working on high-risk posts. Periodic medical examinations of employees are shown in Table 147.

Табела 147

EPS SNABDEVANJE BRANCH											
Working capacity in 2020											
Organisational unit	Number of employees	Periodical examination				Capability for work					
		Referred to examination		Examined		Referred to examination		Examined		Referred to examination	
		број	%	број	%	број	%	број	%	број	%
TOTAL: EPS SNABDEVANJE BRANCH	1.140	20	1,75	20	100,00	20	100,00	0	0,00	0	0,00

15.2. Public complaints

There were no public complaints related to environmental protection in 2020.

III DISTRIBUTION SYSTEM OPERATOR “EPS DISTRIBUCIJA”

Pursuant to the status change as of 1st July 2015, made in accordance with the Reorganization Plan of Public Enterprise Electric Power Industry of Serbia, Belgrade, approved by the Government of Republic of Serbia dated 27th November 2014, Distribution System Operator „EPS Distribucija“ Ltd Beograd was formed through the acquisition of the companies for electricity distribution, as follows: the company for electricity distribution „Elektrovojvodina“ Ltd, Novi Sad, the company for electricity distribution „Elektrosrbija“ doo Kraljevo, the company for electricity distribution „Centar“ Ltd Kragujevac and the company for electricity distribution „Jugoistok“ Ltd Nis, the company for electricity distribution „Elektrodistribucija Beograd“ Ltd Belgrade.

DSO „EPS Distribution“ is comprised of the following:

- **DISTRIBUTION AREA BELGRADE**
- **DISTRIBUTION AREA NOVI SAD**
- **DISTRIBUTION AREA KRALJEVO**
- **DISTRIBUTION AREA KRAGUJEVAC**
- **DISTRIBUTION AREA NIŠ**

1. DISTRIBUTION AREA BELGRADE

Table 148 provides the structure of all facilities within the system of DA Belgrade.

Table 148

DISTRIBUTION AREA BELGRADE												
Facilities and systems in 2020												
Branch	Electricity distribution substations								Distribution network in km			
	110/10 KV	110/20 KV	110/35 KV	110/x/z KV	35/10 KV	20/0.4 KV	10/0.4 KV	Total:	Voltage level	Overhead	Cable	Total length
ED BELGRADE- CENTER									110 kV	0,000	0,000	0,000
									35 kV	0,000	0,000	0,000
									20 kV	0,000	0,000	0,000
									10 kV	859	2.343	3.202
									1,0 kV	0,000	0,000	0,000
									0,4 kV	3.910	4.378	8.288
Total	9	0	2	0	14	0	1.404	1.429	Total	4.769	6.721	11.490
ED BANOVO BRDO									110 kV	0,000	0,000	0,000
									35 kV	0,000	0,000	0,000
									20 kV	0,000	0,000	0,000
									10 kV	369,30	866,16	1.235,46
									1.0 kV	0,000	0,000	0,000
									0.4 kV	1.207,88	1.704,60	2.912,48
Total	3	0	2	1	15	0	1.382	1.403	Total	1.577,18	2.570,76	4.147,94
ED ZEMUN									110 kV	0,000	0,000	0,000
									35 kV	0,000	0,000	0,000
									20 kV	0,000	0,000	0,000
									10 kV	107,5	738,00	845,50
									1.0 kV	0,000	0,000	0,000
									0.4 kV	1.461,00	1.114,00	2.575,00
Total	4	0	1	0	18	0	1.228	1.251	Total	1.568,50	1.852,00	3.420,50
ED KRNJACA									110 kV	0,000	0,000	0,000
									35 kV	0,000	0,000	0,000

									20 kV	0,000	0,000	0,000
									10 kV	217,710	131,42	349,130
									1.0 kV	0,000	0,000	0,000
									0.4 kV	460,800	211,030	671,830
Total	0	0	1	0	6	0	312	319	Total	678,510	342,450	1.020,96
ED MLADENOVAC									110 kV	0,000	0,000	0,000
									35 kV	0,000	0,000	0,000
									20 kV	0,000	0,000	0,000
									10 kV	547,499	101,95	649,449
									1,0 kV	0,000	0,000	0,000
									0,4 kV	1.863,948	89,076	1.953,024
Total	0	0	1	1	11	0	603	616	Total	2.411,447	191,026	2.602,473
ED OBRENOVAC									110 kV	0,000	0,000	0,000
									35 kV	0,000	0,000	0,000
									20 kV	0,000	0,000	0,000
									10 kV	582,872	109,472	692,344
									1.0 kV	0,000	0,000	0,000
									0.4 kV	1.301,389	156,730	1.458,119
Total	1	0	1	0	6	0	508	516	Total	1.884,261	266,202	2150,463
TOTAL: DISTRIBUTION AREA BELGRADE									110 kV	0,000	5,800	5,800
									35 kV	493,785	471,607	965,392
									20 kV	0,000	0,000	0,000
									10 kV	2.683,881	4.290,002	6.973,883
									1.0 kV	0,000	0,000	0,000
									0.4 kV	10.205,017	7.653,436	17.858,453
TOTAL	17	0	8	2	70	0	5.437	5.534	TOTAL	13.382,683	12.420,845	25.803,528

1.1. Overview and Status of Permits

Overview and status of permits, licences and other necessary approvals as well as new requests for permits in 2020 are shown in table 149.

Table 149

DISTRIBUTION AREA BELGRADE			
Overview and status of permits in 2020			
Branch	Obtained approvals and permits (number and date)	New requests for getting permits or prolongation of validity of the existing permits	Note
DISTRIBUTION AREA BELGRADE Planning and Investments Sector			
Replacement of 35 kV lines TS Belgrade 4-TS Sesta muska 1,2,3,4	Decision inter.no.IX- 20 351.41-499/2019 07.11.2019.		
Replacement of 35 kV lines TS Belgrade 6-TS Zeleni venac 1,2,3,4	Decision inter.no.IX- 20 351.41-102/2020 10.04.2020.		
Replacement of 35 kV lines TS Belgrade 6 - TS Technical Faculty 1 and 2	Decision IX-20 351.41-472/2019 21.10.2019.		
Replacement of 35 kV lines TS Toplana – TS Banovo Brdo	Decision inter.no.IX- 20 351.41-99/2020 23.03.2020.		
35kV line connection for TPP-HP Vozdovac	Decision inter.no. IX- 20 351.41-533/2019. dated 18.11.2019		
TC 35/10 kV Kaludjerica		exploitation permit request ROP-BGDU-2309-IUP-9/2019	Refusal 19.10.2019.

Replacment of 35 kV lines TS Belgrade 6-TS Viline Vode	Decision inter.no.IX- 20 351.41-246/2020 18.06.2020.		
Replacement of 35kV lines TS Belgrade 6 - TC Karaburma, lines 1, 2	Location conditions decision inter.no. IX-20 6p. 350-830/2020. dated 15.06.2020.		
Reconstruction of TS 110/35 kV Belgrade 2		ROP-MSGI-37280- ISAW-2/2018	Refusal 5.2.2019.
Reconstruction of TS 110/35 kV Belgrade 6	Decision	ROP-MSGI-6551- GR-4/2019	
Reconstruction of TS 110/35 kV Belgrade 10	Location conditions 350-02-00363/2019 -14 dated 17.9.2019		
Reconstruction of TS 35/10 kV Zemun center		ROP-BGDU-364- LOC-2/2019	Refusal 2.4.2019.
Reconstruction of TS 35/10 kV Mladenovac 5	Decision ROP-MLA-16450-ISAW- 1/2019 20.6.2019		
Reconstruction of TS 35/10 kV Grocka		ROP-GRO-29427- LOCH-2/2019	Refusal 12.11.2019.
Reconstruction of TS 35/10 kV Smederevo road	Decision IX-20 351.41-206-2019 12.6.2019.		

1.2. Monitoring and Environmental Impact

EPS Distribution DA Beograd affects the environment by the following factors:

- **Electromagnetic fields**
- **Environmental noise**
- **Waste**
- **Surface and groundwater quality**
- **Soil quality**

1.2.1. Electromagnetic Fields

In 2020, measurement of electric and magnetic fields for sources of non-ionizing radiation of substations was not performed.

1.2.2. Environmental Noise

In 2020 environmental noise measurement was not performed.

1.2.3. Waste

Waste production in 2020 is presented in Table 150, in accordance with the Serbian waste management regulatoins.

Table 150

DISTRIBUTION AREA BELGRADE											
Waste in 2020											
s.n.	Official Nomenclature of the Rulebook on categories, testing and classification of waste “Official Gazette RS”, No. 56/10 and 93/2019	INDEX NO.	UNIT	BRANCH						TOTAL	NOTE
				ED BEOGRAD - CENTAR	ED BANOVO BRDO	ED ZEMUN	ED KRNJAČA	ED MLADENOVAC	ED OBRENOVAC	DA BEOGRAD	
				КОЛИЧИНЕ							
1.	Concrete	17 01 01	t	0,000	0,000	39,130	0,000	0,000	0,000	39,130	Old concrete piles
2.	Copper, bronze, brass	17 04 01	t	0,000	0,000	1,634	0,000	0,000	0,000	1,634	Waste copper cables, copper waste and scrap, rail, copper wire, waste brass - worn tools
3.	Iron and steel	17 04 05	t	0,000	0,000	9,570	0,000	0,000	0,000	9,570	Miscellaneous old iron that occurs during overhaul or worn-out equipment old Fe consoles with insulators, metal lattice pillars, waste galvanized sheets, etc.
4.	Aluminum	17 04 02	t	0,000	0,000	0,240	0,000	0,000	0,000	0,240	Aluminum waste, worn cables, broken or burnt cables, parts of worn-out equipment
5.	Plastic	16 01 19	t	0,000	0,000	0,052	0,000	0,000	0,000	0,052	Old plastics
6.	Mixed metals	17 04 07	t	0,000	0,000	0,298	0,000	0,000	0,000	0,298	Cord Al-STL
7.	Discarded equipment other than specified in 16 02 09 and 16 02 13	16 02 14	t	0,000	0,000	252,060	0,000	0,000	0,000	252,060	Old transformers
8.	Discarded equipment other than specified in 16 02 09 and 16 02 13	16 02 14	t	0,000	0,000	58,137	0,000	0,000	0,000	58,137	Waste counters and old measuring devices
9.	Clothes	20 01 10	t	0,000	0,000	0,424	0,000	0,000	0,000	0,424	Old clothes
10.	Cables other than specified in 17 04 10	17 04 11	t	0,000	0,000	0,906	0,000	0,000	0,000	0,906	Underground Cu and Al cables
11.	Insulation materials other than specified in 17 06 01 and 17 06 03	17 06 04	t	0,000	0,000	0,903	0,000	0,000	0,000	0,903	Old insulators

1.2.4. Surface, Ground Waters and Soil Monitoring

In 2020 monitoring of soils next to the oil tank wall was performed at three locations:

1. TS 35/10 kV, Boleč, the premises of „Hladnjača PKB Beograd“,
2. TS 110/35 kV Kaluđerica, 85 Vojvode Stepe Street,
3. TS 35/10 kV substation 41 Dobračina Street, 3C 35/10 Umka, Rečanska Street

1.3. Working Environment Monitoring, Occupational Health and Safety

The 2020 Occupational Safety and Health Reports include the following elements:

- **Working environment monitoring**
 - Working environment noise measurements
 - Electromagnetic fields in the working environment
 - Working environment parameters
- **Safety**
 - Employees training
 - Work injuries
- **Health**

1.3.1. Working Environment Monitoring

- **Working environment noise measurements**

Noise measurement in working environment was not performed in 2020.

- **Electromagnetic fields in the working environment**

Electromagnetic level measurements were not performed in 2020.

- **Working environment parameters**

Working environment parameters testing was not performed in 2020.

1.3.2. Occupational Safety

- **Training**

Training of employees is carried out in accordance with the Occupational Safety Qualifications and Knowledge Improvement Programme. Training of employees is presented in the Table 151 and it also includes the training of newly recruited workers, as well as knowledge testing of workers in the aforementioned fields.

Table 151

DISTRIBUTION AREA BEOGRAD					
Training in 2020					
Branch	number of employees	for training		trained	
		No.	%	No.	%
Beograd- centar	696				
Knowledge testing		241	34,63	241	100,00
Newly recruited workers		23	3,30	23	100,00
ED BANOVO BRDO	55	18	32,73	18	100,00
Knowledge testing					
ED ZEMUN	59	18	30,51	18	100,00
Knowledge testing					
ED KRNJAJA	28	8	28,57	8	100,00
Knowledge testing					
ED MLADENOVAC	38	25	65,79	25	100,00
Knowledge testing					
ED OBRENOVAC	26	16	61,54	16	100,00
Knowledge testing					
TOTAL: DISTRIBUTION AREA BEOGRAD	902	349	38,69	349	100,00

Work injuries

The data regarding the number of work injuries in 2020 is presented in Table 152.

Table 152

DISTRIBUTION AREA BEOGRAD						
Injuries in 2020						
Branch	Number of employees	Injuries- number of employees ratio				
		Light	Serious	Fatalities	Total	%
ED BEOGRAD CENTAR	696	6	1	0	7	1,01
ED BANOVO BRDO	55	0	0	0	0	0,00
ED ZEMUN	59	0	0	0	0	0,00
ED KRnjača	28	0	0	0	0	0,00
ED MLADENOVAC	38	0	0	0	0	0,00
ED OBRENOVAC	26	1	0	0	1	3,85
TOTAL: DISTRIBUTION AREA BEOGRAD	902	7	1	0	8	0,89

1.3.3. Health

Periodical medical examinations of employees, presented in Table 175 are carried out regularly for all newly recruited workers and employees working on jobs with special working conditions.

Table 153

DISTRIBUTION AREA BEOGRAD											
Working capacity in 2020											
Branch	Number of employees	Periodical examination				Capability for work					
		Referred to examination		Examined		Capable		Limited capability		Incapable	
		No.	%	No.	%	No.	%	No.	%	No.	%
ED BEOGRAD CENTAR	696	250	35,92	250	100,00	249	99,60	0	0,00	1	0,40
ED BANOVO BRDO	55	18	32,73	18	100,00	18	100,00	0	0,00	0	0,00
ED ZEMUN	59	18	30,51	18	100,00	18	100,00	0	0,00	0	0,00
ED KRnjača	28	8	28,57	8	100,00	8	100,00	0	0,00	0	0,00
ED MLADENOVAC	38	25	65,79	25	100,00	25	100,00	0	0,00	0	0,00
ED OBRENOVAC	26	16	61,54	16	100,00	16	100,00	0	0,00	0	0,00
TOTAL: DISTRIBUTION AREA BEOGRAD	902	335	37,14	335	100,00	334	99,70	0	0,00	1	0,30

1.4. Public complaints

Public complaints during 2020 are presented in Table 154.

Table 154

DISTRIBUTION AREA BELGRADE			
Public complaints in 2020			
Branch	Complaint (number and date)/ complainant	Subject of complaint	Undertaken measures
Banovo Brdo	Republic of Serbia Ministry of Environmental Protection Sector for Environmental Monitoring and Precaution Department for entrusted tasks No.: 353-03-01634/2020-07 Date:21.9.2020	1. The subject of supervision was the explosion of cable head on the power line pylon in the complainant's yard, based on submitted complaint regarding the oil leak in the Prvomajska Street No. 4, Novi Beograd	The consequences of the insulation oil spillage were fixed and the produced waste was treated in accordance with the Law on Waste Management.

2. DISTRIBUTION AREA NOVI SAD

Table 155 provides the structure of all facilities within the system of DA Novi Sad.

Table 155

DISTRIBUTION AREA NOVI SAD											
Facilities and systems in 2020.											
Electricity distribution substations								Distribution network in km			
110/10 kV	110/20 kV	110/35 kV	110/x/z kV	35/10 kV	20/0.4 kV	10/0.4 kV	Total:	Voltage level	Overhead	Cable	Total length
ED SUBOTICA								110 kV	0,000	0,000	0,000
								35 kV	189,530	14,100	203,630
								20 kV	1.020,950	459,500	1.480,450
								10 kV	83,830	1,580	85,410
								1.0 kV	0,000	0,000	0,000
								0.4 kV	2.265,45	309,067	2.574,517
0	9	2	0	7	1.333	138	1.489	Total:	3.559,760	784,247	4.344,007
ED SOMBOR								110 kV	0,000	0,000	0,000
								35 kV	0,000	0,000	0,000
								20 kV	1.286,639	338,645	1.625,284
								10 kV	0,000	0,000	0,000
								1.0 kV	0,000	0,000	0,000
								0.4 kV	1.360,436	309,575	1.670,011
0	8	0	0	0	1.115	0	1.123	Total:	2.647,075	648,220	3.295,295
ED ZRENJANIN								110 kV	0,000	0,000	0,000
								35 kV	238,600	22,970	261,570
								20 kV	874,300	293,45	1.167,750
								10 kV	102,510	12,700	115,210
								1.0 kV	0,000	0,000	0,000
								0.4 kV	1.381,520	252,720	1.634,240
0	4	2	2	18	936	118	1.080	Total:	2.596,930	581,84	3.178,770
ED NOVI SAD								110 kV	0,000	0,000	0,000
								35 kV	159,985	93,363	253,348
								20 kV	779,017	815,109	1.594,126
								10 kV	95,903	68,185	164,088
								1.0 kV	0,000	0,000	0,000
								0.4 kV	2.072,989	1.118,009	3.190,998
0	3	3	9	20	1.740	152	1.927	Total:	3107,894	2094,666	5202,560
ED SREMSKA MITROVICA								110 kV	0,000	0,000	0,000
								35 kV	39,642	4,937	44,579
								20 kV	254,023	213,223	467,246
								10 kV	97,809	27,658	125,467
								1.0 kV	0,000	0,000	0,000
								0.4 kV	401,247	140,885	542,132
0	3	0	0	4	481	100	588	Total:	792,721	386,703	1.179,424
ED RUMA								110 kV	0,000	0,000	0,000
								35 kV	0,000	0,000	0,000
								20 kV	600,709	567,199	1167,908
								10 kV	0,000	0,000	0,000
								1.0 kV	0,000	0,000	0,000

								0.4 kV	990,211	186,717	1176,928
0	8	0	0	0	931	0	939	Укупно	1.590,920	753,916	2.344,836
ED PANCEVO								110 kV	0,000	0,000	0,000
								35 kV	214,6	26,053	240,653
								20 kV	996,313	509,244	1.505,557
								10 kV	104,231	35,221	139,452
								1.0 kV	0,000	0,000	0,000
								0.4 kV	1.983,26	580,264	2.563,524
0	7	2	0	8	993	124	1.134	Укупно	3.298,404	1.150,782	4.449,186
TOTAL: DISTRIBUTION AREA NOVI SAD								110 kV	0,000	0,000	0,000
								35 kV	842,357	161,423	1.003,78
								20 kV	5.811,951	3.196,370	9.008,321
								10 kV	484,283	145,344	629,627
								1.0 kV	0,000	0,000	0,000
								0.4 kV	10.455,110	2.897,237	13.352,350
0	42	9	11	57	7.529	632	8.280	TOTAL	17.593,701	6.400,374	23.994,078

*Note: regarding electricity distribution substations and electricity distribution network length, facilities and cable lines in personal property were taken into consideration. The ones not in personal property were not taken into consideration.

2.1. Overview and Status of Permits

Overview and status of permits, licenses and other required approvals, as well as new applications for permits in 2020, are shown in Table 156.

Table 156

DISTRIBUTION AREA NOVI SAD			
Overview and status of permits in 2020			
Branch	Obtained approvals and permits (Number and date)	New requests for obtaining new or extending of existing permits	Note
ED SUBOTICA			
Construction of 20 kV cable lines for supplying the MBTS-12 "Vode Vojvodine" Srpski Krstur	No: ROP-NKN-33283- ISAW-3/2020 Date: 31.01.2020.		Decision pursuant to Article 145
Construction of 20 kV connecting cable lines for MBTS-116 "Banja" Palić	No: ROP-SUB-37403- ISAW-2/2020 Date: 07.02.2020.		Decision pursuant to Article 145
Construction of 0,4 kV cable line for the residential building with multiple families in the Andrije Medulica Street No. 18 in Subotica	No: ROP-SUB-39550- ISAW-2/2020 Date: 20.02.2020.		Decision pursuant to Article 145
Construction of STS-36 with 20kV Horgoš	No ROP-KAN-23100-ISAW- 2/2020 Date: 06.03.2020.		Decision pursuant to Article 145
Construction of LV 0,4 kV connecting cable line for the lodging facility in Barska Street in Subotica	No: ROP-SUB-1875- ISAWHA-3/2020 Date: 22.04.2020.		Decision pursuant to Article 145
Construction of LV connecting cable line for the facility in Kireška Street in Subotica	No: ROP-SUB-6244-ISAW- 2/2020 Date: 28.04.2020.		Decision pursuant to Article 145
Construction of 0,4 kV cable line in Nade Dimić Street in Subotica ул.Наде Димић у Суботици	No ROP-SUB-5534-ISAW- 2/2020 Date: 28.04.2020.		Decision pursuant to Article 145
Construction of LV 0,4 kV connecting cable line for a residential building with multiple families, in Dragiše Mišović Street	No ROP-SUB-4718-ISAW- 2/2020 Date: 29.04.2020.		Decision pursuant to Article 145
Installation of the MV block in UTS-18P Bačka Topola, for the client "PERUTNINA PTUJ-TOPIKO" DOO Bačka Topola	No ROP-BTP-11509-ISAW- 1/2020 Date: 28.05.2020.		Decision pursuant to Article 145

Construction of 20 kV cable line for TS-586 "NORMA GRUPA" Subotica	No ROP-SUB-12194-ISAW-1/2020 Date: 02.06.2020.		Decision pursuant to Article 145
Construction of STS "VENERA BIKE" Subotica	No ROP-SUB-8192-ISAW-2/2020 Date: 10.06.2020.		Decision pursuant to Article 145
Construction of 20 kV cable lines ZTS-14 Senta (Total Fantastico)	No ROP-SEN-8496-ISAW-2/2020 Date: 10.06.2020.		Decision pursuant to Article 145
Construction of 20 kV cable line for distribution facility for "BOYSEN" and the instalation of the MV block in RP "BOYSEN" in Subotica	No ROP-SUB-9920-ISAW-2/2020 Date: 03.07.2020.		Decision pursuant to Article 145
Construction of LV 0,4 kV connecting cable line for the residential building with multiple families (third phase) in Subotica, Kireška Street	No ROP-SUB-12252-ISAW-2/2020 Date: 16.07.2020.		Decision pursuant to Article 145
Construction of 20 kV cable line for TS -717 "ELEKTROREMONT" in Subotica	No ROP-SUB-32920-ISAWHA-4/2020 Date: 16.07.2020.		Decision pursuant to Article 145
Construction of 20 kV cable line for MBTS-82 "PHIWA" Senta	No ROP-SEN-17687-ISAW-1/2020 Date: 23.07.2020.		Decision pursuant to Article 145
Construction of STS-14 Gornji breg with connecting 20 kV cable line in Gornji breg	ROP-SEN-14184-ISAW-2/2020 Date: 24.07.2020.		Decision pursuant to Article 145
Construction of MBTS-342 with 20 kV in Subotica	No ROP-SUB-14315-ISAW-2/2020 Date: 04.08.2020.		Decision pursuant to Article 145
Construction of LV 0,4 kV connecting cable line for the residential building with multiple families in Subotica, Jo Lajoša Street No. 2	No ROP-SUB-16594-ISAW-2/2020 Date: 13.08.2020.		Decision pursuant to Article 145
Construction of 20 kV cable line on Palić	No ROP-SUB-15031-ISAW-2/2020 Date: 17.08.2020.		Decision pursuant to Article 145
Construction of KTS-86 in Novi Kneževac	No ROP-NKN-15769-ISAW-2/2020 Date: 26.08.2020.		Decision pursuant to Article 145
Construction of LV 0,4 kV connecting cable line for meat processing facility in Bačka Topola in Novosadska Street, for the client "BANATSKI ORGANIK MV" D.O.O. Bačka Topola	No ROP-BTP-16763-ISAW-2/2020 Date: 19.09.2020.		Decision pursuant to Article 145
Construction of LV cable line of the MBTS-23 to GRS in Duritorska Street in Bačka Topola	No ROP-BTP-28514-ISAW-3/2020 Date: 15.11.2020.		Decision pursuant to Article 145
Construction of LV 0,4 kV connecting cable line for buisness and residential building in Subotica in Somborski Put Street No. 50	No ROP-SUB-28518-ISAW-2/2020 Date: 17.11.2020.		Decision pursuant to Article 145
Construction of LV cable duct in 51 Divizije Street in Subotica	Number ROP-SUB-28525-ISAW-2/2020 Dated: November 20th, 2020		Decision pursuant to Article 145
Construction of 20 kV cable duct for MBTS-103 "Perutnina" Bačka Topola	Number ROP-BTP-33914-ISAW-2/2020 Dated: December 3rd, 2020		Decision pursuant to Article 145
Construction of 20 kV ducts for MBTS-720 "ADAM-ŠPED" Subotica and installing of MV unit at MBTS - 720 "ADAM-ŠPED" Subotica	Number ROP-SUB-33577-ISAW-2/2020 Dated: December 16th, 2020		Decision pursuant to Article 145
ED SOMBOR			
STS Boška Vrebalova Sombor	ROP-SOM-23360-ISAW-2/2020 November 27th, 2020		Decision pursuant to Article 145

Cabling of 20kW duct Gruje Dedića Sombor	ROP-SOM-9644-ISAW-3/2020 November 27th, 2020		Decision pursuant to Article 145
LV cable duct No. 26 Srpskih Vladara APATIN	ROP-APA-561-ISAW-2/2020 November 3rd, 2020		Decision pursuant to Article 145
STS Kiš Ferenca – Železnička Svilojevo	ROP-APA-36198-ISAW-3/2020 June 1st, 2020		Decision pursuant to Article 145
LV duct No. 22 Samka Radosavljevića Sombor	ROP-SOM-1222-ISAW-2/2020 June 5th, 2020		Decision pursuant to Article 145
LV cable Block 112 APATIN	ROP-APA-39213-ISAW-2/2020 February 14th, 2020		Decision pursuant to Article 145
LV and HV cable duct Crvenka	ROP-KUL-180-ISAW-2/2020 March 13th, 2020		Decision pursuant to Article 145
LV cable duct Spiralainvest Kula	ROP-KUL-30966-ISAWHA-4/2020 January 31st, 2020		Decision pursuant to Article 145
Reconstruction of RP Železnička Stanica KULA	ROP-KUL-30824-ISAW-3/2020 January 20th, 2020		Decision pursuant to Article 145
Construction of STS I. Milutinovića B.D.Polje	ROP-VRB-36202-ISAW-2/2020 August 19st, 2020		Decision pursuant to Article 145
STS Vojvodjanska-V.Vlahovića M. Bač	ROP-EAC-4713-ISAW-2/2020 June 22nd, 2020		Decision pursuant to Article 145
ED ZRENJANIN			
Construction	IV-05-351-646/2020 December 30, 2020 13:43:00		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-306-IV-05-02 December 7 th , 2020 20:19:34		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-295-IV-05-02 November 23 rd , 2020 14:25:06		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-285-IV-05-02 November 17 th , 2020 17:19:08		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-282-IV-05-02 November 16 th , 2020 13:01:52		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-270-IV-05-02 November 19 th , 2020 13:32:37		Issuing of Decision on Work Performance Approval
Construction	IV-05-351-497/2020 October 14 th , 2020 22:14:36		Issuing of Decision on Work Performance Approval
Construction	IV-05-351-335/2020 August 3 rd , 2020 12:35:43		Issuing of Decision on Work Performance Approval
Construction	III-09-351-2-37/2020 August 7 th , 2020 09:31:20		Issuing of Decision on Work Performance Approval

Construction	351-13/2020-106-IV-05-02 July 27 th , 2020 13:04:53		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-85-IV-05-02 July 7 th , 2020 11:06:54		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-84-IV-05-02 June 29 th , 2020 10:13:14		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-66-IV-05-02 May 29 th , 2020 16:02:28		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-63-IV-05-02 June 5 th , 2020 11:27:34		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-62-IV-05-02 June 2 nd , 2020 15:59:48		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-61-IV-05-02 June 18 th , 2020 08:08:34		Issuing of Decision on Work Performance Approval
Construction	351-43/2020 May 13 th , 2020 12:31:29		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-56-IV-05-02 May 8 th , 2020 12:46:28		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-53-IV-05-02 April 30 th , 2020 09:17:33		Issuing of Decision on Work Performance Approval
Construction	III-09-351-2-14/2020 March 18 th , 2020 13:51:36		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-30-IV-05-02 March 12 th , 2020 09:28:26		Issuing of Decision on Work Performance Approval
Construction	351-13/2020-107-IV-05-02 July 29 th , 2020		Issuing of Decision on Work Performance Approval
ED NOVI SAD			
Underground ducts of 0,4kV to the front of facility in Institutski put bb Street, Sremska Kamenica	ROP-NSD-25118-ISAW- 1/2020 dated October 8 th , 2020		
Underground duct of 0,4kV at Krvavić, Rakovac	ROP-BEO-3380-ISAW- 1/2020 dated March 26 th , 2020		

Overhead terminal duct of 20kV for STS "Zoni", Bečej	ROP-BEC-7228-ISA-W-3/2020 dated September 21 st , 2020		
LV cable duct for facility in Bogdana Popovića bb Street, Novi Sad	ROP-NSD-18991-ISA-W-1/2020 dated August 11 th , 2020		
Underground ducts of 20kV for TS "NGC-1", Novi Sad	ROP-NSD-17090-ISA-W-1/2020 dated July 27 th , 2020		
Extension of overhead LV grid in No. 34 Nova Street, Novi Sad	ROP-NSD-5707-ISA-W-1/2020 dated April 21 st , 2020		
Cable duct of 20kV from the existing BS to existing TS "Pavlović", Šajkaš	ROP-TIT-1640-ISA-W-3/2020 dated March 25 th , 2020		
KBTS "Dom zdravlja", KBTS "Dok 2" and KBTS "Braće Andjelić" with related MV and LV grid, Sremski Karlovci	ROP-PSUGZ-7377-ISA-WHA-2/2020 dated April 24 th , 2020		
Underground ducts of 20 and 0,4kV for facility at corner of Dositejeva and Karadjordjeva Streets, Novi Sad	ROP-NSD-8655-ISA-W-1/2018 dated June 29 th , 2020		
Underground grid of 0,4kV at the spread of Duboka provalija, Sremska Kamenica	ROP-NSD-9234-ISA-WHA-2/2020 dated June 25 th , 2020		
MBTS "Retreat Kovilj" with HV and LV grid, Kovilj	ROP-NSD-29438-ISA-W-2/2020 dated April 22 nd , 2020		
Underground duct of 0,4kV for facility at No. 6 Nenada Mitrova Street, Novi Sad	ROP-NSD-28626-ISA-W-1/2020 dated October 26 th , 2020		
Overhead LV grid at Popovića Komoraša Street, Veternik	ROP-NSD-2378-ISA-W-1/2020 dated February 18 th , 2020		
Underground ducts of 0,4kV for business space at No. 18 Bulevar oslobođenja, Novi Sad	ROP-NSD-18910-ISA-W-1/2020 dated October 13 th , 2020		
Terminal overhead and underground duct of 20kV for TS "Agro-land", the spreads Donji salaši i Donje ugarnice, Bečej	ROP-BEC-7093-ISA-W-3/2020 dated November 30 th , 2020		
Underground grid of 0,4kV for facility in No. 9 Vase Pelagića Street, Novi Sad	ROP-NSD-9339-ISA-WHA-2/2020 dated May 19 th , 2020		
MBTS "Rzav" with related MV and LV grid, Novi Sad	ROP-NSD-4128-ISA-W-1/2020 dated June 24 th , 2020		
Underground grid of 0,4kV from TS "Šumska" for Cetinjska Street, Novi Sad	ROP-NSD-29912-ISA-WHA-2/2020 dated February 26 th , 2020		
Underground duct of 20kV for TS "Prečištač Begeč", Begeč	ROP-NSD-3388-ISA-W-1/2020 dated March 26 th , 2020		
Underground grid of 0,4kV for facility at corner of Streets Nova and Ćirila i Metodija, Novi Sad	ROP-NSD-4714-ISA-W-1/2020 dated March 30 th , 2020		
TD-18128-1 Underground ducts of 20kV at outlet "Primorska" from TS 35/10kV "Sever", Novi Sad	ROP-NSD-33078-ISA-WHA-2/2019 dated February 13 th , 2020		
Underground duct of 0,4kV from TS "Nera", Bački Jarak	ROP-TEM-8340-ISA-W-1/2020 dated April 7 th , 2020		

MBTS "Jugovićevo 2" with related underground grid of 20kV and 0,4kV in Novi Sad, Novi Sad	ROP-NSD-35629-ISAWHA-2/2020 dated January 23 rd , 2020		
Underground grid of 0,4 kV for park north from yard ramp and Radomira Raše Radujkova Street, Novi Sad	ROP-NSD-8662-ISAWHA-2/2020 dated June 3 rd , 2020		
Underground grid of 0,4kV for kindergarden facility in Silbaš, Silbaš	ROP-BAP-1577-ISAW-1/2020 dated February 21 st , 2020		
Underground grid of 0,4kV for facility at No. 7 Vojvode Šupljikca Street, Novi Sad	ROP-NSD-8328-ISAW-1/2020 dated April 28 th , 2020		
Underground duct of 0,4kV for cultural center facility at No. 21 Trg bratstva i jedinstva, Bačka Palanka	ROP-BAP-27280-ISAWHA-2/2019 dated January 24 th , 2020		
Underground LV grid for facility at Kornelije Stanković bb, Street, Novi Sad	ROP-NSD-10050-ISAWHA-2/2020 dated May 28 th , 2020		
Underground cable duct of 20kV between existing steel lattice masts in Bački Petrovac, Bački Petrovac	ROP-BPE-28623-ISAW-1/2020 dated October 15 th , 2020		
Underground ducts of 20kV for TS "Exim komerc", Kovilj	ROP-NSD-785-ISAWHA-2/2020 dated May 11 th , 2020		
Underground grid of 0,4kV for facility at No. 38-40 Neimarova Street, Novi Sad	ROP-NSD-35910-ISAW-1/2019 dated January 6 th , 2020		
TS "Zlatar" with related MV and LV ducts, Novi Sad	ROP-NSD-3770-ISAW-1/2020 dated April 27 th , 2020		
ZTS "Filipa Višnjića 2" with underground ducts of 20 and 0,4kV, Novi Sad	ROP-NSD-17818-ISAWHA-2/2020 dated October 15 th , 2020		
MBTS "Venizelosova" with related MV and LV ducts, Novi Sad	ROP-NSD-16294-ISAW-1/2020 dated October 9 th , 2020		
Underground grid of 0,4kV for facility in No. 15 Dostojevskog Street, Novi Sad	ROP-NSD-17020-ISAW-1/2020 dated August 11 th , 2020		
Underground grid of 0,4kV for facility at corner of Dostojevskog Street and Slovačka Street, Novi Sad	ROP-NSD-17020-ISAW-1/2020 dated August 11 th , 2020		
Underground duct of 0,4kV for facility at No. 18 Partrijarha Čarnojevića Street, Novi Sad	ROP-NSD-35484-ISAW-1/2019 dated January 6 th , 2020		
Underground grid of 0,4kV for facility at No. 30 Mornarska Street, Novi Sad	ROP-NSD-8985-ISAW-1/2020 dated May 13 th , 2020		
Underground grid of 0,4kV at Partrijarha Brankovića Square in front of Stefaneum building, Sremski Karlovci	ROP-PSUGZ-20190-ISAWHA-2/2020 dated September 23 rd , 2020		
TS "Preradovićevo 3" with related MV and LV grid, Petrovaradin	ROP-NSD-14672-ISAWHA-2/2020 dated October 12 th , 2020		
TS "Djurdja Brankovića" with related ducts of 20 and 0,4kV, Novi Sad	ROP-NSD-16021-ISAW-1/2020 dated August 10 th , 2020		
Underground grid of 0,4kV in Nova Street, Novi Sad	ROP-NSD-35985-ISAW-1/2019 dated January 9 th , 2020		

Underground duct of 0,4kV for facility at No. 33 Košuta Lajoš Street, Temerin	ROP-TEM-4716-ISA-W-1/2020 dated February 27 th , 2020		
Underground grid of 0,4kV at Nova bb Street, Petrovaradin	ROP-NSD-14667-ISA-WHA-2/2020 dated September 7 th , 2020		
TS "Jugovićevo 3", TS "Jugovićevo 4" and TS "Jugovićevo 5" with related underground ducts of 20 and 0,4kV, Novi Sad	ROP-NSD-36703-ISA-WHA-2/2020 dated January 23 rd , 2020		
Underground ducts for TS "Paroco", Novi Sad	ROP-NSD-9727-ISA-W-1/2020 dated June 3 rd , 2020		
STS "Biserno ostrvo 2" with related MV and LV grid, Novi Bečej	ROP-NOB-5072-ISA-W-1/2020 dated February 28 th , 2020		
Underground duct of 20kV near Sloboda Bridge, Novi Sad	ROP-NSD-1593-ISA-W-1/2020 dated March 24 th , 2020		
Underground duct of 0,4kV for Primary School "Dušan Radović" (heat supplying substation), Novi Sad	ROP-NSD-35818-ISA-W-1/2019 dated January 16 th , 2020		
Underground grid of 0,4kV for facility at No. 1-3 Gundulićeva Street, Novi Sad	ROP-NSD-8331-ISA-W-1/2020 dated April 22 nd , 2020		
TS "Palilula" with related MV and LV grid, Novi Sad	ROP-NSD-24550-ISA-W-1/2020 dated October 12 th , 2020		
MBTS "Tatarsko brdo 2" with related MV and LV grid, Sremska Kamenica	ROP-NSD-2377-ISA-W-1/2020 dated March 23 rd , 2020		
Underground grid of 0,4kV for facility at Bulevar Patrijarha Pavla bb Street, Novi Sad	ROP-NSD-9958-ISA-W-1/2020 dated May 11 th , 2020		
Underground grid of 0,4kV in Gornje Livade XX Street, Novi Sad	ROP-NSD-39983-ISA-W-1/2019 dated February 14 th , 2020		
Overhead LV grid at part of Sonja Marinković Street (region of transformer STS "Jurija Gagarina"), Sremska Kamenica	ROP-NSD-39951-ISA-WHA-2/2020 dated September 23 rd , 2020		
TS "Zlatarićeva 2" with related ducts of 20 and 0,4kV, Petrovaradin	ROP-NSD-36503-ISA-W-1/2019 dated January 16 th , 2020		
Pole mounted transformer station "Blok stanica 14" with related MV and LV grid, Šajkaš	ROP-TIT-30664-ISA-W-2/2020 dated January 17 th , 2020		
Underground grid of 0,4kV for facility in Somborska bb Street, Novi Sad	ROP-NSD-3155-ISA-W-1/2020 dated April 21 st , 2020		
MBTS "Mornarska 4" with related MV and LV grid, Novi Sad	ROP-NSD-3390-ISA-WHA-2/2020 dated September 9 th , 2020		
Underground grid of 0,4kV at the spread Vučkovac, Ledinci	ROP-NSD-38884-ISA-W-1/2019 dated January 9 th , 2020		
KBTS "IMRE" with related MV and LV grid, Bačko Petrovo Selo	ROP-BEC-3159-ISA-W-1/2020 dated February 12 th , 2020		
Underground duct of 20kV for TS "CTP GAMA", Novi Sad	ROP-NSD-8135-ISA-W-1/2020 dated April 3 rd , 2020		
TS "Dobre Jovanovića" with related MV and LV grid, Veternik	ROP-NSD-3561-ISA-WHA-2/2020 dated April 2 nd , 2020		

TS "Dalmatinska 4" with related MV and LV ducts, Novi Sad	ROP-NSD-14776-ISAW-1/2020 dated September 22 nd , 2020		
Underground grid of 0,4kV for facility at Milana Tepića bb Street, Veternik	ROP-NSD-35485-ISAWHA-2/2019 dated February 27 th , 2020		
KBTS "Jasminova" with related MV and LV grid, Sremska Kamenica	ROP-NSD-10858-ISAW-1/2020 dated October 12 th , 2020		
Underground grid of 0,4kV for facility at No. 1 Danila Kiša Street for business space No. 2, Novi Sad	ROP-NSD-2899-ISAWHA-2/2020 dated April 21 st , 2020		
TS "Avenija 1" with related MV and LV grid, Novi Sad	ROP-NSD-24543-ISAWHA-2/2020 dated October 23 rd , 2020		
Underground grid of 0,4kV at the spread Mišeluk (extension of LV outlet "Mišeluk III No. 5"), Petrovaradin	ROP-NSD-40043-ISAWHA-2/2020 dated April 28 th , 2020		
Underground grid of 0,4kV for facility at Bate Brkića bb Street, Novi Sad	ROP-NSD-36713-ISAW-1/2019 dated January 16 th , 2020		
Underground grid of 0,4kV for facility at the corner of Almaška Street and No. 7 Djordja Rajkovića Street, Novi Sad	ROP-NSD-37186-ISAW-1/2019 dated January 8 th , 2020		
Underground duct of 0,4kV for fuel supply station complex and TNG at Novi Sad at the corner of streets Put Šajkaškog odreda, Temerinska i Kanalska, Novi Sad	ROP-NSD-5996-ISAW-1/2020 dated March 12 th , 2020		
STS "Torine" with related LV grid, Ledinci	ROP-NSD-7248-ISAWHA-2/2020 dated June 24 th , 2020		
Underground duct of 0,4kV for facility at No. 23 Svetozara Markovića Street, Bačka Palanka	ROP-BAP-52-ISAW-1/2020 dated February 21 st , 2020		
Underground grid of 0,4kV for facility at No. 18 Stevana Musića Street, Novi Sad	ROP-NSD-4816-ISAWHA-2/2020 dated July 17 th , 2020		
Underground grid of 0,4kV for facility at No. 10, 12 and 12a Laze Kostića Street, Novi Sad	ROP-NSD-8301-ISAWHA-2/2020 dated April 27 th , 2020		
Underground duct of 0,4kV for facility at No. 34 Račkog Street, Petrovaradin	ROP-NSD-29088-ISAW-2/2020 dated February 26 th , 2020		
Underground grid of 0,4kV for facility at Veternička bb Street, Veternik	ROP-NSD-33896-ISAWHA-2/2019 dated January 22 nd , 2020		
Underground grid of 0,4kV at Nova Street, Veternik	ROP-NSD-35782-ISAWHA-2/2020 dated February 26 th , 2020		
Underground duct of 0,4kV for facility at No. 15a Djordja Rajkovića Street, Novi Sad	ROP-NSD-35983-ISAW-1/2019 dated January 16 th , 2020		
Underground grid of 0,4kV for facility at No. 20 Orlovića Pavla Street, Novi Sad	ROP-NSD-3612-ISAW-1/2020 dated July 17 th , 2020		
Underground duct of 0,4kV for facility at corner of Sime Matavulja Street and Laze Lazarevića bb Street, Novi Sad	ROP-NSD-7679-ISAWHA-2/2020 dated April 23 rd , 2020		
TS "Srbobranski put 2" with underground ducts of 20 and 0.4kV, Bečej	ROP-BEC-20198-ISAW-1/2020 dated August 5 th , 2020		

Underground duct of 0,4kV for facility at No. 9 Kopernikova Street, Novi Sad	ROP-NSD-14777-ISA-1/2020 dated July 17 th , 2020		
Underground grid of 0,4kV for facilities at No. 8 and 8a Stevana Dejanova Street, Novi Sad	ROP-NSD-6032-ISA-2/2020 dated May 5 th , 2020		
Underground duct of 0,4kV for facility at No. 7 Stevana Hristića Street, Novi Sad	ROP-NSD-2387-ISA-1/2020 dated March 23 rd , 2020		
Underground duct of 0,4kV for facility at No. 2 Jaše Ignjatovića Street, Novi Sad	ROP-NSD-3153-ISA-1/2020 dated March 25 th , 2020		
Underground duct of 0,4kV for facility at Perce bb Street, Temerin	ROP-TEM-39565-ISA-2/2020 dated May 7 th , 2020		
UZTS "Servo Mihalja" with related MV and LV grid, Novi Sad	ROP-NSD-30900-ISA-1/2020 dated October 30 th , 2020		
Underground duct of 0,4kV for facility at Ćirila i Metodija bb Street, Novi Sad	ROP-NSD-7253-ISA-1/2020 dated April 21 st , 2020		
Underground duct of 0,4kV for facility at No. 7 Jožefa Atila Street, Novi Sad	ROP-NSD-39907-ISA-1/2019 dated January 31 st , 2020		
Underground duct of 0,4kV for powder mill Jozef facility, Petrovaradin	ROP-NSD-39934-ISA-1/2019 dated January 31 st , 2020		
Underground duct of 0,4kV for facility at No. 38 Jovana Hranilovića Street, Novi Sad	ROP-NSD-3381-ISA-1/2020 dated April 21 st , 2020		
Underground ducts of 0,4kV for facility at corner of No. 18 Svetojovanska Street and No. 13 Djurdja Brankovića Street, Novi Sad	ROP-NSD-4127-ISA-1/2020 dated March 26 th , 2020		
Underground grid of 0.4kV at Rade Kondića Street, Futog	ROP-NSD-14030-ISA-1/2020 dated September 7 th , 2020		
Underground ducts of 0,4kV for facility at No. 2-4 Djordja Zličića Street, Novi Sad	ROP-NSD-15185-ISA-1/2020 dated July 2 nd , 2020		
Underground duct of 20kV at the corner of Cara Dušana Street and Bulevar Cara Lazara, Novi Sad	ROP-NSD-9525-ISA-1/2020 dated April 28 th , 2020		
Underground duct of 0,4kV for shop No. 2 at No. 2 Veselina Masleše Street, Novi Sad	ROP-NSD-1591-ISA-1/2020 dated February 26 th , 2020		
TS "Svetolika Rankovića" with related MV and LV grid, Novi Sad	ROP-NSD-5715-ISA-1/2020 dated April 28 th , 2020		
TS "Radnička 2" with related MV and LV grid, Novi Sad	ROP-NSD-26943-ISA-1/2020 dated October 12 th , 2020		
Underground ducts of 20kV for TS TC "Novi tekstili", Bečej	ROP-BEC-2040-ISA-1/2020 dated January 30 th , 2020		
Underground duct of 0,4kV for bus station at Danila Kiša Street, Bečej	ROP-BEC-7404-ISA-1/2020 dated March 24 th , 2020		
Underground duct of 0,4kV for business building at Nikole Krstića Street, Novi Sad	ROP-NSD-6419-ISA-1/2020 dated May 18 th , 2020		
Underground grid of 0,4kV for facility at No. 10 Branka Radičevića Street, Novi Sad	ROP-NSD-8338-ISA-1/2020 dated April 28 th , 2020		

Underground duct of 0,4kV for facility at No. 37 Mornarska Street, Novi Sad	ROP-NSD-3390-ISAWHA-2/2020 dated September 9 th , 2020		
Underground grid of 0,4kV at Olge Ilić Street, Veternik	ROP-NSD-6038-ISAW-1/2020 dated April 21 st , 2020		
Underground duct of 0,4kV for building at No. 15 Rudnička Street, Novi Sad	ROP-NSD-16432-ISAW-1/2020 dated October 14 th , 2020		
Underground grid of 0,4kV for facility at Janike Balaža Street, Novi Sad	ROP-NSD-28915-ISAW-1/2020 dated October 16 th , 2020		
Underground grid of 0,4kV for facility at 38-40 Svete Kasapinovića Street, Novi Sad	ROP-NSD-18289-ISAW-1/2020 dated September 3 rd , 2020		
Underground duct of 0,4kV for facility at No. 65 Narodnog fronta Street, Temerin	ROP-TEM-35332-ISAW-1/2020 dated December 1 st , 2020		
MBTS "Minut desno" with related MV and LV grid, Novi Sad	ROP-NSD-3152-ISAW-2/2020 dated May 27 th , 2020		
Underground duct of 0,4kV for business facility at corner of Masarikova Street and No. 13 Maršala Tita Street, Bački Petrovac	ROP-BPE-10071-ISAWHA-4/2020 dated July 24 th , 2020		
Underground duct of 0,4kV for facility at Bate Brkića bb Street, Novi Sad	ROP-NSD-2386-ISAW-1/2020 dated March 25 th , 2020		
Underground ducts of 0,4kV for business facility at No. 69 Bulevar oslobođenja, Novi Sad	ROP-NSD-15430-ISAWHA-2/2020 dated October 9 th , 2020		
Reconstruction of ZTS "Business building", Novi Sad	ROP-NSD-14000-ISAW-1/2020 dated July 2 nd , 2020		
Overhead grid of 0,4kV at Nova IV Street, Novi Sad	ROP-NSD-11312-ISAWHA-2/2020 dated October 9 th , 2020		
Underground ducts of 0,4kV for facility near Novosadski put Street at entrance to Bački Jarak, Bački Jarak	ROP-TEM-18061-ISAW-1/2020 dated July 23 rd , 2020		
Underground grid of 0,4kV for facility at No. 7 Mostarska Street, Petrovaradin	ROP-NSD-16238-ISAW-1/2020 dated July 13 th , 2020		
Underground duct of 0,4kV for facility at No. 16 Slovačka Street, Kisač	ROP-NSD-13260-ISAWHA-2/2020 dated July 22 nd , 2020		
Underground ducts of 20kV for existing TS "Sajam 3", Novi Sad	ROP-NSD-9499-ISAWHA-2/2020 dated May 8 th , 2020		
Underground ducts of 20kV for new TS "Sajam 5", Novi Sad	ROP-NSD-9515-ISAW-1/2020 dated April 28 th , 2020		
Underground ducts of 20kV for existing TS "Sajam 2", Novi Sad	ROP-NSD-9498-ISAWHA-2/2020 dated May 8 th , 2020		
Underground duct of 20kV for TS "Letić" and steel lattice mast (ČRS) transmission line of 20kV, Čenej	ROP-NSD-2695-ISAW-8/2020 dated December 14 th , 2020		
MBTS "Novosadska 2" with related MV and LV grid, Temerin	ROP-TEM-26952-ISAW-1/2020 dated September 28 th , 2020		
Terminal transmission line of 20kV for STS "Zeljko", Bačka Palanka	ROP-BAP-4926-ISAW-1/2020 dated March 6 th , 2020		
MBTS "Sime Matavulja 3" with related MV and LV grid, Novi Sad	ROP-NSD-11317-ISAW-1/2020 dated July 21 st , 2020		

Underground duct of 0,4kV for facility at No. 17 and 19 Bele njive Street, Novi Sad	ROP-NSD-6000-ISA-1/2020 dated April 21 st , 2020		
Underground duct of 0,4kV for facility at parcel No. 2066/1, Futog	ROP-NSD-7413-ISA-1/2020 dated April 21 st , 2020		
Underground duct of 0,4kV for facility at No. 40 Branka Bajića Street, Novi Sad	ROP-NSD-26646-ISA-1/2020 dated October 13 th , 2020		
MBTS "Heroja Pinkija 2" with related MV and LV grid, Novi Sad	ROP-NSD-12105-ISA-1/2020 dated August 3 rd , 2020		
Underground duct of 20kV for business complex "Hleb" at Bajči Žilinskog Street, Novi Sad	ROP-NSD-2976-ISA-4/2020 dated October 9 th , 2020		
Underground grid of 0,4kV at Pedje Milosavljevića Street, Novi Sad	ROP-NSD-10848-ISA-1/2020 dated May 15 th , 2020		
Underground ducts of 20kV for TS "Fabrika čokolade"-phase 2, Novi Sad	ROP-NSD-10512-ISA-2/2020 dated August 7 th , 2020		
Underground ducts of 20kV for TS "Fabrika čokolade"-phase 1, Novi Sad	ROP-NSD-2975-ISA-1/2020 dated February 14 th , 2020		
Underground grid of 0,4kV for facility at No. 9 Dobro Jovanovića Street, Veternik	ROP-NSD-9175-ISA-2/2020 dated June 26 th , 2020		
Underground grid of 0,4kV for facility at Pavla Bakića Street, Novi Sad	ROP-NSD-34301-ISA-1/2020 dated December 8 th , 2020		
Underground duct of 0,4kV for facility at No. 17 Koste Šokice Street, Novi Sad	ROP-NSD-12996-ISA-1/2020 dated June 24 th , 2020		
Underground duct of 0,4kV for hydrothermal well, Bečej	ROP-BEC-10849-ISA-1/2020 dated May 20 th , 2020		
Underground ducts of 20 kV for TS "LYKOS", Novi Sad	ROP-NSD-11492-IUPH-2/2020 dated June 24 th , 2020		
Underground LV grid for facility at No. 14 Tolstojeva Street, Novi Sad	ROP-NSD-34516-ISA-1/2020 dated December 28 th , 2021		
MBTS "Idjoški put" with related MV and LV grid, Bečej	ROP-BEC-20371-ISA-1/2020 dated August 12 th , 2020		
Relocation of underground ducts of 20kV at circular cross-road IB 12 and Šajkaškog odreda Street, Novi Sad	ROP-NSD-30138-ISA-1/2020 dated December 28 th , 2020		
Underground grid of 0,4kV for facility at No. 46 Kopernikova Street, Novi Sad	ROP-NSD-14031-ISA-1/2020 dated September 7 th , 2020		
Underground grid of 0,4kV for facility at Desanke Maksimović bb Street, Novi Sad	ROP-NSD-23111-ISA-2/2020 dated October 12 th , 2020		
TS "Livade Trandžament" with related MV and LV grid, Petrovaradin	ROP-NSD-16587-ISA-1/2020 dated October 12 th , 2020		
Underground grid of 0,4kV at Braće Lučić bb Street, Novi Sad	ROP-NSD-30126-ISA-2/2020 dated November 13 th , 2020		

Underground duct of 0,4kV for facility at No. 22 Djordja Rajkovića Street, Novi Sad	ROP-NSD-26949-ISAW-1/2020 dated October 8 th , 2020		
Underground grid of 0,4kV for Vukovarska Street, Petrovaradin	ROP-NSD-14685-ISAW-1/2020 dated June 23 rd , 2020		
Underground ducts of 20kV for TS "Lidl-Temerinska", Novi Sad	ROP-NSD-24753-ISAW-1/2020 dated September 22 nd , 2020		
Overhead LV grid at Radnička Street, Begeč	ROP-NSD-23746-ISAW-1/2020 dated October 9 th , 2020		
Underground grid of 0,4kV for facility at No. 11-13 Dostojevskog Street, Novi Sad	ROP-NSD-17020-ISAW-1/2020 dated August 11 th , 2020		
Underground duct of 0,4kV for business facilities at Živojina Čuluma Street, Novi Sad	ROP-NSD-19337-ISAWHA-2/2020 dated December 28 th , 2020		
Underground duct of 0,4kV for facility at No. 69 Kralja Petra I Street, Bačka Palanka	ROP-BAP-30957-ISAW-1/2020 dated October 30 th , 2020		
Underground duct of 0,4kV for facility at No. 37A Mornarska Street, Novi Sad	ROP-NSD-21167-ISAW-1/2020 dated September 7 th , 2020		
Underground duct of 0,4 kV for facility at No. 3/A Idjoški put Street, Bečej	ROP-BEC-20371-ISAW-1/2020 dated August 12 th , 2020		
Underground ducts of 20kV for TS "Stolarska", Srbobran	ROP-SRB-33945-ISAW-1/2020 dated November 17 th , 2020		
Underground duct of 0,4kV for business facility at No. 73 Narodnog fronta Street, Novi Sad	ROP-NSD-20635-ISAW-1/2020 dated August 11 th , 2020		
Underground grid of 0,4kV for dual facility at Nova Street (Mišeluk 2), Sremska Kamenica	ROP-NSD-30140-ISAW-1/2020 dated December 31 st , 2021		
Underground LV grid at Mladih gorana Street, Rakovac	ROP-BEO-35353-ISAW-1/2020 dated December 1 st , 2020		
STS "Marka Garića", Bačko Gradište	ROP-BEC-14775-ISAW-1/2020 dated June 23 rd , 2020		
Underground duct of 0,4kV and dismantling of overhead grid part at Patrijarha Černojevića Street, Novi Sad	ROP-NSD-28148-ISAW-1/2020 dated October 9 th , 2020		
Underground grid of 0,4kV for sports hall at Gajdobra on corner of Hercegovačka Street and Petra Drapšina Street, Gajdobra	ROP-BAP-28620-ISAW-1/2020 dated November 20 th , 2020		
Relocation of underground ducts of 20kV between TS "Ilije Garašanina" and TS "Vodovod Adice" at part of pre-school institution facility construction, Novi Sad	ROP-NSD-31899-ISAW-1/2020 dated December 28 th , 2020		
Underground grid of 0,4kV for facility at No. 5 Mornarska Street, Novi Sad	ROP-NSD-32281-ISAW-1/2020 dated December 28 th , 2020		
Underground grid of 0,4kV near CS at Vase Ostojića Street, Novi Sad	ROP-NSD-36135-ISAW-1/2020 dated December 15 th , 2021		
Underground ducts of 20kV for TS TC "Vodovod – traffic circle", Novi Sad	ROP-NSD-29085-ISAWHA-2/2020 dated December 8 th , 2020		

Underground duct of 0,4kV for facility at No. 104 Jugoslovenske armije Street, Bačka Palanka	ROP-BAP-28619-ISAW-1/2020 dated November 20 th , 2020		
STS "Save Dimitrijevića 2" with related MV and LV grid, Šajkaš	ROP-TIT-35333-ISAW-1/2020 dated December 1 st , 2020		
Underground ducts of 20 and 0,4kV at corner of Lasla Gala Street and Bulevar oslobođenja, Novi Sad	ROP-NSD-14483-ISAWHA-2/2020 dated June 22 nd , 2020		
Overhead LV grid at Nova III Street, Petrovaradin	ROP-NSD-35336-ISAW-1/2020 dated December 7 th , 2020		
Underground duct of 0,4kV at part of Braće Lučić Street, Novi Sad	ROP-NSD-30126-ISAWHA-2/2020 dated November 13 th , 2020		
Underground duct of 20kV for STS "Petric", Rakovac	ROP-BEO-26408-ISAW-1/2020 dated October 6 th , 2020		
Underground grid of 0,4kV for facility at No 11-13 Bulevar Patrijarha Pavla Street, Novi Sad	ROP-NSD-2826-ISAWA-2/2020 dated December 14 th , 2020		
Underground ducts of 0,4kV for facilities at No. 65 and 89 Narodnog fronta Street, Temerin	ROP-TEM-35332-ISAW-1/2020 dated December 1 st , 2020		
Terminal steel lattice mast of 20kV of transmission line for brickyard "Obnova", Kač	ROP-NSD-34423-ISAW-1/2020 dated December 24 th , 2020		
Underground ducts of 20kV for TS "Gradilišni kamp-Inobačka", Novi Sad	ROP-NSD-23465-ISAW-1/2020 dated September 9 th , 2020		
Underground duct of 0,4kV for facility at No. 4 Juraja Križanića Street, Petrovaradin	ROP-NSD-26954-ISAWHA-2/2020 dated September 30 th , 2020		
ED RUMA			
STS "FRUŠKOGORSKA" with terminal cable duct-Pavlovci	ROP-RUM-34892-ISAW-1/2020 December 1 st , 2020		
STS "RBS" with terminal cable duct of 20kV Kraljevci	ROP-RUM-11034-ISAW-1/2020 May 27 th , 2020		
STS "ZALIVNI SISTEM" Platičevo	ROP-RUM-24418-ISAW-1/2020 September 29 th , 2020		
MBTS "LIMONT" with terminal cable duct of 20kV Ruma	ROP-RUM-29589-ISAW-1/2020 October 29 th , 2020		
LV grid 15.May-15.August Ruma	ROP-RUM-27127-ISAWHA-2/2020 November 5 th , 2020		
STS "NEŠE VERKIĆA" Obrež	ROP-PEC-19088-ISAW-1/2020, August 21 st , 2020		
STS "PREKA KALDRMA" Deč	ROP-PEC-30116-ISAW-1/2020, October 29 th , 2020		
STS "ŠPAJANSKA" Karlovčić	ROP-PEC-31267-ISAW-1/2020, November 12 th , 2020		
MBTS "Crnogorska" with KV 20 kV and LV denouement at Novi Banovci	ROP-SPZ-26375-ISAW-2/2020 dated January 4 th , 2020		
MBTS "Crpna stanica" and KV 20 kV – St. Banovci	ROP-SPZ-2927-ISAW-2/2020 dated January 8 th , 2020		
STS "Alikvantum" with terminal transmission line at N. Karlovci	ROP-IND-12941-ISAW-2/2020 dated August 12 th , 2020		

UZTS "Maksbazel" with KV 20 kV at Beška	ROP-IND-27208-ISAW-2/2020 dated December 8 th , 2020		
MBTS "Industrijska Zona" and KV 20 kV at Indjija	ROP-IND-39639-ISAW-2/2020 dated June 19 th , 2020		
ED SREMSKA MITROVICA			
KV of 0,4 kV from MBTS 20/0,4kV „Svilaja“ to POMM for business, sales – exhibition facility T.P. "Lipa 2015" at No. 47 Svetog Save Street in Šid	ROP-SID-3891-ISAW-1/2020 February 19 th , 2020		Decision on Work Performance Approval
STS 20/04 kV "Ležimirska" with MV and LV denouement in Ležimir	ROP-SMI-7016-ISAW-1/2020 March 20 th , 2020		Decision on Work Performance Approval
Reconstruction of MBTS 20/04 kV "Zeleno drvo" and cable denouement of 0,4 kV from MBTS 20/04 kV "Zeleno drvo" for new residential and commercial facility and existing facility (No. 26 Šećer sokak Street) in Sremska Mitrovica	ROP-SMI-7472-ISAW-1/2020 March 25 th , 2020		Decision on Work Performance Approval
STS 20/04 kV "PAPIR" with terminal cable duct of 20 kV at parcel 2646/1 k.o. Lačarak in Lačarak	ROP-SMI-2813-ISAW-2/2020 March 26 th , 2020		Decision on Work Performance Approval
KV 35 kV from KS to double concrete column (KV between D31 and D32) in Sremska Mitrovica	ROP-SMI-8048-ISAW-1/2020 March 30 th , 2020		Decision on Work Performance Approval
Reconstruction of overhead electrical grid of 0,4 kV in Vojvodjanska Street in Erdevik	ROP-SID-8844-ISAW-1/2020 April 21 st , 2020		Decision on Work Performance Approval
Mixed duct of 20 and 0,4 kV, STS 20/0,4 kV "Prvomajska" and overhead electrical grid of 0,4 kV in Vašica	ROP-SID-8843-ISAW-1/2020 April 21 st , 2020		Decision on Work Performance Approval
Reconstruction of overhead electrical grid of 0,4kV in Železnička Street in Martinci	ROP-SMI-9697-ISAW-1/2020 April 30 th , 2020		Decision on Work Performance Approval
Terminal cable duct of 0,4 kV for business facility "Automaks" doo Kukujevcu at No. 48 Cara Lazara Street in Kukujevcu	ROP-SID-10022-ISAW-1/2020 May 12 th , 2020		Decision on Work Performance Approval
STS 20/0,4kV "Zmaj Jovina" with overhead electrical grid of 0,4 kV and reconstruction of overhead electrical grid of 0,4 kV in Srpskih vladara Street in Kukujevcu	ROP-SID-14288-ISAW-1/2020 May 19 th , 2020		Decision on Work Performance Approval
Reconstruction of overhead electrical grid of 0,4 kV in Fruškogorska Street in Erdevik	ROP-SID-11455-ISAW-1/2020 May 26 th , 2020		Decision on Work Performance Approval
Terminal KV of 0,4 kV for residential and commercial facility at No. 51 Stari šor Street in Sremska Mitrovica	ROP-SMI-7875-ISAWHA-3/2020 June 8 th , 2020		Decision on Work Performance Approval
Cable duct of 20 kV from MBTS 20/0,4kV "Šidjanka" to ZTS 20/0,4kV "Fiskulturni dom" in Karadjordjeva Street and Trg republike in Šid	ROP-SID-13602-ISAW-1/2020 June 15 th , 2020		Decision on Work Performance Approval
Cable duct of 20kV from MBTS 20/0,4kV "Istok 1" to MBTS 20/0,4kV "Istok 2" at " in settlement Istok in Šid	ROP-SID-13605-ISAW-1/2020 June 15 th , 2020		Decision on Work Performance Approval
Cable denouement of 20kV from TS 110/20/35 kV "Sremska Mitrovica 3" in Lačarak and S. Mitrovica	ROP-SMI-14880-ISAWHA-2/2020 July 3 rd , 2020		Decision on Work Performance Approval
Terminal KV of 20 kV and new steel lattice mast (ČRS) with measuring assembly of 20 kV and OMM of el. power consumption billing measurement in Kukujevcu in Vuka Karadžića bb Street, at cadastral parcel No. 1261 in KO Kukujevcu	ROP-SID-16164-ISAW-2/2020 July 20 th , 2020		Decision on Work Performance Approval

Terminal KV of 0,4kV from MBTS 20/0,4 kV "Novo naselje" to POMM-4 with KPK EV-2P and PIMG in kindergarden facility facade at No. 1 Školska Street in Lačarak	ROP-SMI-20188-ISAW-1/2020 August 7th, 2020		Decision on Work Performance Approval
Terminal double KV of 0,4kV from MBTS 20/0,4 kV "Orao" to POMM-6 with PIMG at SABP-800 for building of "Jovan Popović" school in Sremska Mitrovica	ROP-SMI-20248-ISAW-1/2020 August 7th, 2020		Decision on Work Performance Approval
Terminal transmission line of 20kV and new steel lattice mast (ČRS) with measuring assembly of 20kV and measuring point cabinet for el. power consumption billing measurement in Svetog Save Street in Šid at cadastral parcel No. 8045/2 ko Šid	ROP-SID-17215-ISAW-3/2020 August 19th, 2020		Decision on Work Performance Approval
Terminal KV of 20kV and new MV block with measuring point cabinet and MG at future MBTS "YU-DIN" in Sremska Mitrovica	ROP-SMI-17295-ISAW-2/2020 October 5th, 2020		Decision on Work Performance Approval
Reconstruction of MV block in MBTS of 20/0,4kV "Stara pekara" in Sremska Mitrovica at cadastral parcel 1279/15 k.o. Sremska Mitrovica and terminal double cable duct of 20 kV in Sremska Mitrovica	ROP-SMI-23132-ISAW-2/2020 October 12th, 2020		Decision on Work Performance Approval
KV of 0,4kV from future KPK in front of facility at No. 39 Cvetna Street to KPK at new facility at No. 13-15 Cvetna Street in Sremska Mitrovica	ROP-SMI-28438-ISAW-1/2020 October 14th, 2020		Decision on Work Performance Approval
STS of 20/0,4kV "Srbijagas" with MV and LV cable denouement in Šid	ROP-SID-30481-ISAW-1/2020 October 21st, 2020		Decision on Work Performance Approval
Terminal KV of 0,4kV from MBTS 20/0,4kV "Parobrodska" to KPK EV-2P and KPK EV-1P in facility facade at No. 35 Parobrodska Street in Sremska Mitrovica	ROP-SMI-30670-ISAW-1/2020 October 27th, 2020		Decision on Work Performance Approval
Terminal for cogeneration plant for electric power generation (power plant) and plant for biogas production (pruchaser) in Sremska Mitrovica, Jarački put bb	ROP-SMI-10790-ISAW-3/2020 November 2nd, 2020		Decision on Work Performance Approval
Steel lattice mast (ČRS) with measuring assembly of 20kV and OMM of el. power consumption billing measurement at parcel No. 543 k.o. Sremska Rača in Sremska Rača	ROP-SMI-32856-ISAW-1/2020 November 13th, 2020		Decision on Work Performance Approval
Relocation of KV 20kV from MBTS 20/0,4 kV "Visoka" to TS 20/0,4 kV "Cooper" in Sremska Mitrovica	ROP-SMI-23521-ISAWHA-3/2020 November 25th, 2020		Decision on Work Performance Approval
ED PANČEVO			
LV cables from MBTS "Karadjordjeva" in Pančevo Vojvode Stepe in Banatski Brestovac	ROP-PAN-38686-ISAW-1/2019 December 19th, 2019		Decision on Work Performance Approval
MBTS "Svetog Save" with HV and LV cables in Pančevo	ROP-PAN-571-ISAW-1/2020 January 16th, 2020		Decision on Work Performance Approval
LV cable in dr. Svetislava Kasapinovića Street in Pančevo	ROP-PAN-4377-ISAW-1/2020 February 25th, 2020		Decision on Work Performance Approval
MV cable from STS "Ponjavica" to MBTS "Blok" 076 in Kovin	ROP-KOV-4383-ISAW-1/2020 February 26th, 2020		Decision on Work Performance Approval
LV grid at Ogle Petrov Street in Banatski Brestovac	ROP-PAN-4373-ISAW-1/2020 February 25th, 2020		Decision on Work Performance Approval
MV cable from existing steel lattice mast (ČRS) to existing TS "Velika Greda"	ROP-PLA-10659-ISAW-1/2020 May 18th, 2020		Decision on Work Performance Approval

MV cable in Opovo	ROP-OPO-14854-ISA-1/2020 June 22 nd , 2020		Decision on Work Performance Approval
STS "Kovačica 23" in Kovačica	ROP-KOA-16696-ISA-1/2020 July 14 th , 2020		Decision on Work Performance Approval
SN and optical cable from TS 110/20kV "Kačarevo" to MRP "Beose"	ROP-PAN-17378-ISA-1/2020 July 15 th , 2020		Decision on Work Performance Approval
SN and optical cable from TS 110/20kV "Pančevo 3" to MRP "Beose"	ROP-PAN-17801-ISA-1/2020 July 21 st , 2020		Decision on Work Performance Approval
LV cable in Mesić	ROP-VRS-13787-ISA-WHA-1/2020 June 25 th , 2020		Decision on Work Performance Approval
STS "Kovačica 23" in Kovačica	ROP-KOV-16696-ISA-1/2020 July 14 th , 2020		Decision on Work Performance Approval
LV cable in Vršac	ROP-VRS-22684-ISA-WHA-1/2020 September 1 st , 2020		Decision on Work Performance Approval
LV cable in Vršac	ROP-VRS-22687-ISA-WHA-1/2020 September 1 st , 2020		Decision on Work Performance Approval
RP and MV cable at Jabučki put in Pančevo	ROP-PAN-29101-ISA-1/2020 October 15 th , 2020		Decision on Work Performance Approval
MV cable and STS "Skrobara 5"	ROP-PAN-29106-ISA-1/2020 October 15 th , 2020		Decision on Work Performance Approval
MV cable at Stari Tamiš	ROP-PAN-31349-ISA-1/2020 October 28 th , 2020		Decision on Work Performance Approval
PRP "Brose"	ROP-PAN-31788-ISA-1/2020 Dated November 2 nd , 2020		Decision on Work Performance Approval

2.2. Monitoring and impact to environment

Factors by which EC Novi Sad affects environment, and which are not completely included in monitoring so far, are the following:

- Electromagnetic fields
- Noise in Environment
- Waste
- Quality of Surface and Ground Water
- Quality of Soil

2.2.1. Electromagnetic Fields

Measurements of electromagnetic and magnetic field were not performed during year 2020.

2.2.2. Noise in Environment

Measurement of noise in environment was not performed in year 2020.

2.2.3. Waste

Table 157 shows characterization, categorization and partial disposal of waste in year 2020.

Table 157

DISTRUBUTION AREA NOVI SAD												
Generated types of waste in 2020												
S.N.	Rulebook on categories, testing and classification of waste ("Official Gazette of RS" No. 56/2010 and 93/2019)	INDEX No.	UNIT OF MEASUREMENT	ED							Total	NOTE
				SUBOTINA	SOMBOR	ZRENJANIN	NOVI SAD	SREMSKA MITROVICA	RUMA	PANČEVO	TOTAL: DISTRIBUTION AREA NOVI SAD	
				AMOUNTS								
1	Waste toner for printing other than tha listed in 08 03 17	08 03 18	t	0,150	0,030	0,000	0,350	0,000	0,000	0,000	0,530	-
2	Other oils for insulation and heat transfer	13 03 10*	t	0,300	0,700	1,500	3,000	1,000	2,300	7,920	16,720	Transformer oil
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste kits for detection of PCB – uncontaminated
3	Other emulsions	13 08 02*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Water containing oil from oil sumps
4	Packaging containing remains of hazardous substances or contaminated with hazardous substances	15 01 10*	t	0,020	0,000	0,000	0,000	0,000	0,000	0,000	0,020	Waste plastic bottles used for testing of transformer oil in electrical overhaul workshop
5	Absorbents, filter materials(including the oil filters which are not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances	15 02 02*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste absorption resources with oil and heavy fuel oil, gravel containing oil
6	Waste tires	16 01 03	t	2,815	2,500	0,000	5,720	0,180	1,080	0,600	12,895	Waste tires
7	Waste vehicles that do not contain liquids and other hazardous substances	16 01 06	t	4,900	2,300	2,180	28,720	0,000	0,000	0,000	38,100	-
8	Oil filters	16 01 07*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
9	Ferrous metals	16 01 17	t	3,885	1,800	10,020	47,000	6,060	0	47,750	116,515	Waste iron
10	Transformers and condensers containing PCB	16 02 09*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste PCB transformers
11	Disposed equipment containing hazardous components other than specified in 16 02 09 to 16 02 12	16 02 13*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Condenser batteries
12		16 02 14	t	6,020	2,100	3,260	0,000	1,120	0,000	1,880	14,380	Waste meters



				0,51	0,000	0,000	54,080	0,000	0,000	72,030	126,620	Waste transformers not containing oil
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Electrical devices
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Measuring cabinets
				0,095	0,000	0,000	0,000	0,000	0,000	0,000	0,095	Measuring devices (ampermeters, voltmeters)
				0,730	0,000	0,000	0,000	0,000	0,000	0,000	0,730	Disconnecter of 20 kV
				1,240	0,000	0,000	0,000	0,000	0,000	0,000	1,240	LV and HV units
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste HV and LV
13	Lead batteries	16 06 01*	t	0,000	0,300	0,000	0,000	0,000	0,000	0,000	0,300	Batteries
14	Waste containing oil	16 07 08*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste kits for testing transformer oil on PCB
15	Water containing oil	16 10 01*		0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Water containing oil from oil sump
16	Concrete	17 01 01	t	77,610	78,600	13,640	111,700	13,020	45,840	31.920,000	32.260,410	Concrete poles
17	Wood	17 02 01	t	2,000	7,800	0,420	7,380	2,280	6,920	0,000	26,800	Wooden poles – poles
				0,000	0,000	0,000	11,340	0,000	0,000	23.640,000	23.651,340	Waste mixed wood
18	Plastic	17 02 03	t	0,130	0,000	0,000	0,720	0,280	0,000	0,000	1,130	-
19	Glass, plastic and wood containing hazardous substances or contaminated by dangerous substances	17 02 04*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Wooden poles with impregnation
20	Copper, bronze, brass	17 04 01	t	0,000	0,000	0,000	0,000	0,000	0,890	0,000	0,890	Waste and residues of copper and brass
				0,321	5,200	1,560	0,000	0,000	0,000	0,010	7,081	Waste copper
				1,243	0,000	3,200	0,000	1,64	0,000	0,085	6,168	Waste copper cables
21	Aluminum	17 04 02	t	0,000	0,000	0,760	0,000	0,000	7,980	0,000	8,740	Waste aluminum
				0,520	1,100	1,62	1,920	0,200	0,000	0,560	5,920	Waste aluminum cables
22	Iron and steel	17 04 05	t	0,000	0,000	0,000	0,000	0,000	26,780	0,000	26,780	Waste pieces of TS equipment
23	Mixed metals	17 04 07	t	2,340	3,100	0,000	0,420	0,640	0,000	5,760	12,260	Al - Fe
24	Cables containing oil, tar and other hazardous substances	17 04 10*	t	0,105	0,000	0,000	0,000	0,000	0,000	0,000	0,105	Oil cable
25	Gravel containing oil	17 05 03*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
26	Insulation materials other than specified in 17 06 01 and 17 06 03	17 06 04	t	3,991	11,300	0	8,100	0,100	0,000	3,020	3.043,491	Waste ceramic insulators
27	Construction materials containing asbestos	17 06 05*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste asbestos panels
28	Paper and cardboard	20 01 01	t	0,300	0,000	0,000	1,500	0,000	0,000	0,700	2,500	-
29	Glass	20 01 02	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
30	Fluorescent pipes and other waste containing mercury	20 01 21*	t	0,250	0,020	0,000	0,000	0,000	0,000	0,000	0,270	Fluorescent pipes, light balls containing mercury



31	Disposed electronic and electrical equipment other than that listed in 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	1,763	0,400	0,000	0,000	0,000	0,000	0,000	2,163	Waste computers, keyboards, monitors, electronic meters
32	Bulk waste	20 03 07	t	2,300	0,000	0,460	0,000	0,000	0,000	0,000	2,760	Waste office furniture
33	Waste soil and concrete contaminated by PCB oil	17 05 03*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	-
34	Switches	16 01 17	t	0,600	0,000	0,000	0,000	0,000	0,000	0,000	0,600	-
35	Lead seals	16 02 15*	t	0,045	0,000	0,000	0,000	0,000	0,000	0,000	0,045	-

2.2.4. Surface, Ground Waters and Soil Monitoring

Surface and groundwater monitoring in 2020. is not defined-covered by tests. Soil monitoring is shown in Tables from 158 to 180.

Table 158

DISTRIBUTION AREA NOVI SAD						
ED SUBOTICA						
The Results of Physical - Chemical Land Tests in 2020						
Location	Transformer station Martonoš 6					
Sampling date	12.08.2020					
Parameter	Test method	Unit of measurement	Test result	Measurement uncertainty	Limit value	Remedial value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	3.78	0.25		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.38
Sample 2						
Organic matter content	VM 106	%	3.58	0.23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.36
Sample 3						
Organic matter content	VM 106	%	3.65	0.24		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.37
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	4.59	0.30		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.46
Sample 2						
Organic matter content	VM 106	%	3.21	0.21		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.32
Sample 3						
Organic matter content	VM 106	%	3.45	0.22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.35

Table 159

DISTRIBUTION AREA NOVI SAD						
ED SUBOTICA						
The Results of Physical - Chemical Land Tests in 2020.godini						
Location	Transformer station Subotica					
Sampling date	12.08.2020					
Parameter	Test method	Unit of Measurement	Test result	Measurement uncertainty	Limit value	Remedial value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	1.51	0.10		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.15

Sample 2						
Organic matter content	VM 106	%	1.50	0.10		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	
Sample 3						
Organic matter content	VM 106	%	1.52	0.10		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.15
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	1.25	0.08		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.13
Sample 2						
Organic matter content	VM 106	%	1.38	0.09		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.14
Sample 3						
Organic matter content	VM 106	%	1.29	0.08		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.13
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	1.35	0.09		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.14
Sample 2						
Organic matter content	VM 106	%	1.25	0.008		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.13
Sample 3						
Organic matter content	VM 106	%	1.38	0.09		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.003	0.14

Table 160

DISTRIBUTION AREA NOVI SAD						
ED SUBOTICA						
The Results of Physical - Chemical Land Tests in 2020						
Location	Transformer station Orom					
Sampling date	12.08.2020					
Parameter	Test method	Unit of Measurement	Test result	Measurement uncertainty	Limit value	Remedial value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	5.16	0.34		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.52
Sample 2						
Organic matter content	VM 106	%	3.47	0.23		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.35
Sample 3						
Organic matter content	VM 106	%	2.8	0.18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.28
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	4.59	0.3		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.46
Sample 2						
Organic matter content	VM 106	%	4.54	0.3		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.45
Sample 3						
Organic matter content	VM 106	%	2.3	0.15		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.30
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	5.85	0.38		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.59
Sample 2						
Organic matter content	VM 106	%	3.31	0.22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.33
Sample 3						
Organic matter content	VM 106	%	3.62	0.24		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.24
Borehole 4						
Sample 1						
Organic matter content	VM 106	%	4.29	0.28		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.43
Sample 2						
Organic matter content	VM 106	%	2.81	0.18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.28
Sample 3						
Organic matter content	VM 106	%	3.25	0.21		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.33

Table 161

DISTRIBUTION AREA NOVI SAD						
ED SUBOTICA						
The Results of Physical - Chemical Land Tests in 2020						
Location	Transformer station Hrvatski Majur 1					
Sampling date	12.08.2020					
Parameter	Test method	Unit of Measurement	Test result	Measurement uncertainty	Limit value	Remedial value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	5.58	0.36		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	0.017	0.005	0.01	0.56
Sample 2						
Organic matter content	VM 106	%	3.48	0.23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	0.050	0.015	0.01	0.35
Sample 3						
Organic matter content	VM 106	%	3.90	0.25		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.39
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	4.89	0.32		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	0.004	0.001	0.01	0.49
Sample 2						
Organic matter content	VM 106	%	4.91	0.32		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	0.002	0.001	0.01	0.49
Sample 3						
Organic matter content	VM 106	%	4.56	0.30		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	0.010	0.003	0.01	0.46
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	4.65	0.30		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	0.008	0.002	0.01	0.47
Sample 2						
Organic matter content	VM 106	%	2.50	0.16		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.25
Sample 3						
Organic matter content	VM 106	%	1.92	0.25		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.25
Borehole 4						
Sample 1						
Organic matter content	VM 106	%	3.35	0.22		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.34
Sample 2						
Organic matter content	VM 106	%	4.45	0.29		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.45
Sample 3						
Organic matter content	VM 106	%	3.83	0.25		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.38

Table 162

DISTRIBUTION AREA NOVI SAD						
ED SUBOTICA						
The Results of Physical - Chemical Land Tests in 2020						
Location	Transformer station Hrvatski Majur 2					
Sampling date	12.08.2020					
Parameter	Test method	Unit of Measurement	Test result	Measurement uncertainty	Limit value	Remedial value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	52.81	0.18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.28
Sample 2						
Organic matter content	VM 106	%	3.19	0.23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.32
Sample 3						
Organic matter content	VM 106	%	4.26	0.28		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.43
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	3.55	0.23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.36
Sample 2						
Organic matter content	VM 106	%	3.05	0.20		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.31
Sample 3						
Organic matter content	VM 106	%	3.55	0.23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.36

The obtained values of PCB concentrations are lower than the corrected limit values, as borehole as the limit of detection method at all tested locations of the Branch ED Subotica. Except for samples from the transformer station Hrvatski Majur 1 where:

- In the examined composite soil samples from the borehole HM1-1, PCB concentrations are higher than the corrected limit values, and lower than the remediation value in the samples at depths of 0.0-0.8 m and 0.8-1.5 m, while in the sample from a depth of 1.5-2.0m the concentration is lower than the corrected limits as well as the limit of detection method.
- In the tested composite soil samples from the borehole HM1-2, PCB concentrations are lower than the corrected limits values.
- In the tested composite soil samples from the borehole HM1-3, PCB concentrations are lower than the corrected limit values for the sample from a depth of 0.0-0.8 m, while in the samples from a depth of 0.8-1.5 m and 1.5- 2.0m concentration is lower than the corrected limits as well as the limit of detection method.
- In the examined composite soil samples from the borehole HM1-4, the PCB concentration is lower than the corrected limits as borehole as well as the limit of detection method.

Table 163

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location		Transformer station Kanjiža			
Sampling date		06.08.2020			
Parameter	Test method	Unit of Measure ment	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.37		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.28		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	2.12		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.89		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.85		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.88		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.81		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	9.65		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.59		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.71		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1.05		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8.03		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 3					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.25		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	9.24		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.04		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8.37		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.98		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8.49		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 164

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location	Transformer station Kanjiža (preko puta kanala i stanice za preliv)				
Sampling date	12.08.2020				
Parameter	Test method	Unit of Measurement	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.47		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.17		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.75		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.63		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.840		

Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.11		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 165

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location	Transformer station Totovo selo (u Ružinoj ulici)				
Sampling date	12.08.2020				
Parameter	Test method	Unit of Measure ment	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.96		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.48		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.22		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.05		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.73		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.63		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	3.08		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.55		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	2.74		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.08		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1.84		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	4.72		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 166

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020.godini					
Location		Transformer station Totovo vilage			
Sampling date		12.08.2020			
Parameter	Test method	Unit of Measure ment	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.59		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.17		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.26		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.85		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.09		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.20		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.95		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.86		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.60		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.59		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.17		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.08		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 3					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.44		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.11		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.18		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	4.28		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.79		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	3		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 167

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location		Transformer station Srpski Krstur			
Sampling date		11.08.2020			
Parameter	Test method	Unit of Measurement	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.81		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.09		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.21		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.46		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1.46		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.20		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.09		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.28		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.12		

Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.72		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.20		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.53		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 168

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location		Transformer station Banatsko Arandelovo			
Sampling date		11.08.2020			
Parameter	Test method	Unit of Measurement	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.05		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.12		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.17		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	9.12		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.25		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.76		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.29		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.32		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	3.68		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.53		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					

Moisture content	SRPS ISO 11465:2002	%	3.94		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.88		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 169

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location		Transformer station Podlokanj			
Sampling date		11.08.2020			
Parameter	Test method	Unit of Measurement	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.90		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5.77		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.28		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.21		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1.47		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.83		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.58		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.41		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.86		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.94		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1.29		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.28		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Borehole 3					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.74		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	10.45		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.42		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	10.58		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.70		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	4.53		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 4					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.04		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	9.50		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.71		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.10		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.80		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	4.53		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 170

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location	Transformer station Sanad				
Sampling date	13.08.2020				
Parameter	Test method	Unit of Measurement	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	2.34		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	9.87		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1,82		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8,51		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1,71		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8,14		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	13,15		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8,94		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1,83		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8,00		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	1,82		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7,39		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0

Table 171

DISTRIBUTION AREA NOVI SAD					
ED SUBOTICA					
The Results of Physical - Chemical Land Tests in 2020					
Location		Transformer station Male Pijace			
Sampling date		13.08.2020			
Parameter	Test method	Unit of Measurement	Test result	Maximum limit value	Remedial value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0,43		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	4,20		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0,88		

Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8.00		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.62		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.60		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.42		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.43		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 3					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0,88		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	10,64		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0,68		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5,15		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0,55		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	4,82		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Borehole 4					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1,03		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	11,59		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0,99		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6,90		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0,85		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	5,01		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0,01	0,02	1,0
---	--------	-------	--------	------	-----

At all tested locations of the ED Subotica Branch, the obtained values of the tested parameters correspond to the maximum limit and remediation values from the Decree on limit values of pollutants, harmful and dangerous substances in the soil ("Official Gazette of RS" No. 30 / 2018-50, 64 / 2019-3).

Table 172

DISTRIBUTION AREA NOVI SAD						
ED PANČEVO						
Results of physical-chemical soil testing in 2020						
Location	Transformer Station Starčevo 12					
Sampling date	29.07.2020					
Parameter	Testing Method	Measurement Unit	Test Result	Measurement Uncertainty	Limit Value	Remediation Value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	3,19	0,21		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,32
Sample 2						
Organic matter content	VM 106	%	2,15	0,14		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,21
Sample 3						
Organic matter content	VM 106	%	2,45	0,16		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,24
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	2,62	0,17		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,26
Sample 2						
Organic matter content	VM 106	%	2,73	0,18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,27
Sample 3						
Organic matter content	VM 106	%	1,15	0,07		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,11
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	2,66	0,17		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,27

PCB-118, PCB-138, PCB-153, PCB-180)						
Sample 2						
Organic matter content	VM 106	%	2,49	0,16		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,25
Sample 3						
Organic matter content	VM 106	%	2,06	0,13		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,21

Table 173

DISTRIBUTION AREA NOVI SAD						
ED PANČEVO						
Results of physical-chemical soil testing in 2020						
Location	Transformer Station Opopo 1					
Sampling Date	29.07.2020					
Parameter	Testing Method	Measurement Unit	Test Result	Measurement Uncertainty	Limit Value	Remediation Value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	3,35	0,22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,33
Sample 2						
Organic matter content	VM 106	%	3,37	0,22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,34
Sample 3						
Organic matter content	VM 106	%	2,76	0,18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,28
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	3,39	0,22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,34
Sample 2						
Organic matter content	VM 106	%	2,82	0,18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,28
Sample 3						
Organic matter content	VM 106	%	2,00	0,13		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101,	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,20

PCB-118, PCB-138, PCB-153, PCB-180)						
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	2,48	0,16		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,25
Sample 2						
Organic matter content	VM 106	%	3,46	0,22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,35
Sample 3						
Organic matter content	VM 106	%	2,21	0,14		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,22

Table 174

DISTRIBUTION AREA NOVI SAD						
ED PANČEVO						
Results of physical-chemical soil testing in 2020						
Location	Transformer Station Kovačica 15					
Sampling Date	29.07.2020					
Parameter	Testing Method	Measurement Unit	Test Result	Measurement Uncertainty	Limit Value	Remediation Value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	3,68	0,24		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,37
Sample 2						
Organic matter content	VM 106	%	2,63	0,17		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,26
Sample 3						
Organic matter content	VM 106	%	2,24	0,15		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,22
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	4,81	0,31		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,48
Sample 2						
Organic matter content	VM 106	%	2,34	0,15		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101,	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,23

PCB-118, PCB-138, PCB-153, PCB-180)						
Sample 3						
Organic matter content	VM 106	%	2,05	0,13		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,20
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	3,33	0,22		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,33
Sample 2						
Organic matter content	VM 106	%	2,98	0,19		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,30
Sample 3						
Organic matter content	VM 106	%	2,44	0,16		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,24

Table 175

DISTRIBUTION AREA NOVI SAD						
ED PANČEVO						
Results of physical-chemical soil testing in 2020						
Location	Transformer Station Hajdučica 3					
Sampling Date	07.08.2020					
Parameter	Testing Method	Measurement Unit	Test Result	Measurement Uncertainty	Limit Value	Remediation Value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	6,74	0,44		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,67
Sample 2						
Organic matter content	VM 106	%	6,34	0,41		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,63
Sample 3						
Organic matter content	VM 106	%	3,51	0,23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,35
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	5,70	0,37		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101,	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,57

PCB-118, PCB-138, PCB-153, PCB-180)						
Sample 2						
Organic matter content	VM 106	%	4,89	0,32		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,49
Sample 3						
Organic matter content	VM 106	%	3,81	0,25		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,38
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	5,70	0,37		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,57
Sample 2						
Organic matter content	VM 106	%	4,89	0,32		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,49
Sample 3						
Organic matter content	VM 106	%	3,13	0,20		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0,002	0,0005	0,01	0,31

Table 176

DISTRIBUTION AREA NOVI SAD						
ED PANČEVO						
Results of physical-chemical soil testing in 2020						
Location	Transformer Station Velika Greda					
Sampling Date	07.08.2020					
Parameter	Testing Method	Measurement Unit	Test Result	Measurement Uncertainty	Limit Value	Remediation Value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	5.84	0.38		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.38
Sample 2						
Organic matter content	VM 106	%	7.10	0.46		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.71
Sample 3						
Organic matter content	VM 106	%	2.61	0.17		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101,	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.26

PCB-118, PCB-138, PCB-153, PCB-180)						
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	6.89	0.45		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.69
Sample 2						
Organic matter content	VM 106	%	5.45	0.35		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.55
Sample 3						
Organic matter content	VM 106	%	4.01	0.26		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.40

Table 177

DISTRIBUTION AREA NOVI SAD						
ED PANČEVO						
Results of physical-chemical soil testing in 2020						
Location	Transformer Station Hajdučica 2					
Sampling Date	07.08.2020					
Parameter	Testing Method	Measurement Unit	Test Result	Measurement Uncertainty	Limit Value	Remediation Value
Borehole 1						
Sample 1						
Organic matter content	VM 106	%	5.44	0.35		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.54
Sample 2						
Organic matter content	VM 106	%	7.10	0.46		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.71
Sample 3						
Organic matter content	VM 106	%	4.58	0.30		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.46
Borehole 2						
Sample 1						
Organic matter content	VM 106	%	5.71	0.37		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.57
Sample 2						
Organic matter content	VM 106	%	5.69	0.37		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.57

PCB-118, PCB-138, PCB-153, PCB-180)						
Sample 3						
Organic matter content	VM 106	%	3.54	0.23		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.35
Borehole 3						
Sample 1						
Organic matter content	VM 106	%	4.77	0.31		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.48
Sample 2						
Organic matter content	VM 106	%	5.33	0.35		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.53
Sample 3						
Organic matter content	VM 106	%	4.56	0.30		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.46
Borehole 4						
Sample 1						
Organic matter content	VM 106	%	3.74	0.24		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.37
Sample 2						
Organic matter content	VM 106	%	3.75	0.24		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.38
Sample 3						
Organic matter content	VM 106	%	2.84	0.18		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	VM 099-1	mg/kg	< 0.002	0.0005	0.01	0.28

At all tested locations of the Branch ED Pančevo, all the obtained values of PCB concentration are lower than the corrected limit values, as well as the limits of detection method.

Table 178

DISTRIBUTION AREA NOVI SAD					
ED PANČEVO					
Results of physical-chemical soil testing in 2020					
Location		Transformer Station Kovin, in Žarko Zrenjanin St.			
Sampling Date		04.08.2020			
Parameter	Testing Method	Measurement Unit	Test Result	Maximum Limit Value	Remediation Value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.63		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.98		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.91		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.07		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	9.23		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.9		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.38		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.95		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 179

DISTRIBUTION AREA NOVI SAD					
ED PANČEVO					
Results of physical-chemical soil testing in 2020					
Location		Transformer Station Kovin, in Mihailo Pupin St.			
Sampling Date		04.08.2020. год.			
Parameter	Testing Method	Measurement Unit	Test Result	Maximum Limit Value	Remediation Value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.75		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	8.6		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.04		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.37		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.56		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.39		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	0.85		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.61		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	0.98		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.44		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	0.90		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.20		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

Table 180

DISTRIBUTION AREA NOVI SAD					
ED PANČEVO					
Location		Transformer Station Pančevo			
Results of physical-chemical soil testing in 2020					
Sampling Date		04.08.2020			
Parameter	Testing Method	Measurement Unit	Test Result	Maximum Limit Value	Remediation Value
Borehole 1					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	1.21		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	11.9		
Polychlorinated biphenyls (PCB-28,PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 2					
Moisture content	SRPS ISO 11465:2002	%	1.21		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	7.03		

Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Sample 3					
Moisture content	SRPS ISO 11465:2002	%	9.54		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	6.2		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0
Borehole 2					
Sample 1					
Moisture content	SRPS ISO 11465:2002	%	8.78		
Organic matter content	SRPS EN 13137:2005, Method B, withdrawn	%	11.3		
Polychlorinated biphenyls (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153, PCB-180)	DM 121	mg/kg	< 0.01	0.02	1.0

At all tested locations of the Branch ED Pančevo the obtained values of the examined parameters correspond to the maximum limit and remediation values from the Decree on the limit values of pollutants, harmful and dangerous substances in the soil ("Official Gazette of RS" No. 30 / 2018-50, 64 / 2019-3).

2.3. Working Environment Monitoring, Occupational Health and Safety

The 2020 Occupational Safety and Health Reports include the following elements:

- **Working Environment Monitoring**
 - Working environment noise measurement
 - Working environment electromagnetic fields
 - Working environment parameters
- **Occupational Safety**
 - Training of the employees
 - Work injuries
- **Health**

2.3.1. Working Environment Monitoring

- **Working Environment Noise Measurements**

Results of the working environment noise level measurements in 2020 are given in Table 181.

Table 181

DISTRIBUTION AREA NOVI SAD			
Working environment noise in 2020			
Branch	Facility	Registered noise level in working areas (dB)	Permitted noise level in (dB (A))
ED PANČEVO		Measurements were not performed in 2020	
ED RUMA		Measurements were not performed in 2020	
ED SREMSKA MITROVICA		Measurements were not performed in 2020	
ED SOMBOR		Measurements were not performed in 2020	

ED SUBOTICA	Measurements were not performed in 2020		
ED ZRENJANIN	Measurements were not performed in 2020		
ED NOVI SAD	Underground transmission line preparation workshop	74 ± 2.20	85
	Underground transmission line workshop	69 ± 2.10	85
	Workshop 110 kV	75 ± 2.30	85
	Public lighting workshop	76 ± 2.30	85
	Electrical repair workshop	69 ± 2.10	85
	Computer-printing center	80 ± 2.40	85

Working Environment Electromagnetic Fields

Measurements of electric and magnetic field levels were not performed in 2020.

Working Environment Parameters

Working Environment Parameters are given in the Table 182.

Table 182

DISTRIBUTION AREA NOVI SAD																				
Working Environment Parameters in 2020																				
Branch / Facility	Number of tested working environments		No. of working environments in which all parameters are not within the permissible limits		No. of working environments in which all parameters are within the allowed limits		Total number of recorded parameters		No. of parameters which exceed the permissible limits		Distribution of unsatisfactory parameters									
	Number	Number	%	Number	%	Number	Number	%	Number	%	Dust		Harmful gases		Noise		Vibrations		Micro climate	
											Number	%	Number	%	Number	%	Number	%	Number	%
ED SUBOTICA	There was no measuring in 2020																			
ED SOMBOR	Measurements were not performed in 2020																			
ED ZRENJANIN	Measurements were not performed in 2020																			
ED NOVI SAD	Measurements were not performed in 2020																			
ED RUMA	Measurements were not performed in 2020																			
ED S.MITROVICA	Measurements were not performed in 2020																			
ED PANCEVO	Measurements were not performed in 2020																			
HQ Winter period		0	0.00				0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
HQ Summer period		0	0.00				0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
TOTAL: DISTRIBUTION AREA NOVI SAD		0	0.00				0	0.00	0	0.00					0	0.00				

Chemical hazard parameters are given in the Table 183.

Table 183

DISTRIBUTION AREA NOVI SAD				
Chemical hazards in working environment for 2020				
Branch	Working place	Detected chemical compounds	Registered level of chemical hazards in workplaces. (mg/m ³)	Permitted level of chemical damage ± measurement uncertainty (mg/m ³)
ED NOVI SAD	Underground lines preparation workshop	benzene	0.01	3.25
		toluene	0.02	192
		n-hexane	0.16	72
	Underground lines workshop	vinyl chloride	0.10	7.77
	Workshop 110 kV	ethyl acetate	0.02	1400
		iso-propanol	0.16	980
		acetone	0.03	1210
	Workshop of public lighting	ethyl acetate	0.07	1400
		iso-propanol	0.06	980
		acetone	0.01	1210
		xylene	0.08	221
	Electrical repair workshop	benzene	0.15	3.25
		n-hexane	1.30	72
	Computer and Printing center	styrene	0.18	215
	Overhead lines workshop	toluene	0.01	192
		n-hexane	0.03	72
	SS Maintenance workshop 20/10/0,4 kV	iso-propanol	0.01	980
		acetone	0.02	1210
	Distribution warehouse	carbon monoxide	2.47	55
	IT 1	carbon monoxide	0.12	55
	Carbonation of chemical analysis of insulation oil	n-hexane	1.63	72
	Meters repair workshop	ethyl acetate	0.01	1400
		iso-propanol	0.12	980
		acetone	0.02	1210

2.3.2. Occupational Safety

Training

Training data are given in the Table 184.

Table 184

DISTRIBUTION AREA NOVI SAD					
Training in 2020					
Branch /Facility	Number of employees	Planned for training		Trained	
		Number	%	Number	%
ED Novi Sad	163	84	51.53	84	100.00
ED Subotica	97	97	100.00	97	100.00
ED Sombor	53	26	49.06	26	100.00
ED Zrenjanin	75	14	18.67	0	0.00
ED Ruma	50	26	52.00	0	0.00
ED Sremska Mitrovica	24	24	100.00	24	100.00
ED Pančevo	62	2	3.23	2	100.00
HQ	228	32	14.04	32	100.00
TOTAL: DISTRIBUTION AREA NOVI SAD	752	305	40.56	265	86.89

▪ Work Injuries

Data on work injuries in 2020 are given in the Table 185.

Table 185

DISTRIBUTION AREA NOVI SAD						
Work injuries in the year 2020						
Branch /Facility	Number of employees	Injuries - number of employees ratio				
		Light	Severe	Deadly	Total	%
ED Novi Sad	163	1	0	0	1	0.61
ED Subotica	97	1	0	0	1	1.03
ED Sombor	53	0	0	0	0	0.00
ED Zrenjanin	75	4	0	0	4	5.33
ED Ruma	50	1	1	0	2	4.00
ED Sr. Mitrovica	24	0	0	0	0	0.00
ED Pančevo	62	2	0	0	2	3.23
HQ	228	5	0	0	5	2.19
TOTAL:	752	14	1	0	15	1.99
DISTRIBUTION AREA NOVI SAD						

2.3.3. Health

Periodical medical examinations of employees shown in the Table 186 are carried out regularly for all new workers and the employees working under high risk conditions.

Table 186

DISTRIBUTION AREA NOVI SAD											
Work capability of employees in 2020											
Branch /Facility	Number of employees	Periodical examination				For work					
		Referred to examination		Examined/ Referred		Capable		Partially Capable		Incapable	
		Number	%	Number	%	Number	%	Number	%	Number	%
ED Novi Sad	163	84	51.53	84	100.00	81	96.43	3	3.57	0	0.00
ED Subotica	97	57	58.76	57	100.00	50	87.72	5	8.77	2	3.51
ED Sombor	53	26	49.06	26	100.00	26	100.00	0	0.00	0	0.00
ED Zrenjanin	75	34	45.33	34	100.00	33	97.06	0	0.00	1	2.94
ED Ruma	50	26	52.00	26	100.00	24	92.31	2	7.69	0	0.00
ED Sr. Mitrovica	24	14	58.33	14	100.00	12	85.71	1	7.14	1	7.14
ED Pančevo	62	37	59.68	37	100.00	34	91.89	3	8.11	0	0.00
HQ	228	32	14.04	32	100.00	31	96.88	1	3.13	0	0.00
TOTAL:	752	310	41.22	310	100.00	291	93.87	15	4.84	4	1.29
DISTRIBUTION AREA NOVI SAD											

2.4. Public Complaints

In 2020 there were no public complaints regarding the environment.

3. DISTRIBUTION AREA KRALJEVO

Table 187 indicates the structure of all facilities and systems within DP (DA) Kraljevo.

Table 187

DISTRIBUTION AREA KRALJEVO												
Facilities and system in 2020												
Branch	Electricity distribution substations								Distribution network length in km			
	110/10 kV	110/20 kV	110/35 kV	110/x/z kV	35/10 kV	20/0,4 kV	10/0,4 kV	Total:	Voltage level	Overhead	Cable	Total length
ED ARANDJELOVAC									110 kV	0,000	0,000	0,000
									35 kV	50,740	0,000	50,740
									20 kV	21,850	31,040	52,890
									10 kV	440,390	0,740	441,130
									1,0 kV	1.559,120	55,500	1.614,620
									0,4 kV	0,000	0,000	0,000
Total	0	0	0	2	5	75	424	506	Total	2.072,100	87,280	2.159,380
ED VALJEVO									110 kV	0,000	0,000	0,000
									35 kV	145,600	54,600	200,200
									20 kV	0,000	0,000	0,000
									10 kV	205,600	930,200	1.135,700
									1,0 kV	3.986,200	218,000	4.204,200
									0,4 kV	0,000	0,000	0,000
Total	0	0	3	0	19	0	1.062	1.084	Total	4.337,400	1.202,800	5.540,100
ED JAGODINA									110 kV	0,000	0,000	0,000
									35 kV	227,430	15,070	242,500
									20 kV	526,200	141,900	668,100
									10 kV	736,800	147,670	884,470
									1,0 kV	0,000	0,000	0,000
									0,4 kV	3.498,530	384,190	3.882,720
Total	2	0	3	2	19	0	1.563	1.589	Total	4.988,970	688,830	5.677,790
ED KRALJEVO									110 kV	27,480	0,000	27,480
									35 kV	186,600	27,720	217,320
									20 kV	89,000	24,500	113,500
									10 kV	940,970	276,690	1.217,650
									1,0 kV	0,000	0,000	0,000
									0,4 kV	4.786,000	211,100	4.997,100
Total	3	0	3	2	26	177	1.157	1.368	Total	6.030,050	540,010	6.573,05
ED KRUSEVAC									110 kV	0,000	0,000	0,000
									35 kV	1.335,800	18,200	1.354,000
									20 kV	0,500	0,000	0,500
									10 kV	1.477,100	400,650	1.877,850
									1,0 kV	0,000	0,000	0,000
									0,4 kV	5.342,900	472,700	5.815,600
Total	0	0	1	4	22	1	1.297	1.325	Total	8.156,300	891,550	9.047,950
ED LAZAREVAC									110 kV	0,000	0,000	0,000
									35 kV	127,000	6,500	133,050
									20 kV	0,820	16,050	16,870
									10 kV	712,000	97,850	808,850
									1,0 kV	3.100,000	92,000	3,192,000
									0,4 kV	0,000	0,000	0,000

Total	0	0	1	1	12	6	740	760	Total	3.939,820	211,950	4.150,770
ED LOZNICA									110 kV	21,180	0,000	0,000
									35 kV	186,000	25,190	211,190
									20 kV	0,000	0,000	0,000
									10 kV	734,400	132,800	867,210
									1,0 kV	0,000	0,000	0,000
									0,4 kV	3.083,640	74,410	3.158,050
Total	0	0	2	3	18	0	920	943	Total	4.025,220	23,400	4.236,450
ED NOVI PAZAR									110 kV	0,000	0,000	0,000
									35 kV	79,800	1,000	80,800
									20 kV	1,500	1,700	3,200
									10 kV	615,200	73,500	688,700
									1,0 kV	0,000	0,000	0,000
									0,4 kV	2.136,200	15,100	2.151,300
Total	0	0	1	1	9	8	635	654	Total	2.832,700	91,300	2.924,000
ED UŽICE									110 kV	0,000	0,000	0,000
									35 kV	370,000	19,000	389,000
									20 kV	0,000	0,000	0,000
									10 kV	2.211,600	494,300	2.705,900
									1,0 kV	7.266,000	654,500	7.920,500
									0,4 kV	24,200	0,000	24,200
Total	0	0	7	0	48	0	2.114	2.169	Total	9.871,800	1.167,800	11.039,600
ED ČAČAK									110 kV	1,170	0,000	1,170
									35 kV	290,810	40,060	330,860
									20 kV	0,000	0,000	0,000
									10 kV	1.698,580	276,000	1.974,580
									1,0 kV	6.257,090	218,540	6.475,630
									0,4 kV	0,000	0,000	0,000
Total	0	0	3	3	37	0	1.904	1.947	Total	8.247,650	534,600	8.782,240
ED ŠABAC									110 kV	0,000	0,000	0,000
									35 kV	94,000	27,000	121,000
									20 kV	637,620	96,540	734,160
									10 kV	274,000	67,020	341,020
									1,0 kV	0,000	0,000	0,000
									0,4 kV	2.310,710	173,740	2.484,450
Total	0	2	0	4	8	752	299	1.065	Total	3.316,330	364,300	3.680,630
TOTAL: DISTRIBUTION AREA KRALJEVO									110 kV	49,830	0,000	28,650
									35 kV	3.093,780	233,890	3.330,670
									20 kV	1.277,490	311,720	1.589,210
									10 kV	10.046,640	2.897,420	12.943,060
									1,0 kV	22.168,410	1.238,540	23.406,950
									0,4 kV	21.182,180	1.331,240	22.513,420
TOTAL	5	2	24	22	223	1.019	12.115	13.410	TOTAL	57.818,310	6.012,810	63.811,940

3.1. Overview and Permits Status

Overview and status of permits, licenses and other required approvals, as well as new applications for permits in 2020. are presented in Table 188.

Table 188

DISTRIBUTION AREA KRALJEVO			
Overview and status of permits in 2020			
Branch	Obtained approvals and permits (number and date)	Applications for obtaining of new or extension of the existing permits	Note
ED ARANDJELOVAC			
Decision of approval of works execution LVN from SS Jorguša - JUNKOVAC	ROP-TOP-2229-ISAW-1/2020 351-27/2020-02, 18.02.2020		
Decision of approval of works execution LVN from SS Kula no. 1 – JUNKOVAC	ROP-TOP-2231-ISAW-1/2020 351-28/2020-02, 18.02.2020		
Decision of approval of works execution LVN from SS School - PLASKOVAC	ROP-TOP-9943-ISAW-1/2020 351-98/2020-02, 08.05.2020		
Decision of approval of works execution LVN from SS Gornji kraj 1 BELOSAVCI	ROP-TOP-2232-ISAW-1/2020 351-29/2020-02, 18.02.2020		
Decision of approval of works execution LVN from SS Gornji kraj 2 BELOSAVCI	ROP-TOP-9949-ISAW-1/2020 351-99/2020-02, 08.05.2020		
Decision of approval of works execution LVN from SS Prokići – G. TRNAVA	ROP-TOP-39926-ISAW-1/2019 351-300/2019-02, 09.01.2020		
Decision of approval of works execution LVN from SS Varošica - G. TRNAVA	ROP-TOP-39928-ISAW-1/2019 351-301/2019-02, 09.01.2020		
Decision of approval of works execution LVN from Vojkovci 2	ROP-TOP-14937-ISAW-1/2020 351-160/2020-02, 27.07.2020		
Decision of approval of works execution Cable lines 20kV from TS Žučin park to SS Danice Pajević	ROP-ARA-32780-ISAW-2/2020, 17.12.2020		
Decision of approval of works execution Cable lines 20kV from SS Španskih boraca to SS Franca Prešerna	ROP-ARA-27594-ISAW-2/2020, 10.12.2020		
Decision of approval of works execution LVN Uroševići and Spasići	ROP-ARA-11876-ISAW-1/2020, 27.05.2020		
Decision of approval of works execution connecting line DV 20kV for Sb SS Misača Rudnik	ROP-ARA-26533-ISAW-2/2020, 01.12.2020		
ED VALJEVO			
STS 10/0,42kV „Popučke 28“ connecting SN line 10 kV and LV 1kV.	Location conditions ROP-VAL-38758-LOC-1/2019, 10.01.2020		
STS 10/0,4 kV „Prijezdici 4“ Kamenolom	Dec. of approval of works execution ROP-VAL-2251-ISAW-1/2020, 14.02.2020		
Cable line from SS 35/10 kV Ub 1 to SS 35/10kV Čučuge	Change of location condition ROP-UB-27528-LOC-4/2020, 25.02.2020		
Construction of optical cable from Pecke to the border of Ljubovija municipality	Dec. of approval of works execution ROP-OSE-29460-CPI-2/2020, 04.03.2020		
Cable line from SS 35/10 kV Ub 1 to SS 35/10kV Čučuge	Issuing/changing the temporary construction permit ROP-UB-27528-CPIH-6/2020, 13.03.2020		
Electricity transmission through the underground cable 1 kV from SS 10/0,4 kV Osečina 3 to KPK	Location conditions ROP-OSE-4928-LOC-1/2020, 20.03.2020		

Terminal 10 kV from SS 35/10kV Čučuge for Pambukovica and for Ub	Issuing location conditions ROP-UB-6812-LOC-1/2020, 24.03.2020		
Cable line 35 kV from SS 110/35 kV Valjevo 2 to SS 35/10kV Valjevo 5	Issuing/change of location conditions ROP-VAL-1246-LOC-2/2020 25.03.2020		
Electricity transmission through the underground cable 1 kV from SS 10/0,4 kV Osečina 3 to KPK	Dec. of approval of works execution ROP-OSE-4928-ISAW-2/2020 26.03.2020		
STS 10/0,42kV „Popučke 28“-connecting MV line 10 kV and LV 1kV.	Dec. of approval of works execution ROP-VAL-38758-ISAW-2/2020 08.04.2020		
Cable line 35 kV Jabučje-UB and cable line 10kV Ub-Stublenica	Issuing location conditions ROP-UB-8681-LOC-1/2020 18.05.2020		
Cable line 1kV from SS 10/0,4kV „Milivoja Bjelice settlement“ to KRO, cable line 1kV from KRO to KPK, cable line 1kV from KPK to MRO	Issuing/change of location conditions ROP-VAL-9253-LOC-2/2020 01.06.2020		
Cable line 1kV from SS 10/0,4kV „Milivoja Bjelice settlement“ to KRO, cable line 1kV from KRO to KPK, cable line 1kV from KPK to MRO	Dec. of approval of works execution ROP-VAL-9253-ISAW-3/2020 16.06.2020		
Cable line 1kV from SS 10/0,4 kV Jadar to KPK at the facility „Knez Miloševa 70“	Dec. of approval of works execution ROP-VAL-33162-ISAW-2/2020 24.06.2020		
LV from STS 10/0,4 kV „Vučijak 1“ towards the new settlement of Murgaš	Issuing location conditions ROP-UB-13818-LOC-1/2020 06.07.2020		
New section from Boričevci to the intersection of Cara Lazara St. Čapa and Milice Nožice St. (changed route) VA 2-VA 2 SCHOOL YARD	Issuing/change of dec. of approval of works execution ROP-VAL-14762- ISAW-8/2020 24.07.2020		
SBSS 10/0,42kV „Petrići 7“ and medium-voltage line 10 kV	Issuing location conditions ROP-VAL-16740-LOC-1/2020 06. 08. 2020.		
LVN from STS 10/0.4 kV „Vučijak 1“	Dec. of approval of works execution ROP-UB-13818-ISAW-2/2020 20.08.2020.		
SBSS 10/0,42kV „Brezovice 4-Maričići“ and medium-voltage line 10 kV	Issuing location conditions ROP-VAL-16606-LOC-1/2020 24.08.2020		
Reconstruction of parts of DV 10kV TS 10/0,4kV“Ključ 8-Mioni“- DIRECTION TOWARDS TOLIĆ	Dec. of approval of works execution ROP-MIO-23202-ISAW-1/2020 02.09.2020.		
DV 10 kV Djurdjevac 2- Rajković 3	Issuing location conditions ROP-MIO-18966-LOC-1/2020 16.09.2020		
TS 35/10 kV "Divčibare"	Издавање локацијски услови ROP-VAL-22200-LOC-1/2020 16.09.2020.		
DV 10 kV for TS 10/0,4 kV Strugaonik 4	Issuing location conditions ROP-MIO-23042-LOC-1/2020 28.09.2020		

Cable line SS 10/0,4 kV Donja Grabovica	Issuing location conditions ROP-VAL-27528-LOC-1/2020 16.10.2020		
Lines 10 kV from the 13 switch station 35/10 kV "Čučuge"- towards Pambukovica and Ub	Dec. of approval of works execution ROP-UB-6812-ISAW-2/2020 20.10.2020.		
STS 10/0,42kV "Takovo 8" 50(160) kVA and surface SNS 10kV	Issuing location conditions ROP-UB-31354-LOC-1/2020 17.11.2020.		
Cable line 10 kV from TS 35/10 kV Mionica 2 to terminal pole DV 10kV for Paštrić	Issuing location conditions ROP-MIO-37051-LOC-1/2020 23.12.2020		
		Issuing location conditions: Murgaš-Vrhovine from pole no. 52 to pole no. 92	Procedure in progress
		Dec. of approval of works execution: Cable line 35 kV from SS 110/35 kV Valjevo 2 to SS 35/10kV Valjevo 5	Procedure in progress
		Dec. of approval of works execution: SBSS 10/0,42kV "Joševa 3"-Jeremići and surface MV line 10kV	Procedure in progress
		Dec. of approval of works execution: SBSS 10/0,42kV "Mionica 23"- Kaljević of connecting surface MV line 10kV	Procedure in progress
		Change of location conditions: Cable line 35kV Jabučje-Ub and cable line 10kV Ub-Stublenica	Procedure in progress
ED JAGODINA			
	ROP-DES-28715-WA-4/2019, 23.12.2019.		
	ROP-PAR-28482-ISAW-2/20		
	ROP-PAR-28477-WA-3/20		
	ROP-DES-31918- ISAW- 1/2020, 03.11.2020.		
	ROP-DES-11287- WA -3/2020, 27.05.2020.		
	ROP-SVI-25- ISAW-5/2020, 27.07.2020.		
	ROP-SVI-38713-WA-1/2019, 18.12.2019.		
	ROP-ZAB-30023-WA-3/2019, 09.12.2019.		
	ROP-PAR-17223-ISAW-2/20 , 03.09.2020.		
	ROP-JAG-13526-WA-6/2020, 29.07.2020.		
	ROP-CUP-10029-WA-4/2020, 28.07.2020.		
	ROP-JAG-23327-WA-3/2019, 16.10.2019.		
	ROP-SVI-24493-WA-2/2020, 24.09.2020.		
	ROP-JAG-10068-ISAW- 7/2020, 14.09.2020.		
	ROP-REK-23674-ISAW- 2/2020, 09.09.2020.		
	ROP - DES – 2406 – ISAW - 2/2019, 01.04.2019.		
	ROP-PAR-2836-ISAW-2/2019 13.09.2020.		

	ROP-PAR-31355- WA - 4/2020 15.04.2020.		
	ROP-JAG-13311-ISAW- 1/2018, 25.05.2018.		
	ROP-PAR-4493- WA - 4/2020 , 26.05.2020.		
	ROP-CUP-5120-WA-4/2020, 23.06.2020.		
	ROP-PAR-35476- ISAW- 1/2019, 19.02.2020.		
	ROP-PAR-13386- ISAW- 2/2020, 08.07.2020.		
	ROP-PAR-37453- ISAWA- 3/2020, 22.05.2020.		
	ROP-JAG-9802-WA-1/2020, 30.04.2020.		
	ROP-DES-11552- WA -2/2019, 21.06.2019.		
	ROP-JAG-520-ISAW-1/2019, 21.01.2019.		
	ROP-JAG-525-ISAW-1/2019, 21.01.2019.		
	ROP-PAR-33491- ISAW- 2/2018, 24.12.2018.		
	ROP-PAR-34801- WA-3/2020, 16.03.2020.		
	ROP-CUP-6796-WA-1/2016, 19.04.2016.		
	ROP-SVI-4477- ISAW-6/2019, 09.04.2019.		
	ROP-PAR-32856- WA-3/2019, 12.12.2018.		
ED KRALJEVO			
SBSS Bukovica 7	ROP-KRA-18224-ISAW- 1/2020 (351-8-137/2020-06), 21.07.2020.		Constructed
SBSS Ravanica 6	ROP-KRA-28468-ISAW- 1/2020 (351-8-182/2020-06), 08.10.2020.		Not constructed
SBSS Divlje polje 5	ROP-KRA-22363-ISAW- 1/2020 (351-8-153/2020-06), 25.08.2020.		Constructed
Vrnjačka Banja Plant	ROP-VBN-30664-ISAW- 2/2020, 09.11.2020.		Cable line 20kV Children home „Ždrela“
Raška Plant			
ED Raška	ROP-RAS-32622-ISAW- 1/2020, 06.11.2020	NEW	
ED Raška	ROP-RAS-19179-ISAW- 1/2020, 06.08.2020.	NEW	
ED Raška	ROP-RAS-37263-ISAW- 1/2020, 18.12.2020	NEW	
ED Raška	ROP-RAS-39986-ISAW- 1/2019, 13.01.2020	NEW	
ED Raška	ROP-RAS-3149-ISAW-1/2020, 24.02.2020	NEW	
ED Raška	ROP-RAS-32398-ISAW- 1/2020, 04.11.2020	NEW	

ED Raška	ROP-RAS-10910-ISAW-1/2020, 22.05.2020	NEW	
ED Raška	ROP-RAS-7346-ISAW-2/2020, 10.09.2020	NEW	
ED Raška	ROP-RAS-26062-ISAWHA-1/2020, 06.10.2020	NEW	
ED Raška	ROP-MSGI-18410-ISAWHA-3/2020, 28.10.2020.	NEW	
ED Raška	ROP-MSGI-19825-ISAWHA-3/2020, 28.10.2020.	NEW	
ED Raška	ROP-RAS-35829-ISAW-1/2020, 08.12.2020.	NEW	
ED KRUŠEVAC			
1. Decision of works execution for SBSS 10/0,4 kV " Smilovac 4" with cable bundle 10 kV and LV junction in Silovac, Ražanj.	ROP-RAZ-11816-ISAW-3/2020 351-2/2020-02 20.01.2020		
2. Application for works on construction of SBSS 10/0,4 kV " Varnice " with a connecting bundle 10 kV and LV distribution network, municipality Ražanj.	ROP-RAZ-38711-WA-2/2020 351-3/2020-02 14.01.2020		
3. Location conditions for the execution of works on SBSS 10/0,4 kV " Stubal 4" with the connecting line 10 kV and the reconstruction of LV network in Stubl, municipality Aleksandrovac.	ROP-ALK-2091-LOC-1/2020 350-7/2020-04 07.02.2020		
4. Application for works on the construction of SBSS 10/0,4 kV " Smilovac 4 " with the connecting budle 10 kV and LV distribution network, municipality Ražanj.	ROP-RAZ-11816-WA-4/2020 351-12/2020-02 20.02.2020		
5. Application for the beginning of works on the construction of SBSS 10/0,4 kV "Poljana Stanjevo 2" with LV network, municipality Aleksandrovac.	ROP-ALK-9456-WA-2/2020 351-49/2020-04 06.03.2020		
6. Application for the beginning of works on the construction of SBSS 10/0,4 kV "Mala Raklja 1 " with cable line 10 kV and LV network, municipality Aleksandrovac.	ROP-ALK-32413-WA-2/2020 351-48/2020-04 06.03.2020		
7. Application for the beginning of works on the construction of SBSS 10/0,4 kV "Mala Raklja 2 " with cable line 10 kV and LV network, municipality Aleksandrovac.	ROP-ALK-32477-WA-2/2020 351-50/2020-04 06.03.2020		
8. Application for the beginning of works on the construction of LVN from SBSS 10/0,4 kV "Modrica 4" in Modrica, the city of Kruševac.	ROP-KRU-1400-WA-2/2020 351-339/2020 30.03.2020		
10. Decision for works on SBSS 10/0,4 kV "Stubal 4" with the connecting line 10 kV and reconstruction of LV network in Stubl, municipality Aleksandrovac.	ROP-ALK-2091-ISAW-2/2020 351-68/2020-04 13.04.2020		
11. Application for the beginning of works on SBSS 10/0,4 kV "Stubal 4" with the connecting line 10 kV and reconstruction of LV network in Stubl, municipality Aleksandrovac.	ROP-ALK-2091-WA-3/2020 351-70/2020-04 22.04.2020		
12. Decision for works on SBSS 10/0,4 kV "Donji Stupanj 5" with the	ROP-ALK-28117-ISAW-3/2020 351-69/2020-04		

transmission line 10 kV and mandatory LV distribution network in Donji Stupanj, municipality Aleksandrovac.	14.04.2020		
13. Application for the beginning of works on SBSS 10/0,4 kV "Donji Stupanj 5" with the transmission line 10 kV and mandatory LV distribution network in Donji Stupanj, municipality Aleksandrovac.	ROP-ALK-28117-WA-4/2020 351-72/2020-04 27.04.2020		
14. Decision for works on LVN from SBSS 10/0,4 kV "Padež 2" in Padež, the city of Kruševac.	ROP-KRU-7139-ISAW-1/2020 351-307/2020 20.03.2020		
15. Application for the beginning of works on LVN from SBSS 10/0,4 kV „Padež 2" in Padež, the city of Kruševac.	ROP-KRU-7139-WA-2/2020 351-347/2020 01.04.2020		
16. Application for the beginning of works on the relocation of transmission line by constructing the cable line 10 kV at the terminal 10 kV Radoševac – branch for Lovačko Polje from SS 35/10 kV "Stalać", municipality Čičevac.	ROP-CIC-23409-WA-2/2020 351-21/20-05 13.05.2020		
17. Location conditions for the introduction of works on cable line 10 kV from SBSS 10/0,4 kV "Vitoševac 5" to the pole at CP 4232 KO Vitoševac municipality Ražanj.	ROP-RAZ-9242-LOC-1/2020 350-16/2020-02 15.05.2020		
18. Location conditions for works on SBSS 10/0,4 kV "Sebečevac 4 " with the connecting line 10 kV in Sebečevac, the city of Kruševac.	ROP-KRU-9427-LOC-1/2020 350-266/2020 21.05.2020		
19. Decision for works on SBSS 10/0,4 kV "Dvorane 4" in Dvorane, the city of Kruševac.	ROP-KRU-9731-ISAW-2/2020 351-480/2020 22.05.2020		
20. Location conditions for works on SS 10/0,4 kV "Novo Groblje" with the connecting line 10 kV the city of Kruševac.	ROP-KRU-9737-LOC-1/2020 350-279/2020 26.05.2020		
21. Location conditions for works on SBSS 10/0,4 kV "Padež 5 " with the connecting bundle 10 kV the city of Kruševac.	ROP-KRU-10776-LOC-1/2020 350-318/2020 10.05.2020		
22. Decision for works on SS 10/0,4 kV "Novo Groblje" with the connecting line 10 kV the city of Kruševac.	ROP-KRU-9737-ISAW-2/2020 350-655/2020 25.06.2020		
23. Location conditions for works on SBSS 10/0,4 kV "Petina 2" with the connection bundle 10 kV the city of Kruševac.	ROP-KRU-13418-LOC-1/2020 350-395/2020 02.07.2020		
24. Decision for works on SS 10/0,4 kV "Lazarica 8 - Igralište" with the double connecting line 10 kV the city of Kruševac.	ROP-KRU-7740-ISAW-3/2020 351-859/2020 28.07.2020		
25. Decision for works on SBSS 10/0,4 kV "Petina 2" with the connection bundle 10 kV the city of Kruševac.	ROP-KRU-13418-ISAW-2/2020 350-782/2020 15.07.2020		
26. Application for the beginning of works on SS 10/0,4 kV "Novo Groblje" with the connecting line 10 kV the city of Kruševac.	ROP-KRU-9737-WA-3/2020 350-779/2020 15.07.2020		

27. Decision for works on CL 10 kV from SBSS 10/0,4 kV " Vitoševac 5 " to the pole at CP 4232 KO Vitoševac municipality Ražanj.	ROP-RAZ-9242-ISA-2/2020 351-39/2020-02 17.07.2020		
28. Application for the beginning of works on SBSS 10/0,4 kV "Petina 2" with the connection bundle 10 kV the city of Kruševac.	ROP-KRU-13418-WA-3/2020 351-872/2020 27.07.2020		
29. Decision for works on SBSS 10/0,4 kV "Sebečevac 4 " with the connecting line 10 kV and mandatory LV distribution line in Sebečevac the city of Kruševac.	ROP-KRU-9427-ISA-2/2020 351-858/2020 28.07.2020		
30. Decision for works on SBSS 10/0,4 kV "Modrica 4" with the connecting line 10 kV (bundle) in Modrica the city of Kruševac.	ROP-KRU—10780/ISA-2/2020 351-778/2020 20.07.2020		
31. Application for the beginning of works on SBSS 10/0,4 kV "Modrica 4" with the connecting line 10 kV (bundle) in Modrica the city of Kruševac.	ROP-KRU—10780/ISA-3/2020 351-928/2020 03.08.2020		
32. Application for the beginning of works on SBSS 10/0,4 kV "Sebečevac 4 " with the connecting line 10 kV and mandatory LV distribution line in Sebečevac the city of Kruševac.	ROP-KRU-9427-ISA-3/2020 351-922/2020 03.08.2020		
33. Application for the beginning of works on SS 10/0,4 kV "Lazarica 8 - Igralište" with the double connecting line 10 kV the city of Kruševac.	ROP-KRU-7740-ISA-4/2020 351-927/2020 03.08.2020		
34. Location conditions for works on SBSS 10/0,4 kV "Donje Zleginje 2" with the connecting transmission line 10 kV (bundle) and the reconstruction of LV network in Donje Zleginje, municipality Aleksandrovac.	ROP-ALK-16428-LOC-1/2020 350-45/2020-04 03.08.2020		
35. Location conditions for works on reconstruction of LVN and the bundle 10 kV SS 10/0,4 kV "Lomnica 4 " -Lomnica 1"- „Lomnica 3" - „Buci 1" – „Buci 3" the city of Kruševac.	ROP-KRU-17726-LOC-1/2020 350-505/2020 03.08.2020		
36. Decision for works on SBSS 10/0,4 kV "Padež 5 " with the connecting bundle 10 kV the city of Kruševac.	ROP-KRU-10776-ISA-2/2020 350-934/2020 04.08.2020		
37. Application for the beginning of works on SBSS 10/0,4 kV "Dvorane 4 " in Dvorane the city of Kruševac.	ROP-KRU-9731-WA-3/2020 351-538/2020 29.05.2020		
38. Location conditions for works on SBSS 10/0,4 kV "Trnavci 2" with the connecting transmission line 10 kV (bundle) and the reconstruction of LV network in Trnavci, municipality Aleksandrovac.	ROP-ALK-21170-LOC-1/2020 350-58/2020-04 01.09.2020		
39. Decision for works on SBSS 10/0,4 kV "Trnavci 2" with the connecting transmission line 10 kV (bundle) and the reconstruction of LV network in Trnavci, municipality Aleksandrovac.	ROP-ALK-21170-ISA-2/2020 351-180/2020-04 22.09.2020		
40. Location conditions for works on the part of double CL from SS 35/10 kV	ROP-KRU-19716-LOC-1/2020 350-546/2020 01.09.2020		

"Kruševac 4 " to SS 35/10 kV " Centar 1-2 " the city of Kruševac.			
41. Decision for works on the part of double CL from SS 35/10 kV "Kruševac 4 " to SS 35/10 kV " Centar 1-2 " the city of Kruševac.	ROP-KRU-19716-ISAW-2/2020 351-1227/2020 22.09.2020		
42. Decision for works on SBSS 10/0,4 kV "Donje Zleginje 2" with the connecting transmission line 10 kV (bundle) and the reconstruction of LV network in Donje Zleginje, municipality Aleksandrovac.	ROP-ALK-16428-ISAW-2/2020 351-177/2020-04 17.09.2020		
43. Application for the beginning of works on the part of double CL 35 kV from TC 35/10 kV "Kruševac 4 " to SS TC 35/10 kV "Centar 1-2 " the city of Kruševac.	ROP-KRU-19716-WA-3/2020 351-1381/2020 15.10.2020		
44. Location conditions for works on the construction of PRP 10 kV with the connecting CL 10 kV within the existing SS 35/10 kV "Miloje Zakić" the city of Kruševac.	ROP-KRU-19716-LOC-1/2020 350-546/2020 01.09.2020		
ED LAZAREVAC			
Decision of approval of works execution on connecting transmission line 10 kV from SS „Sumed“ Cvetovac to „shaft 0“ Stepojevac	ROP-LAZ-39284-ISAW-3/2020 23.03.2020.		
Decision of approval of works execution on connecting transmission line 10 kV from „shaft 0“ Stepojevac to SS „Deponija“ Kalenić	ROP-UB-653-ISAW-2/2020 05.05.2020.		
Decision of approval of works execution on connecting CL 35 kV from „Očaga“ to SS 35/10 kV „Lazarevac 4“	ROP-LAZ-30142-ISAW-5/2020 13.05.2020.		
Decision of approval of works execution on transmission line 10 kV and SBSS 10/0,4 kV „Lukići“ Donji Lajkovac	ROP-LAJ-8365-ISAW-3/2019 26.06.2020.		
Decision of approval of works execution on KPK 10/0,4 kV „Škola“ Gornaj Toplica and con. cable lines 20 kV	ROP-MIO-36546-ISAW-2/2020 28.07.2020.		
Decision of approval of works execution on CL 1 kV from SS 10/0,4 kV „Dom kulture“ for the supply of residential-business facility „Spalex“ Lazarevac	ROP-LAZ-15708-ISAW-2/2020 17.08.2020.		
Decision of approval of works execution on CL 1 kV from SS 10/0,4 kV „EDL“ for the supply of residential-business facility „Kom-Takt“ Lazarevac	ROP-LAZ-12998-ISAWHA-2/2020, 28.07.2020.		
Decision of approval of works execution on SBSS 10/0,4 kV „Zekinobrdo“ Kruševica	ROP-LAZ-8622-ISAWHA-2/2020 27.04.2020.		
Decision of approval of works execution on CL 10 kV „ATC – Tržni centar“ Lazarevac	ROP-LAZ-23783-ISAW-2/2020 od 10.11.2020.		
Decision of approval of works execution on rec. transmission line 10 kV „Slovac-Stepanje“	ROP-LAJ-23777-ISAW-2/2020 25.12.2020.		
ED LOZNICA			
Cable line 0,4 kV from MBTS 10/04 kV "Vuka Karadžića" to residential facility on CP 8600 KO Loznica MB Gradnja	351-75/2020-V 11.02.2020.		

MBTS 10/04 kV „Cerska“ Lagator, with 10 kV cable line, Gradeks	351-102/2020-V 19.02.2020.		
Reconstruction of LVN from STS 10/04 kV „Bogoštica“ terminal Gajići, Bogoštica	351-126/2020-V 04.02.2020.		
Reconstruction of LVN from STS 10/04 kV „Priljuša“ Stupnica	351-29/2020-V 24.01.2020.		
Cable line 0,4 kV from MBTS 10/04 kV „Evropa“ to residential facility on CP 8801 KO Loznica, Petrović Tomislav	351-81/2020-V 11.02.2020.		
Cable line 0,4 kV from KPRO-4 from MBTS 10/04 kV „Ploča 2“ to residential facility on CP 8000 KO Loznica, Ranković Slobodan, Planeks	351-104/2020-V 19.02.2020.		
Reconstruction of LVN from SS 10/04 kV "Srednja Mala" Donje Nedeljice	351-68/2020-V 10.02.2020.		
Adaptation of LVN terminal from SBSS 10/04 kV "Etno selo" Vrhpolje, Cvetojević Vladan	351-22/20-04 26.02.2020.		
Cable line 0,4 kV from MBTS 10/04 kV "Beogradska 2" Loznica, Ranković Stojan	351-66/2020-V 10.02.2020.		
Reconstruction of LVN from STS 10/04 kV „Šapari“ Ljubovija	351-92/20-04 08.07.2020.		
Reconstruction of LVN from MBTS 10/04 kV "Grabik" Banja Koviljača	351-215/2020-V 13.03.2020.		
Con. 10 kV cable line for new SBSS 10/04 kV „Ženeva“ Lešnica	351-88/2020-V 11.02.2020.		
Distribution network 10 kV cable lines from SS 110/35/10 kV "Loznica 2", connection to MBTS 10/04 kV "Lagator L6" and SBSS 10/04 kV "D. Radosavljevića"	351-567/2020-V 22.07.2020.		
Cable line 0,4 kV from MBTS 10/04 kV „Evropa“ to residential facility on CP 8824 KO Loznica, Pajić	351-132/2020-V 26.02.2020.		
Double cable line 0,4 kV from ZTS 10/04 kV "Deličevača" to CP 866 Krupanj, Dugogradnja MD 2018	351-280/2020-04 12.03.2020.		
Cable line 0,4 kV from STS 10/04 kV "Zanatski centar" to CP 3097 KO Prnjavor, Samurović Petar	353-4-68/2020-11 07.04.2020.		
Cable line 0,4 kV from ZTS 10/04 kV "Žarkovača" to CP 145/3 KO Krupanj, Blagojević Goran	351-266/2020-04 05.03.2020.		
Over-underground 0,4 kV line from MBTS 10/04 kV "Sušara" to business facility on CP 3124 Zavlaka, Europrom Valjevo	351-278/2020-04 11.03.2020.		
Reconstruction of LVN from MBTS 10/04 kV "Voćnjak 3" from the pole on CP 259, Voćnjak	351-416/2020-V 11.06.2020.		
Reconstruction of LVN from SS 10/04 kV "Grobljanska" situated on CP 1244, Kozjak	351-431/2020-V 15.06.2020.		
SBSS 10/04 kV "Ženeva" at CP 4148, Lešnica	351-158/2020-V 05.03.2020.		
Cable line 0,4 kV from MBTS 10/04 kV "Beogradska 2" to residential facility on CP 5019, Loznica, Branka Radičevića st.	351-510/2020-V 03.07.2020.		

SBSS 10/04 kV "Jelav 8" with con. transmission line 10 kV	351-626/2020-V 04.08.2020.		
Two cable lines 0,4 kV from MBTS 10/04 kV "Novi dom" to residential facility on CP 179/14, Banja Koviljača, Pejak Tim Lo Gradnja	351-518/2020-V 09.07.2020.		
Adaptation of LVN from ZTS 10/04 kV "Stefanovića put 1" to CP 856/2, Loznica, Pakom Cvetinović	351-496/2020-V 31.06.2020.		
Reconstruction of LVN from SS 10/04 kV "Gajići" terminal Čase, Brštica	ROP-KRN-20838-ISAW- 1/2020 14.08.2020.		
Reconstruction of LVN from SS 10/04 kV "Nestorovići" Radalj	351-102/2020-03 26.08.2020.		
Reconstruction of LVN from STS 10/04 kV "Gornja Dvorska" terminal Kikanovići, Gornja Dvorska	ROP-KRN-21942-ISAW- 1/2020 20.08.2020.		
Cable line 0,4 kV from KPRO from ZTS 10/04 kV "Hotel Borac" to the facility on CP 981 KO Krupanj, Popović Branko	ROP-KRN-21893-ISAW- 1/2020 19.08.2020.		
Cable line 0,4 kV from MBTS 10/04 kV "Miloša Pocerca" to residential facility on CP 3728 and 3729, Loznica, Papo	351-748/2020-V 28.08.2020.		
Reconstruction of LVN from MBTS 10/04 kV "Kolonija" terminal Gornja Zajača, Zajača	351-871/2020-V 28.09.2020.		
Con. cable line 10 kV for SBSS 10/04 kV "DDM 015 Milosavljević" Petlovača	353-4-177/2020-11 08.07.2020.		
SBSS 10/04 kV "DDM 015 Milosavljević" Petlovača	353-4-216/2020-11 30.07.2020.		
Distribution network 10 kV of cable lines from SS 110/35/10 kV "Loznica 2" connection between MBTS 10/04 kV "Lagator L6" and SBSS 10/04 kV "D. Radosavljevića"	351-567/2020-V 22.07.2020.		
Cable line 0,4 kV from MBTS 10/04 kV „Blok 106" to residential facility on CP 838/1, Čitluk, Vesić Ilija – Ival	351-151/20-04 16.10.2020.		
Adaptation of LVN from PTS 10/04 kV "Grobljanska 2", Loznica, Nede Spasojević st.	351-1123/2020-V 27.11.2020.		
LVN from MBTS 10/04 kV "ŽTP" Mali Zvornik to residential facility Ikonić on CP 787 Mali Zvornik	351-138/2020-V 05.10.2020.		
Cable line 0,4 kV from ZTS 10/04 kV "Gradilište 1" to business facility Enikon, Loznica	351-1016/2020-V 27.10.2020.		
Reconstruction of LVN from STS 10/04 kV "Donji Savkovići" Ljubovija	351-182/20-04 30.11.2020.		
Reconstruction of LVN from STS 10/04 kV "Geben" Gornje Košlje	351-183/20-04 30.11.2020.		
Reconstruction of LVN from STS 10/04 kV "Malo brdo" terminal Vasiljevići, Kostajnik	ROP-KRN-35974-ISAW- 1/2020 07.12.2020.		
Cable line 0,4 kV from MBTS 10/04 kV "Bakal Milosava" to residential facility on CP 5477, Loznica, Petrović Dragan	351-1119/2020-V 27.11.2020.		
SBSS 10/04 kV "BIM Trade" on CP 1846/16 Vrbić	ROP-KRN-20761-ISAW- 1/2020 13.08.2020.		

Con. transmission line kV with SBSS 10/04 kV "BIM Trade" on CP 1846/16 Vrbic	ROP-KRN-28771-ISA-1/2020 14.10.2020.		
Reconstruction of LVN from PTS 10/04 kV "Mišići" terminal Gaj, Brasina	351-215/2020-03 28.12.2020.		
Reconstruction of LVN from PTS 10/04 kV "Velika reka 3 Čagulj" terminal Polići, Velika reka	351-214/2020-03 28.12.2020.		
Over-underground line 0,4 kV from STSS 10/04 kV "Banjevac 3" to business facility Ice Tours on CP 1434 Krupanj	ROP-KRN-35016-ISA-1/2020 26.11.2020.		
ED NOVI PAZAR			
Overground MV 10 kV line and SBSS 10/0,4 kV „Vučiniće 3“	ROP-NPA-40003-ISA-3/2020 29.07.2020		
Underground transmission line 10 kV from SS 10/0,4 kV „Banjska petlja“ to SS 10/0,4 kV „Banja 2“	ROP-NPA-25636-ISA-WHA-5/2020 27.01.2020		
New SS 10/0,4 kV „Gazilar 1“	ROP-NPA-8920-ISA-WHA-7-2020 17.11.2020		
MBTS 2*630 kVA 10/0,4 kV „Vojniće 4“	ROP-NPA-11340-ISA-3/2020 09.09.2020		
Cable line 10 kV and SBSS 10/0,4 kV „Osoje 5“	ROP-NPA-35246-ISA-2/2020 31.12.2020		
LVN Boroštica - Tutin	ROP-TUT-1565-ISA-1/2020 27.01.2020		
ED ČAČAK			
Con. double cable line 35 kV from ČRS no. 13 transmission line „Satelitska stanica – Latvica“ to RP facility 35 kV Brusnik in Stupčevići, Arilje			
MBTS 10/0,4 kV/kV „Birčaninova“ with overvoltage of the water supply 10 kV and 1 kV			
MBTS 10/0,4 kV/kV „Birčaninova“ with overvoltage of the water supply 10 kV and 1 kV			
MBTS 10/0,4 kV/kV „Birčaninova“ with overvoltage of the water supply 10 kV and 1 kV			
MBTS 10/0,4 kV/kV „Birčaninova“ with overvoltage of the water supply 10 kV and 1 kV			
MBTS 10/0,4 kV/kV „Balkanska 2“ with con. cable lines 10 kV			
MBTS 10/0,4 kV/kV „Balkanska 2“ with con. cable lines 10 kV			
MBTS 10/0,4 kV/kV „Balkanska 2“ with con. cable lines 10 kV			
Cable line 10 kV for SS 10/0,4 kV/kV „Rtari Kamp 3“ on CP no. 899/1, 823/4 KO Rtari from the existing transmission line 10 kV to SS 10/0,4 kV/kV „Rtari 1“			
Relocation of the route part of cable line 10 kV from SS 10/0,4 kV/kV „Autoprevoz“ to SS 10/0,4 kV/kV „Grafčar“ in Ivanjica			

Relocation – replacement of surface line by cable line 10 kV for SBSS 10/0,4 kV/kV „Milutinovići“ in Prilike – Ivanjica	ROP-IVA-36006-WA-3/2019 24.01.2020.		
SBSS 10/0,4 kV/kV „Dugo polje“ and transmission line 10 kV „Gornja Crnuća – Brdo Svračkovci“	ROP-GML-3357-LOC-1/2020 21.02.2020.		
SBSS 10/0,4 kV/kV „Dugo polje“ and transmission line 10 kV „Gornja Crnuća – Brdo Svračkovci“	ROP-GML-3357-ISAW-2/2020 06.03.2020.		
SBSS 10/0,4 kV/kV „Zeta Dljina“ and 10 kV „Vodovod Dljina“ with con. lines „Zeta Dljina“	ROP-LUC-8701-WA-4/2020 28.07.2020.		
Cable line 10 kV „Institutovo imanje – Savkovići“ in Ljubić	ROP-CAC-25252-WA-4/2020 12.03.2020.		
SBSS 10/0,4 kV/kV „Dragojloviće 2“ with con. transmission line 10 kV	ROP-SJE-7492-LOC-1/2020 26.03.2020.		
SBSS 10/0,4 kV/kV „Čedovo 2“ with con. transmission line 10 kV	ROP-SJE-7490-LOC-1/2020 27.03.2020.		
Construction of cable line 10 kV for SBSS 10/0,4 kV/kV „Milutinovići“ in Prilike – Ivanjica	ROP-IVA-36006-LOC-1/2020 19.08.2020.		
Construction of cable line 10 kV for MBTS 10/0,4 kV/kV „TOYOTA“ in Konjevići	ROP-CAC-22076-LOC-1/2020 25.08.2020.		
Construction of MBTS 10/0,4 kV/kV „TOYOTA“ in Konjevići	ROP-CAC-22076-LOC-1/2020 04.09.2020.		
MBTS 10/0,4 kV/kV „Milutinovići“ in Prilike – Ivanjica	ROP-IVA-19648-LOC-1/2020 19.08.2020.		
MBTS 10/0,4 kV/kV „Milutinovići“ in Prilike – Ivanjica	ROP-IVA-19648-ISAW-2/2018 28.08.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Milutinovići“ in Prilike – Ivanjica	ROP-IVA-19650-ISAW-2/2020 28.08.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Milutinovići“ in Prilike – Ivanjica	ROP-IVA-19650-WA-4/2020 18.09.2020.		
Con. line 10 kV between the transmission line for Kamenolom and Lisa on CP no. 3929/2 KO Lisa and 72/12 KO Šume	ROP-IVA-31976-ISAW-3/2020 13.04.2020.		
Cable line 10 kV „Brkovići – Rasadnik“ in Trbušani	ROP-CAC-8272-LOC-1/2020 21.04.2020.		
Cable line 10 kV „Brkovići – Rasadnik“ in Trbušani	ROP-CAC-8272-ISAW-2/2020 17.07.2020.		
Cable line 10 kV „Brkovići – Rasadnik“ in Trbušani	ROP-CAC-8272-WA-3/2020 28.07.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV for MBTS 10/0,4 kV/kV „Kamelija“	ROP-CAC-10040-LOC-1/2020 20.05.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV for MBTS 10/0,4 kV/kV „Kamelija“	ROP-CAC-10040-WA-3/2020 03.08.2020.		
MBTS 10/0,4 kV/kV „Kneza Miloša 3“ con. cable lines 10 kV	ROP-CAC-9517-LOC-1/2020 08.05.2020.		
MBTS 10/0,4 kV/kV „Kneza Miloša 3“ con. cable lines 10 kV	ROP-CAC-9517-ISAW-2/2020 01.06.2020.		
MBTS 10/0,4 kV/kV „Kneza Miloša 3“ con. cable lines 10 kV	ROP-CAC-9517-WA-3/2020 11.06.2020.		
SBSS 10/0,4 kV/kV „STAL“ in Preljina	ROP-CAC-11977-LOCH-2/2020 10.06.2020.		

Con. cable line 10 kV for SBSS 10/0,4 kV/kV „STAL“ in Preljina	ROP-CAC-11976-LOCH-2/2020 10.06.2020.		
Con. cable line 10 kV for SBSS 10/0,4 kV/kV „STAL“ in Preljina	ROP-CAC-11976-ISAW-3/2020 16.09.2020.		
Con. cable line 10 kV for SBSS 10/0,4 kV/kV „STAL“ in Preljina	ROP-CAC-11976-WA-4/2020 28.09.2020.		
Con. cable line 10 kV for SBSS 10/0,4 kV/kV „STAL“ in Preljina	ROP-CAC-11976-ISAW-3/2020 16.10.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Atekik komerc 1“	ROP-CAC-13429-LOC-1/2020 16.06.2020.		
Con. underground power cable line 10 kV for MBTS 10/0,4 kV/kV „Atekik komerc 1“	ROP-CAC-13429-ISAW-3/2020 02.09.2020.		
Con. underground power cable line 10 kV for MBTS 10/0,4 kV/kV „Atekik komerc 1“	ROP-CAC-13429-WA-4/2020 14.09.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Bermilton“	ROP-GML-12390-LOC-1/2020 17.06.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Bermilton“	ROP-GML-14601-ISAW-1/2020 29.06.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Bermilton“	ROP-GML-12390-WA-3/2020 13.07.2020.		
Con. power cable line 10 kV for SS 10/0,4 kV/kV „STAX“ K.O Konjevići	ROP-GML-12142-WA-5/2020 19.08.2020.		
Con. medium voltage line 10 kV for SBSS 10/0,4 kV/kV „Betonska baza Trbušani“	ROP-CAC-14601-LOC-1/2020 08.07.2020.		
Con. medium voltage line 10 kV for SBSS 10/0,4 kV/kV „Betonska baza Trbušani“	ROP-CAC-14601-WA-3/2020 03.08.2020.		
Decision on temporary construction permit – con. medium voltage line 10 kV for SBSS 10/0,4 kV/kV „Betonska baza Trbušani“	ROP-CAC-14601-TCPI-2/2020 23.07.2020.		
Decision on temporary construction permit – con. medium voltage line 10 kV for MBTS 10/0,4 kV/kV „Pakovraće kamp 2“	ROP-CAC-15642-TCPI-2/2020 18.08.2020.		
Con. cable line 10 kV for MBTS 10/0,4 kV/kV „Pakovraće kamp 2“	ROP-CAC-15642-WA-3/2020 08.09.2020.		
Con. cable line 10 kV for SS 10/0,4 kV/kV „Kamp 10 Krstac“	ROP-LUC-108555-LOC-1/2020 01.06.2020.		
Con. cable line 10 kV for SS 10/0,4 kV/kV „Kamp 10 Krstac“	ROP-LUC-10555-ISAW-2/2020 08.07.2020.		
Con. cable line 10 kV for SS 10/0,4 kV/kV „Kamp 10 Krstac“	ROP-LUC-10555-WA-3/2020 20.07.2020.		
Cable line 10 Kv from ČPC at parcel 110/2 K.O to SS 10/0,4 kV/kV „Akvapan“ with introduction to SS 10/0,4 kV/kV „Machinery Vranići“	ROP-CAC-25255-ISAW-2/2020 20.07.2020.		
Cable line 10 Kv from ČRS at parcel 110/2 K.O to SS 10/0,4 kV/kV „Akvapan“ with introduction to SS 10/0,4 kV/kV „Machinery Vranići“	ROP-CAC-25255-WA-3/2020 03.08.2020.		
SBSS 10/0,4 kV/kV „SEM“ in Trnava	ROP-CAC-11975-LOC-2/2020		

	09.06.2020.		
SBSS 10/0,4 kV/kV „SEM“ in Trnava	ROP-CAC-11975-ISA-3/2020 30.07.2020.		
SBSS 10/0,4 kV/kV „SEM“ in Trnava	ROP-CAC-11975-WA-4/2020 10.08.2020.		
Connection line 10 kV to future SBSS 10/0,4 kV/kV „SEM“ in Trnava	ROP-CAC-11974-LOC-2/2020 10.06.2020.		
Connecting cable line 10 kV for SBSS 10/0,4 kV/kV „Pakovraće kamp 2“	ROP-CAC-15642-WA-3/2020 08.09.2020.		
Connection line 10 kV to future SBSS 10/0,4 kV/kV „SEM“ in Trnava	ROP-CAC-11974-ISA-3/2020 30.07.2020.		
10 kV connection line to the future SBTS 10 / 0.4 kV / kV "SEM" in Trnava	ROP-CAC-11974-WA-4/2020 10.08.2020.		
SBTS 10 / 0.4 kV / kV "Zablaće Field" in Zablaće	ROP-CAC-23389-LOC-1/2020 04.09.2020.		
SBTS 10 / 0.4 kV / kV "Zablaće Field" in Zablaće	ROP-CAC-23389-ISA-2/2020 18.11.2020.		
SBTS 10 / 0.4 kV / kV "Zablaće Field" in Zablaće	ROP-CAC-23389-WA-3/2020 30.11.2020.		
SBTS 10 / 0.4 kV / kV "Airport" in Pranjani	ROP-GML-22507-ISA-1/2020 24.08.2020.		
SBTS 10 / 0.4 kV / kV "Airport" in Pranjani	ROP-GML-22507-WA-2/2020 08.09.2020.		
SBTS 10 / 0.4 kV / kV "Doliće 3" with 10 kV connection line and 1 kV line termination	ROP-SJE-29756-LOC-1/2020 23.10.2020.		
SBTS 10 / 0.4 kV / kV "Doliće 3" with 10 kV connection line and 1 kV line termination	ROP-SJE-29756-ISA-3/2020 27.10.2020.		
SBTS 10 / 0.4 kV / kV "Doliće 3" with 10 kV connection line and 1 kV line termination	ROP-SJE-29756-WA-4/2020 16.11.2020.		
SBTS 10 / 0.4 kV / kV "Vasovići" with 10 kV connection line and connection to the existing MNN	ROP-IVA-27514-LOC-1/2020 26.10.2020.		
Reconstruction of 10 kV overhead line "Lučka reka - Tanaskovići" - section "Lučka reka 1 - Lučka reka 2"	ROP-IVA-27515-LOC-1/2020 28.10.2020.		
SBTS 10 / 0.4 kV / kV "Roma settlement" with 10 kV transmission line in Sjenica	ROP-SJE-31148-LOC-1/2020 30.10.2020.		
SBTS 10 / 0.4 kV / kV "Roma settlement" with 10 kV transmission line in Sjenica	ROP-SJE-31148-ISA-2/2020 13.11.2020.		
SBTS 10 / 0.4 kV / kV "Roma settlement" with 10 kV transmission line in Sjenica	ROP-SJE-31148-WA-3/2020 02.12.2020.		
Reconstruction of overhead line 10 kV "Tijanjanje - Puhovo - Lis"	ROP-LUC-30326-LOC-1/2020 05.11.2020.		
Reconstruction of overhead line 10 kV "Tijanjanje - Puhovo - Lis"	ROP-LUC-30326-ISA-2/2020 23.11.2020.		
Reconstruction of overhead line 10 kV "Tijanjanje - Puhovo - Lis"	ROP-LUC-30326-WA-3/2020 04.12.2020.		
SBTS 10 / 0.4 kV / kV "Domanovići" in Sokolići	ROP-CAC-32045-LOC-1/2020 24.11.2020.		

SBTS 10 / 0.4 kV / kV "Čipalje" with connection line 10 kV and MNN in Bogačići - Sjenica	ROP-SJE-31148-LOC-1/2020 30.10.2020.		
10 kV connection line for MBTS 10 / 0.4 kV / kV "Camp Prilipac" in Prilipac	ROP-POZ-34489-LOC-1/2020 15.12.2020.		
MBTS 10 / 0.4 kV / kV "NIS Skolići" with connection kV 10 kV and unbundling of 1 kV lines in Sokolići	ROP-CAC-36941-LOC-1/2020 25.12.2020.		
MNN facilities	Objects MHH		
Connection KV 1 kV for industrial building - workshop on kp number 2099/1 KO Preljina from TS 10 / 0.4 kV / kV "Intertrade"	Connection KV 1 kV for industrial building - workshop on kp number 2099/1 KO Preljina from TS 10 / 0.4 kV / kV "Intertrade"		
Connection KV 1 kV for industrial building - workshop on kp number 2099/1 KO Preljina from TS 10 / 0.4 kV / kV "Intertrade"	Connection KV 1 kV for industrial building - workshop on kp number 2099/1 KO Preljina from TS 10 / 0.4 kV / kV "Intertrade"		
Connected underground electric power line 1 kV for residential building on kp number 4257 KO Čačak corner of Svetozara Markovića Street and Dragomir Minić Street in Čačak from TS 10 / 0.4 kV / kV "ABCD"	Connected underground electric power line 1 kV for residential building on kp number 4257 KO Čačak corner of Svetozara Markovića Street and Dragomir Minić Street in Čačak from TS 10 / 0.4 kV / kV "ABCD"		
Connected underground electric power line 1 kV for residential building on kp number 4257 KO Čačak corner of Svetozara Markovića Street and Dragomir Minić Street in Čačak from TS 10 / 0.4 kV / kV "ABCD"	Connected underground electric power line 1 kV for residential building on kp number 4257 KO Čačak corner of Svetozara Markovića Street and Dragomir Minić Street in Čačak from TS 10 / 0.4 kV / kV "ABCD"		
Connected underground electric power line 1 kV for residential building on kp number 4257 KO Čačak corner of Svetozara Markovića Street and Dragomir Minić Street in Čačak from TS 10 / 0.4 kV / kV "ABCD"	Connected underground electric power line 1 kV for residential building on kp number 4257 KO Čačak corner of Svetozara Markovića Street and Dragomir Minić Street in Čačak from TS 10 / 0.4 kV / kV "ABCD"		
Connection line 1 kV for business facility on kp number 999/6 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	Connection line 1 kV for business facility on kp number 999/6 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"		
Connection line 1 kV for business facility on kp number 999/6 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	Connection line 1 kV for business facility on kp number 999/6 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"		
Connection line 1 kV for business facility on kp number 999/6 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	Connection line 1 kV for business facility on kp number 999/6 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"		
Connection line 1 kV to SSMO for business facility workshop on kp number 928 KO Konjevići from TS 10 / 0.4 kV / kV "Rastoke Konjevići" on kp number 928 KO Konjevići	Connection line 1 kV to SSMO for business facility workshop on kp number 928 KO Konjevići from TS 10 / 0.4 kV / kV "Rastoke Konjevići" on kp number 928 KO Konjevići		

Connection line 1 kV to SSMO for business facility workshop on kp number 928 KO Konjevići from TS 10 / 0.4 kV / kV "Rastoke Konjevići" on kp number 928 KO Konjevići	ROP-CAC-1251-WA-3/2020 02.03.2020.		
Connection line 1 kV for residential and business building on kp number 4300/3 KO Čačak from TS 10 / 0.4 kV / kV "Balkanska 2"	ROP-CAC-5637-LOC-1/2020 10.03.2020.		
Connection line 1 kV for residential and business building on kp number 4300/3 KO Čačak from TS 10 / 0.4 kV / kV "Balkanska 2"	ROP-CAC-5637-ISAW-2/2020 23.03.2020.		
Connection line 1 kV for residential and business building on kp number 4300/3 KO Čačak from TS 10 / 0.4 kV / kV "Balkanska 2"	ROP-CAC-5637-WA-3/2020 10.04.2020.		
Connection line 1 kV for residential and business building on kp number 2947/1 KO Čačak from TS 10 / 0.4 kV / kV "Self-service"	ROP-CAC-5636-LOC-1/2020 16.03.2020.		
Connection line 1 kV for residential and business building on kp number 2947/1 KO Čačak from TS 10 / 0.4 kV / kV "Self-service"	ROP-CAC-5636-ISAW-2/2020 25.03.2020.		
Connection line 1 kV for residential and business building on kp number 2947/1 KO Čačak from TS 10 / 0.4 kV / kV "Self-service"	ROP-CAC-5636-WA-3/2020 10.04.2020.		
Connection line 1 kV for residential building on plot number 1959/5 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	ROP-CAC-7488-LOC-1/2020 07.04.2020.		
Connection line 1 kV for residential building on plot number 1959/5 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	ROP-CAC-7488-ISAW-2/2020 13.04.2020.		
Connection line 1 kV for residential building on plot number 1959/5 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	ROP-CAC-7488-WA-3/2020 28.04.2020.		
Connection line 1 kV for power supply of the existing KPK on the business facility Moka on kp number 2247/5 KO Čačak from TS 10 / 0.4 kV / kV "Bogdan Kapelan"	ROP-CAC-8096-LOC-1/2020 10.04.2020.		
Connection line 1 kV for power supply of the existing KPK on the business facility Moka on kp number 2247/5 KO Čačak from TS 10 / 0.4 kV / kV "Bogdan Kapelan"	ROP-CAC-8096-ISAW-2/2020 24.04.2020.		
Connection line 1 kV for power supply of the existing KPK on the business facility Moka on kp number 2247/5 KO Čačak from TS 10 / 0.4 kV / kV "Bogdan Kapelan"	ROP-CAC-8096-WA-3/2020 22.05.2020.		
Connection line 1 kV for business - residential building on kp number 346 KO Čačak from TS 10 / 0.4 kV / kV "Lomina"	ROP-CAC-7440-LOCH-2/2020 13.04.2020.		

Connection line 1 kV for business - residential building on kp number 346 KO Čačak from TS 10 / 0.4 kV / kV "Lomina"	ROP-CAC-7440-ISAW-3/2020 27.05.2020.		
Connection line 1 kV for business - residential building on kp number 346 KO Čačak from TS 10 / 0.4 kV / kV "Lomina"	ROP-CAC-7440-WA-4/2020 17.06.2020.		
Connection KV 1 kV for supplying IMO to kp number 6221/2 KO Čačak from TS 10 / 0.4 kV / kV "Sloboda naselje"	ROP-CAC-8481-LOC-/2020 21.04.2020.		
Connection KV 1 kV for supplying IMO to kp number 6221/2 KO Čačak from TS 10 / 0.4 kV / kV "Sloboda naselje"	ROP-CAC-8481-WA-3/2020 10.07.2020.		
Connection KV 1 kV for supplying IMO to kp number 6221/2 KO Čačak from TS 10 / 0.4 kV / kV "Sloboda naselje"	ROP-CAC-8481-ISAW-2/2020 13.05.2020.		
Connection line 1 kV for residential building on plot number 6941 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	ROP-CAC-9328-LOC-1/2020 08.05.2020.		
Connection line 1 kV for residential building on plot number 6941 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	ROP-CAC-9328-ISAW-2/2020 19.05.2020.		
Connection line 1 kV for residential building on plot number 6941 KO Čačak from TS 10 / 0.4 kV / kV "Birčaninova"	ROP-CAC-9328-WA-3/2020 16.06.2020.		
Connection line 1 kV for business facility "Mizzoni papir" on kp number 4458/106 KO Čačak from TS 10 / 0.4 kV / kV "Mireks"	ROP-CAC-12387-LOC-1/2020 15.06.2020.		
Connection line 1 kV for business facility "Mizzoni papir" on kp number 4458/106 KO Čačak from TS 10 / 0.4 kV / kV "Mireks"	ROP-CAC-12387-LOCA-1/2020 01.07.2020.		
Connection line 1 kV for business facility "Mizzoni papir" on kp number 4458/106 KO Čačak from TS 10 / 0.4 kV / kV "Mireks"	ROP-CAC-12387-ISAW-4/2020 08.07.2020.		
Connection line 1 kV for business facility "Mizzoni papir" on kp number 4458/106 KO Čačak from TS 10 / 0.4 kV / kV "Mireks"	ROP-CAC-12387-WA-5/2020 16.07.2020.		
Connection line 1 kV for residential building on kp number 1308 KO Čačak from TS 10 / 0.4 kV / kV "Kneza Miloša 3"	ROP-CAC-12397-LOC-1/2020 16.06.2020.		
Connection line 1 kV for residential building on kp number 6939 KO Čačak from TS 10 / 0.4 kV / kV "Kneza Miloša 3"	ROP-CAC-14193-LOC-1/2020 03.07.2020.		
Connection line 1 kV for residential building on kp number 6939 KO Čačak from TS 10 / 0.4 kV / kV "Kneza Miloša 3"	ROP-CAC-14193-ISAW-2/2020 10.07.2020.		
Connection line 1 kV for residential building on kp number 6939 KO Čačak from TS 10 / 0.4 kV / kV "Kneza Miloša 3"	ROP-CAC-14193-WA-3/2020 21.07.2020.		
Connection line 1 kV for residential building on kp number 6937 KO Čačak	ROP-CAC-12397-ISAW-2/2020 16.07.2020.		

from TS 10 / 0.4 kV / kV "Kneza Miloša 3"			
Connection line 1 kV for residential building on kp number 6937 KO Čačak from TS 10 / 0.4 kV / kV "Kneza Miloša 3"	ROP-CAC-12397-WA-3/2020 27.07.2020.		
Connection line 1 kV for power supply of the facility on kp number 1571 KO Ivanjica from TS 10 / 0.4 kV / kV "Number 4"	ROP-IVA-8616-WA-3/2020 29.06.2020.		
Connection line 1 kV for a residential building on plot number 365 KO Čačak in st. Bate Janković from TS 10 / 0.4 kV / kV "Craft Quarter"	ROP-CAC-16273-LOC-1/2020 22.07.2020.		
Connected electricity KV 1 kV for a residential building on kp number 365 KO Čačak in st. Bate Janković from TS 10 / 0.4 kV / kV "Craft Quarter"	ROP-CAC-16273-ISAW-2/2020 06.08.2020.		
Connected electricity KV 1 kV for a residential building on kp number 365 KO Čačak in st. Bate Janković from TS 10 / 0.4 kV / kV "Craft Quarter"	ROP-CAC-16273-WA-3/2020 17.08.2020.		
Connected electricity KV 1 kV for a residential building on kp number 365 KO Čačak in st. Bate Janković from TS 10 / 0.4 kV / kV "Craft Quarter"	ROP-CAC-16273-GR-4/2020 16.12.2020.		
Connected power KV 1 kV for residential building on kp number 918 and 919 KO Čačak from TS 10 / 0.4 kV / kV "Braće Glišić"	ROP-CAC-22641-LOC-1/2020 07.09.2020.		
Connected power KV 1 kV for residential building on kp number 918 and 919 KO Čačak from TS 10 / 0.4 kV / kV "Braće Glišić"	ROP-CAC-22641-ISAW-2/2020 16.09.2020.		
Connected power KV 1 kV for residential building on kp number 918 and 919 KO Čačak from TS 10 / 0.4 kV / kV "Braće Glišić"	ROP-CAC-22641-WA-3/2020 28.09.2020.		
Connected power KV 1 kV for power supply IMO "BS" at kp number 331/5 KO Konjevići from TS 10 / 0.4 kV / kV "Toyota"	ROP-CAC-26370-LOC-1/2020 24.09.2020.		
Connecting underground power cable line 1 kV for MBTS 10 / 0.4 kV / kV "TOYOTA" in Konjevići	ROP-CAC-22076-ISAW-2/2020 07.10.2020.		
Connecting underground power cable line 1 kV for MBTS 10 / 0.4 kV / kV "TOYOTA" in Konjevići	ROP-CAC-26370-WA-3/2020 22.10.2020.		
Connected power KV 1 kV for business facility on kp number 5970/6 KO Čačak from TS 10 / 0.4 kV / kV "Elementary school Ratko Mitrović"	ROP-CAC-28765-LOC-1/2020 28.10.2020.		
Connected power KV 1 kV for business facility on kp number 5970/6 KO Čačak from TS 10 / 0.4 kV / kV "Elementary school Ratko Mitrović"	ROP-CAC-28765-ISAW-2/2020 15.11.2020.		
Connected power KV 1 kV for business facility on kp number 5970/6 KO Čačak from TS 10 / 0.4 kV / kV "Elementary school Ratko Mitrović"	ROP-CAC-28765-WA-3/2020 24.11.2020.		

Connected power KV 1 kV for IMO power supply at kp number 1574/2 KO Trbušani from TS 10 / 0.4 kV / kV "Prijevorska 3"	ROP-CAC-29723-LOC-1/2020 03.11.2020.		
Connected power KV 1 kV for IMO power supply at kp number 1574/2 KO Trbušani from TS 10 / 0.4 kV / kV "Prijevorska 3"	ROP-CAC-29723-ISAW-2/2020 17.11.2020.		
Connected power KV 1 kV for IMO power supply at kp number 1574/2 KO Trbušani from TS 10 / 0.4 kV / kV "Prijevorska 3"	ROP-CAC-29723-WA-3/2020 30.11.2020.		
Connected power KV 1 kV for power supply of residential building on kp number 60 KO Čačak from TS 10 / 0,4 kV / kV "Ljubićska"	ROP-CAC-31599-LOCH-2/2020 20.11.2020.		
Connected power KV 1 kV for power supply of residential building on kp number 60 KO Čačak from TS 10 / 0,4 kV / kV "Ljubićska"	ROP-CAC-31599-ISAW-3/2020 02.12.2020.		
Connected power KV 1 kV for power supply of residential building on kp number 60 KO Čačak from TS 10 / 0,4 kV / kV "Ljubićska"	ROP-CAC-31599-WA-4/2020 14.12.2020.		
Connected power KV 1 kV for power supply of residential building on kp number 49/1 KO Čačak from TS 10 / 0,4 kV / kV "Ratko Stefanović"	ROP-CAC-33180-LOC-1/2020 26.11.2020.		
Power kV 1 kV on the part of the route of the 4 MNN outlet from TS 10 / 0.4 kV / kV "Dragisa Misovic School"	ROP-CAC-35677-LOC-1/2020 23.12.2020.		
Power kV 1 kV on the part of the route of the 4 MNN outlet from TS 10 / 0.4 kV / kV "Dragisa Misovic School"	ROP-CAC-35677-ISAW-2/2020 24.12.2020.		
Connected power KV 1 kV for supplying IMO to kp number 4/6 KO Čačak from TS 10 / 0.4 kV / kV "VTŠ"	ROP-CAC-37567-LOC-1/2020 24.12.2020.		
ED UŽICE			
Cable line 10kV line TS Airport 1 - TS Flight control	Decision according to Article 145 number 351-561 / 20-02 dated 29/10/2020		
KBTS 10 / 0.4 kV Airport 1 no.	ROP-BBA-24043-ISAWHA-2/2020 dated 29/09/2020		
1 kV connection cable for Garni hotel "SIESTA", Krčagovo, Užice	Decision under Article 145 no.351-443/20 -02 dated 29/10/2020		
1 kV connection cable for Kindergarten "Poletarac", Užice	Decision under Article 145 no.351-63/20-02 dated 14/04/2020		
1 kV connection cable for Final Inženjering, Užice	Decision under Article 145 no.351-44/20 -02 dated 9/03/2020		
1 kV connection cable for the building Tešić Srdana, Užice	Decision under Article 145 no.351-587/20 -02 dated 30/10/2020		
STS 10 / 0.4 kV Jugo-Frigo, Bela Zemlja, Užice	Decision under Article 145 no.351-246/20 -02 dated 10/08/2020		
STS 10 / 0.4 kV Jakovljevin with 10kV connection line, Užice	Decision under Article 145 no.351-77/20 -02 dated 27/04/2020		

Čajetina Plant			
Substation 35/10 kV Zlatibor 1 new	Decision under Article 145 no.351-369/2020-03 dated 28/09/2020		
TS 10 / 0.4 kV Transkop, and power supply 10 kV Vod	Decision under Article 145 no.351-560/2020-03 dated 30/12/2020		
TS 10 / 0.4 kV Aćimovića Gaj 2, and 10 kV supply line	Decision under Article 145 no.351-583/2020-03 dated 17/12/2020		
TS 10 / 0.4 kV Titova vila 1, and power supply 10 kV Vod	Decision under Article 145 no.351-369/2020-03 dated 28/09/2020		
KV 1 kV with TS Transkop 2	Decision under Article 145 no.351-560/2020-03 dated 23/12/2020		
KV 1 kV from TS Čolovića Vrdo 2	Decision under Article 145 no.351-133/2020-03 dated 8/05/2020		
KV 1 kV with TS Titova Vila 1	Decision under Article 145 no.351-536/2020-03 dated 2/12/2020		
Substation 10 / 0.4 kV Pašića Livada 2	Decision under Article 145 no.351-528/2020-03 dated 27/11/2020		
KV 1 kV Connection for EAGLE CONCSTRUKCION	Decision under Article 145 no.351-472/2020-03 dated 5/11/2020		
KV 1 kV with TS VIP CASA	Decision under Article 145 no.351-252/2020-03 dated 2/07/2020		
KV 1 kV Connection for Mičić Ivana	Decision under Article 145 no.351-340/2020-03 dated 1/12/2020		
KV 1 kV Connection for Marble and Granite	Decision under Article 145 no.351-3/2020-03 dated 07/7/2020		
KV 1 kV Connection for Mičić Border	Decision under Article 145 no.351-265/2020-03 dated 07/7/2020		
KV 1 kV Connection for SI Construction	Decision under Article 145 no.351-244/2020-03 dated 07/7/2020		
KV 1 kV Connection for the Municipal Administration of Čajetina	Decision under Article 145 no.351-253/2020-03 dated 29/6/2020		
Skilled 1 kV Connection for Terzić Predraga Čajetina	Decision under Article 145 no.351-312/2020-03 dated 29/6/2020		
KV 1 kV Connection for ZOFIKS	Decision under Article 145 no.351-396/2020-03 dated 2/10/2020		
Plant Nova Varoš			
MBTS 10 / 0.4 kV Balloon Hall with connecting cable water 10kV	Decision under Article 145 no. ROP-NVA-26562-ISAW- 7/2020 Registration number 351- 129/2020-06 dated 26/8/2020		
SBTS 10 / 0.4 kV Debelja Huts with 10kV connection line	Decision under Article 145 no. ROP-NVA-25670-ISAWA- 2/2020		

	Registration number 351-88/2020-06 dated 09/6/2020		
Prijepolje plant			
Connecting 1kV cable lines, 2x RRP00-A 4x150mm ² from TS 10 / 0.4kV "Banka" to the residential and business building, parcel no. 595, 723 and 601 K.O. Prijepolje	Decision under Article 145 no. 353-77/2020 dated 8/6/2020		
Reconstruction and adaptation of substation TS 10 / 0.4kV "Banka"	Decision under Article 145 no. 353-69/2020 dated 22/5/2020		
Relocation of the existing 10 kV line TS 10 / 0.4kV "Iris" - TS 10 / 0.4kV "Bank" and unbundling of the LV network, Valterova Street	Decision under Article 145 no. 353-57/2020 dated 29/4/2020		
Connecting 1kV cable line, RR00-A 4x150mm ² from TS 10 / 0.4kV "Svetlost" to the residential and business building, on parcel plots no. 229, 215/1, 203 and 195/2 K.O. Prijepolje	Decision under Article 145 no. 353-202/20 dated 11/12/2020.		
Connecting 1kV cable lines RR00-A 3x (4x150) mm ² of 10 / 0.4kV "Svetlost 2" to the residential and business building on parcel no. 332/1 K.O. Prijepolje	Decision under Article 145 no. 353-49/2020 dated 2/4/2020		
Construction of TS 10 / 0.4 kV "Popadić Potok 2" on the floor. plots 2465/8, K.O. Prijepolje with two connecting cable lines 10kV on the floor. plots 2465/2, 2465/8, K.O. Prijepolje, cable line 1kV from TS 10 / 0.4, kV "Popadića potok 2" to RO-4 and RO-4 on the first floor of plot no. 2465/8, 2465/2, 2465/5, K.O. Prijepolje, cable line 1kV from TS 10 / 0.4kV "Popadića potok 2" to RO-4 and RO-4 on the floor. plots no. 2465/8, 2465/2, 2464/3, two cable lines 1 kV from TS 10 / 0.4 kV "Popadića potok 2" to KPK on cat. Plots No. 2465/8, 2465/2, 2464/7, 2464/6 K.O. Prijepolje	Decision under Article 145 no. 353-197/20 dated 2/12/2020.		
Bajina Basta plant			
Double cable line 10kV line from TS 35/10 kV Bajina Bašta - TS 10 / 0.4 kV Ekmešćići		Request for issuance of location conditions ROP-BBA-34408-LOC-1/2020 dated 19.11.2020.	
10 kV transmission line from TS 10 / 0.4 kV Ekmešćići - TS 30/10 kV Zlodol		Request for issuance of location conditions ROP-BBA-31136-LOCH-2/2020 dated 25.12.2020.	
10 kV transmission line for TS 10 / 0.4 kV Rača 2		Obtained location conditions ROP-BBA-13255-LOC-1/2020 from 23.12.2020. This is a conceptual design	
10 kV transmission line for Rogatica		Request for issuance of location conditions ROP-LOC-421996/2020 dated 29.12.2020	
Cable line 1kV with TS 10 / 0.4 kV Keserovača		Request for issuance of location conditions ROP-BBA-10846-LOCH-2/2020 dated August 26, 2020	
Cable line 10kV line from TS 35/10 kV Perućac - TS 10 / 0.4 kV Seat		Ongoing preparation of project documentation	
Cable line 10kV line for TS 10 / 0.4 kV Bjeluša 2	Decision under Article 145 no. ROP-BBA-15144-ISAW-2/2020 dated 27/11/2020		

Cable line 10kV line from TS 10 / 0.4 kV Dam Lazići - OHL pole		Obtained location conditions ROP-BBA-26585-LOCH-2/2020 from 10.12.2020. This is a conceptual design	
MBTS 10 / 0.4 kV Lakes		Obtained location conditions ROP-BBA-15794-LOC-1/2020 from 17.08.2020. This is a conceptual design	
MBTS 10 / 0.4 kV Lug 3		Ongoing preparation of project documentation	
SBTS 10 / 0.4 kV Balače		Obtained location conditions ROP-BBA-15147-LOC-1/2020 dated 12.08.2020. This is a conceptual design	
SBTS 10 / 0.4 kV Bjeluša 2		Obtained location conditions ROP-BBA-15149-LOC-1/2020 dated 07.08.2020. This is a conceptual design	
SBTS 10 / 0.4 kV Krivi vir		Decision under Article 145 no. ROP-BBA-15151-ISAW-3/2020 dated 30.11. 2020	
SBTS 10 / 0.4 kV Jelisavčići 3		Ongoing preparation of project documentation	
Arilje Plant			
TS10 / 0,4kV „STETESK“ 1x1000 (630) kVA on KP 16/45 cadastral municipality Arilje	Decision under Article 145 no.16-421618/1-2020 dated 19/5/2020		
Connection cable 1kV line for residential and business building "REX-TRANS" Arilje	Decision under Article 145 no.16-421844/1-2020 dated 13/8/2020		
STS 10 / 0.4kV 1x250kVA "KATMAR" with connection line 10kV	Decision under Article 145 no.15-161009-20 dated 10/7/2020		
MXE "JOVANOVIĆI DOBRAČE" "VSP Energi" d.o.o Lučani	Decision no.Д.09.15-31471/1-2020 dated 12/2/2020		
TS10 / 0,4kV „STETESK“ 1x1000 (630) kVA on KP 16/45 cadastral municipality Arilje	Decision under Article 145 no.16-421618/1- dated 19/5/2020		
Kosjerić plant			
STS 10 / 0.4 kV Godljevo 1 with 10kV connection line and 1kV line for connection to the existing LV network	Decision under Article 145 no.351–204/2020 dated 6/11/2020		
Priboj plant			
KV 10 kV TS 35 Priboj 1 - Luka	Decision under Article 145 no.ROP-PRI-24542-ISAW-1/2020 dated 11/9/2020		
Požega Plant			
Cable line "KV 1kV TS 10 / 0,4kV Čirjanići - NNM with TS 10 / 0,4kV Solila"	Decision under Article 145 no.351–166/2019 dated 20/5/2020		
Cable line 10 kV "OHL 10kV Jeminska Stena - TS10 / 0.4kV Pan Komerc"	Decision under Article 145 no.351–141/2019 dated 24/4/2020		
Cable line "KV 10 and 1kV TS 10 / 0,4kV Frigo Paun - TS 10 / 0,4kV Erića Potok"	Decision under Article 145 no.351–142/2019 dated 24/4/2020		
Cable line 10 kV "TS 10 / 0.4kV Zelenac - TS10 / 0.4kV Zelenac 1"	Decision under Article 145 no.351–128/2019 dated 22/4/2020		
10 kV connection cable line, STS 10 / 0.4 kV "Bajić Dragić (Rubin)"	Decision under Article 145 no.351–119/2020 dated 24/4/2020		
10 kV connection cable line and MBTS 10 / 0.4 kV 1x1000kVA "MATERIAL RESERVES"	Decision under Article 145 no.351–348/2020 dated 7/10/2020		

10 kV connection cable line, STS 10 / 0.4 kV „Vukolić Srećko	Decision under Article 145 no.351–226/2020 dated 21/7/2020		
RESIDENTIAL - OFFICE BUILDING, POŽEGA, VOJVODE MIŠIĆA bb for financier: Nenad Subotić,	Decision under Article 145 no.ROP-POZ-23217-ISAWHA- 2/2020 dated 18/9/2020		
1 kV connection cable line, TS 10 / 0.4 kV "Zeleni pijac" - MO "Residential and business building Tilija"	Decision under Article 145 no.351–489/2020 dated 16/12/2020		
ED ŠABAC			
MV 20 and 0.4 kV for power supply BSTS 20 (10) /0.4 kV Jelenča 13 and LV network in Pop Lukina Street in Jelenča	ROP-SAB-6366-ISAW-1/2020 dated 12/3/2020		
Connection OHL 20kV for power supply of TS Subotica 6 in Subotica	ROP-KOC-11966-ISAW- 1/2020 dated 27/5/2020.		
MBTS 20 / 0,4kV Vladimirci 13, double connecting cable line 20kV in Belgrade road in Vladimirci	ROP-VLA-350-ISAW-1/2020 od dated 15/1/2020		
Overhead connection OHL 20kV Bogatić-Sovljak from disconnector to post.DV in Bogatić to post.TS Sovljak 2 in Sovljak	ROP-BOG-8960-ISAW-1/2020 dated 27/4/2020.		
BSTS 20 / 0,4kV Subotica 6 and connection line 0,4kV on kp.br120 KO Subotica in Subotica	ROP-KOC-11963-ISAW- 1/2020 dated 27/5/2020		
BSTS 20 / 0.4kV Badovinci 31 in Badovinci	ROP-BOG-36779-ISAW- 2/2019 dated 3/1/2020		
BSTS 20 / 0,4kV Mrovska 3 with connecting OHL 20kV and overhead MNN in Mrovska	ROP-VLA-12330-ISAW-1/2020 dated 4/6/2020		

3.2. Monitoring and environmental impact

Factors that DP Distribucija Kraljevo affects the environment are:

- **Electromagnetic fields**
- **Noise in the environment**
- **Waste**
- **Surface and groundwater quality**
- **Land quality**

3.2.1. Electromagnetic fields

Electromagnetic field measurements were performed at 1 location in 2020 and are presented in Table 191.

Table 191

DISTRIBUTION AREA KRALJEVO			
Electromagnetic field in the environment in 2020			
Branch	Source and position sources in space	electrical field	Magnetic field
		E_{max} V/m	B_{max} μ T
ED Lazarevac	TC 35 / 10kV "Lazarevac 2" Examination of human exposure to non-ionizing low frequency radiation in the environment	399,1 V/m	1,40 μ T
		E (V/m)	B (μ T)
DIN / VDE 1995 –Germany		-	-
NRPB 1993 - United Kingdom		12	1.600
CENELEC 1995 - European prestandard		12	640
ICNIRP 1998 - International recommendations		5	100

3.2.2. Noise in the environment

Environmental noise measurements in 2020 were performed at 7 locations shown in Table 192.

Table 192

DISTRIBUTION AREA KRALJEVO								
Noise in the environment in 2020								
No	Branches Measuring point and measuring point	Mode	Daily measurements		Night measurements		Permissible noise level in (dB (A))	
			Leq (dB(A))	LA (dB(A))	Leq (dB(A))	LA (dB(A))	Daily measurements	Night measurements
1.	ED Kraljevo-Raška, Predraga Vilimonovića 15, apartment 24 TS 10 / 04kV Raska Report no. 24-2-1633 / 6 dated 21 February 2020.	I shift	28	35	32	35	35	30
2.	ED Kraljevo-Raška, Predraga Vilimonovića 15, apartment 24 TS 10 / 04kV Raska Report no. 24-2-1633 / 14 from 07.08.2020.	I shift	33	35	35	34	35	30
3.	ED Kraljevo-Raška, Predraga Vilimonovića 15, apartment 24 TS 10 / 04kV Raska Report no. 24-2-1633 / 618 dated 15.10.2020.	I shift	27	27	28	28	35	30
4.	ED Kraljevo, Ribnica SS 110/35 / 10kV Kraljevo 6	I shift	50	46	45	44	55	4
5.	ED Cacak, Gornji Milanovac, Nevada Substation 110 / 35kV Gornji Milanovac	I shift	50	44	49	43	55	45
6.	ED Krusevac, Kosovska bb SS 110/35 / 10kV Kruševac 3	I shift	52	44	47	44	55	45
7.	ED Lazarevac, st. Branka Radičevića br.49 Substation 35/10 kV Lazarevac 2	I shift	21	20	21	20	35	30

3.2.3. Waste

Characterization, categorization and partial disposal of waste performed in 2020 are shown in Table 189.

Table 189

DISTRIBUTION AREA KRALJEVO																	
Waste types generated in 2020																	
SERIAL NUMBER	Rulebook on categories, testing and classification of waste ("Official Gazette of RS" No. 56/2010 and 93/2019).	INDEX NUMBER	UNIT OF MEASURE	Branch													NOTE
				Managemen t	ED Arandjelova	ED Valjevo	ED Jagodina	ED Kraljevo	ED Kruševac	ED Lazarevac	ED Loznica	ED Novi Pazar	ED Čačak	ED Uzice	ED Sabac	IN TOTAL: DP KRALJEVO	
				AMOUNTS													
1.	Sulfuric acid	06 01 02*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste sulfuric acid
2.	Base KON	06 02 04*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste KON
3.	Waste toners	08 03 18	t	1.88	0,000	0,000	0,000	0,000	0,000	0,020	0,000	0,000	0,000	0,500	0,000	2,400	Worn toners
4.	Insulating and heat transfer oils containing PCBs	13 03 01*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Contaminate d PCB oils
5.	Mineral non-chlorinated engine oils, transmission oils and lubricants	13 02 05*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Motor oil
6.	Non-chlorinated mineral oils, for insulation and heat transfer	13 03 07*	t	0,000	0,000	0,000	0,000	0,000	0,000	7,700	0,000	0,000	0,000	0,000	0,000	7,700	Transformer oil
7.	Packaging that contains residues of hazardous substances or is contaminated with hazardous substances	15 01 10*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,020	0,000	0,000	0,000	0,000	0,000	0,020	Waste contaminated PVC packaging from chemicals
8.	Absorbents, filter materials (including oil filters not otherwise specified), wipes, protective clothing, contaminated with hazardous substances	15 02 02*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,050	0,000	0,000	0,000	0,000	0,000	0,050	Oil-contaminated waste absorbents
9.	Waste tires	16 01 03	t	0,000	0,000	0,140	0,000	0,200	0,000	0,220	0,100	0,700	0,290	0,66	0,000	2,310	Old car tires
10.	Waste vehicles	16 01 04*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Old vehicles



11.	Waste vehicles that do not contain liquids or other hazardous substances	16 01 06	t	0,000	1,640	1,500	27,200	0,000	0,000	0,000	0,000	0,000	0,000	0,000	2,500	32,840	Old vehicles
12.	Oil filters	16 01 07	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,100	0,000	0,100	Old filters
13.	Antifreeze containing dangerous substances	16 01 14*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Antifreeze
14.	Transformers and capacitors containing PCBs	16 02 09*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	PCB contaminated equipment
15.	Discarded equipment other than that specified in 16 02 09 to 16 02 13	16 02 14	t	0,000	0,000	0,000	1,100	0,840	0,000	0,000	0,000	0,000	0,000	30,000	0,000	31,940	Old transformers
16.	Lead batteries	16 06 01*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,030	0,000	0,000	0,000	0,000	0,000	0,030	
17.	Nickel-cadmium batteries	16 06 02*	t	0,000	0,000	0,000	0,000	0,200	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,200	Waste nickel-cadmium batteries
18.	Concrete	17 01 01	t	0,000	0,000	0,000	0,500	0,000	0,000	0,510	0,000	0,000	2,600	0,000	0,000	3,610	Old concrete pillars
19.	Tile and ceramics	17 01 03	t	0,000	0,500	0,000	0,020	0,000	0,000	0,000	0,000	0,000	0,300	0,000	0,000	0,820	Ceramics
20.	Plastic	17 02 03	t	0,000	0,000	0,020	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,020	Waste plastic
21.	Copper	17 04 01	t	0,000	0,000	0,000	0,000	0,66	0,000	0,000	0,05	0,000	0,000	0,05	0,000	0,76	Pure piece copper and copper wire
22.	Copper Aluminum	17 04 01 17 04 02	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Copper lacquer
				0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Scrap aluminum
23.	Iron and steel	17 04 05	t	0,000	0,200	0,050	0,950	3,200	0,000	0,62	0,540	2,770	65,680	15,410	0,010	89,430	Waste parts of TS equipment, etc.
24.	Mixed metals	17 04 07	t	0,000	3,490	0,000	1,940	4,700	3,500	3,540	4,720	0,000	0,000	25,000	0,430	47,320	Al-Fe rope
25.	Cables containing oil, oil tar and other hazardous substances	17 04 10	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Oiled cables
26.	Cables other than those mentioned in 17 04 10	17 04 11	t	0,000	0,200	0,280	0,000	0,000	0,000	0,970	0,050	0,000	0,000	0,000	0,000	1,500	Waste Al cables



27.	Cables other than those mentioned in 17 04 10 Insulating materials other than those mentioned in 17 06 01 and 17 06 03	17 04 11 17 06 04	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,900	0,900	Waste copper cables
				0,000	0,000	0,000	0,000	1,260	0,000	0,520	0,000	0,000	0,000	0,000	0,000	0,000	1,780	Old insulators
28.	Building material containing asbestos	17 06 05*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Asbestos barriers, slabs, etc.
29.	Paper and cardboard	20 01 01	t	0,000	0,000	0,010	0,000	0,000	0,000	0,150	0,000	0,000	0,000	0,000	0,000	0,000	0,160	Old paper and cardboard
30.	Fluorescent tubes and other wastes containing mercury	20 01 21*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste fluorescent tubes
31.	Discarded electrical and electronic equipment other than that specified in 20 01 21 and 20 01 23 containing dangerous components	20 01 35*	t	0,000	0,000	0,580	0,200	0,000	0,000	0,170	0,000	0,000	0,000	0,500	0,030		1,470	Computers, monitors
32.	Rejected electric and electronic equipment other than the stated in 20 01 21, 20 01 23 and 20 01 35	20 01 36	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	EEO not containing the hazardous components
33.	Wood containing hazardous substances	20 01 37*	t	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	Waste water proof poles-black water-proofing
34.	Wood other than in 20 01 37	20 01 38	t	0,000	0,000	0,000	1,000	0,000	0,000	0,000	0,000	0,000	0,000	17,550	0,000	0,000	18,550	Waste water proof poles-green water-proofing
35.	Bulky waste	20 03 07	t	1,120	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,180	0,000	0,000		1,300	Old furniture and joinery, etc.
36.	Oily water	13 08 02*	t	0,000	0,000	0,000	0,000	43,340	43,500	0,000	14,460	0,000	22,840	24,180	0,000		148,320	Waste water from oil pits

3.2.4. Surface, ground waters and soil monitoring

During 2020, a visit of several substations was conducted in order to inspect the condition of oil pits and sumps, all with the aim of collecting data for possible reconstructions thereof and the installation of separators at those locations. On that occasion, in accordance with the indicated need, soil sampling from 18 locations was performed.

3.3. Working Environment Monitoring, Occupational Health and Safety

Occupational Health and Safety Reports for 2020 include the following activities:

- **Working environment monitoring**
 - Working environment noise measurements
 - Working environment electromagnetic fields
 - Working environment parameters
- **Safety**
 - Training of employees
 - Occupational injuries
- **Healthcare**

3.3.1. Working Environment Monitoring

- **Working environment noise measurement**

Noise measurements in working environment were not performed in 2020.

- **Electromagnetic fields in working environment**

Measurements of electric and magnetic field levels were not performed in 2020.

- **Working environment parameters**

In 2020, working environment parameters were not measured in business facilities of branches of DA Kraljevo.

3.3.2. Occupational safety

- **Training of employees**

Training of employees is carried out in accordance with the Occupational Safety Training Program. Knowledge testing of the employees on the positions with increased risk is performed every fifth year in accordance with the Risk Assessment Act.

Training of employees is shown in Table 190, and it includes both the training of new employees and the training for the employees for specific expert positions.

Table 190

DISTRIBUTION AREA KRALJEVO					
Training of employees in 2020					
Branch/Facility	Number of employees	For training		Trained	
		Number	%	Number	%
ED Arandelovac	32				
Occupational health and safety training		15	46,88	15	100,00
ED Valjevo	50				
Occupational health and safety training		29	58,00	29	100,00
ED Jagodina	75				
Occupational health and safety training		49	65,33	49	100,00

Fire protection training		51	68,00	51	100,00
ED Kraljevo	68				
Occupational health and safety training		10	14,71	10	100,00
ED Kruševac	94				
Occupational health and safety training		10	10,64	10	100,00
Fire protection training		58	61,70	58	100,00
ED Lazarevac	43				
Occupational health and safety training		15	34,88	15	100,00
ED Loznica	63				
Occupational health and safety training		48	76,19	48	100,00
ED Novi Pazar	48				
Occupational health and safety training		11	22,92	11	100,00
Fire protection training		47	97,92	47	100,00
ED Užice	141				
Occupational health and safety training		101	71,63	101	100,00
Fire protection training		40	28,37	40	100,00
ED Čačak	120				
Occupational health and safety training		76	63,33	76	100,00
Fire protection training		13	10,83	13	100,00
ED Šabac	43				
Occupational health and safety training		31	72,09	31	100,00
HQ	109				
Occupational health and safety training		20	18,35	20	100,00
TOTAL: DISTRIBUTION AREA KRALJEVO	886	415	46,84	415	100,00
Occupational health and safety training	886	151	17,04	151	100,00

Occupational injuries

Data on occupational injuries in 2020 are provided in Table 191.

Table 191

DISTRIBUTION AREA KRALJEVO						
Occupational injuries in 2020						
Branch/Facility	Number of employees	Injuries in relation to the number of employees				
		Mild	Severe	Fatal	Total	%
ED Arandelovac	32	1	0	0	1	3,13
ED Valjevo	50	0	0	0	0	0,00
ED Jagodina	75	2	10	0	12	16,00
ED Kraljevo	68	1	0	0	1	1,47
ED Kruševac	94	1	0	0	1	1,06
ED Lazarevac	43	1	0	0	1	2,33
ED Loznica	63	0	0	0	0	0,00
ED Novi Pazar	48	0	0	0	0	0,00
ED Užice	141	3	2	0	5	3,55
ED Čačak	120	3	2	0	5	4,17
ED Šabac	43	0	1	0	1	2,33
HQ of DA	109	0	0	0	0	0,00
TOTAL: DISTRIBUTION AREA KRALJEVO	886	12	5	0	17	1,92

3.3.3. Healthcare

Results of periodic examinations are given in Table 192.

Табела 192

DISTRIBUTION AREA KRALJEVO											
Work capability of employees in 2020											
Branch/Facility	Number of employees	Periodic examination				For work					
		Referred to examination		Examined/ Referred		Capable		Limited capability		Not capable	
		No.	%	No.	%	No.	%	No.	%	No.	%
ED Arandelovac	32	20	62,50	19	95,00	19	100,00	0	0,00	0	0,00
ED Valjevo	50	29	58,00	28	96,55	24	85,71	3	10,71	1	3,57
ED Jagodina	75	47	62,67	47	100,00	42	89,36	5	10,64	0	0,00
ED Kraljevo	68	33	48,53	33	100,00	26	78,79	7	21,21	0	0,00
ED Kruševac	94	0	0,00	0	0,00	0	0,00	0	0,00	0	0,00
ED Lazarevac	43	28	65,12	28	100,00	27	96,43	0	0,00	1	3,57
ED Loznica	63	48	76,19	45	93,75	43	95,56	1	2,22	1	2,22
ED Novi Pazar	48	32	66,67	32	100,00	31	96,88	1	3,13	0	0,00
ED Užice	141	94	66,67	94	100,00	91	96,81	3	3,19	0	0,00
ED Čačak	120	70	58,33	69	98,57	61	88,41	7	10,14	1	1,45
ED Šabac	43	31	72,09	28	90,32	28	100,00	0	0,00	0	0,00
HQ of DA	109	18	16,51	18	100,00	17	94,44	1	5,56	0	0,00
TOTAL: DISTRIBUTION AREA KRALJEVO	886	450	50,79	441	98,00	409	92,74	28	6,35	4	0,91

3.4. Public complaints

Public complaints are given in Table 193.

Table 193

DISTRIBUTION AREA KRALJEVO			
Public complaints in 2020			
Organizational unit	Complaint (number and date) and the submitter thereof	Subject of the complaint	Actions taken
Branch Kraljevo-Raška Plant	Municipal Administration of the Municipality of Raska, Secretariat for Inspections, Department for Investments and Construction Land-Inspection for Environmental Protection, Decision No. 501-2510/20 dated 17.01.2020, as per the complaint of the tenant Biljana Malić.	1. Measurement of noise levels and preparation of reports for the substation 10/04kV in a residential building. 2. Measurements should be carried out in the apartment of Biljana Malić 3. Measurements should be carried out at night.	According to the Decision, the noise was measured, the Report was prepared and the remediation measures were carried out in order to reduce the excessive noise level as determined by measurement.
Branch Lazarevac	Belgrade City Administration, Secretariat for Inspections, Sector for Environmental Protection - Record No. X-09 501.9-1315/20 dated 28.09.2020, as per the complaint of Milorad Đokić	1. Measurement of noise levels in the reference apartment of Milorad Đokić in regular (normal) mode of operation of SS 35/10 kV "Lazarevac 2" and the Report is to be submitted to the inspector for review. Testing of non-ionizing radiation levels in the zone of SS 35/10 kV "Lazarevac 2".	According to the Record, the noise was measured and the Report was prepared. There was no exceeding in the measured noise level. Non-ionizing radiation testing was performed and the Report was prepared. There was no exceeding in the measured level of non-ionizing radiation.

4. DISTRIBUTION AREA KRAGUJEVAC

The structure of all facilities and systems within DA Kragujevac is shown in Table 194.

Table 194

DISTRIBUTION AREA KRAGUJEVAC												
Facilities and systems in 2020												
Branch	Power distribution Substations								Distribution network			
	110/10 KV	110/20 KV	110/35 KV	110/x/z KV	35/10 KV	20/0,4 KV	10/0,4 KV	Total:	Voltage level	Overhead in km	Cable in km	Distribution network total length in km
ED KRAGUJEVAC									110 kV	0,000	0,000	0,000
									35 kV	193,000	40,100	233,100
									20 kV	0,000	0,000	0,000
									10 kV	1.185,230	589,675	1.774,908
									1,0 kV	0,000	0,000	0,000
									0,4 kV	4.243,01	824,427	5.067,439
Total	1	0	1	5	14	0	916	937	Total	5.621,240	1.454,202	7.075,447
ED POŽAREVAC									110 kV	0,000	0,000	0,000
									35 kV	253,300	36,140	289,440
									20 kV	0,000	0,000	0,000
									10 kV	1.061,440	240,040	1.301,480
									1,0 kV	0,000	0,000	0,000
									0,4 kV	4.090,980	482,240	4.573,220
Total	0	0	4	0	23	0	927	954	Total:	5.405,720	758,420	6.164,14
ED SMEDEREVO									110 kV	2.06	0,000	2.06
									35 kV	179.55	30.64	210.19
									20 kV	0,000	0,000	0,000
									10 kV	861.619	229.115	1090.734
									1,0 kV	0,000	0,000	0,000
									0,4 kV	2,683.84	76.31	2760.15
Total	1	0	4	0	26	0	977	1.008	Total	3,727.069	336.065	4063.134
TOTAL: DISTRIBUTION AREA KRAGUJEVAC									110 kV	2,060	0,000	2,060
									35 kV	625,850	106,880	732,730
									20 kV	0,000	0,000	0,000
									10 kV	3.108,292	1.058,83	4.167,122
									1,0 kV	0,000	0,000	0,000
									0,4 kV	11.017,832	1.382,977	12.400,809
TOTAL	2	0	9	5	63	0	2.820	2.899	TOTAL	14.754,034	2.548,687	17.302,721

4.1. Overview and status of permits

The overview and status of permits, licenses and other required approvals as well as new requests for obtaining permits in 2020 are presented in Table 195.

Table 195

DISTRIBUTION AREA KRAGUJEVAC			
Permits Overview and Status in 2020			
Branch	Obtained approvals and permits (Number and date)	New Applications for obtaining new or extending the existing permits	Note
ED KRAGUJEVAC			
1 kV cable lines for connecting the facility in Laze Marinkovića St. No. 48-52, cp 5346/1, 5346/3, 5325/1, 5348 and 15804 CM KG 3	ROP-KRG-39449-ISAW-1/2019 10.01.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility on the corner of Luja Pastera St. and Dragana Simića St., on cp 3275/1 and 3273/1 CM KG 3 and the free-standing distribution cabinet (SRO) in Janka Veselinovića St.	ROP-KRG-39450-ISAW-1/2019 10.01.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in Svetozara Markovića St. No. 78, cp 3714/1 and 3744 CM KG 3	ROP-KRG-460-ISAW-1/2020 24.01.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in Save Nemanjića St. No. 5, cp 5008/2 CM KG 1	ROP-KRG-1702-ISAW-1/2020 31.01.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in Gavril Principa St. No.8, cp 2551 and 2554 CM KG 3	ROP-KRG-1703-ISAW-1/2020 31.01.2020		Decision on the approval of works performance
10 kV transmission line from the pole on cp 2649/1 CM Miraševac to the concrete pillar substation 1030 Miraševac, nn network in Miraševac	ROP-RAC-941-ISAWHA-2/2020 07.02.2020 351-16/2020-IV-02		Decision on the approval of works performance
1 kV cable lines for connecting the business facility (Kraft invest) in Grada Karare St. nn, cp 6569, 6551/6, 6551/3 and 6551/2 CM KG 4	ROP-KRG-2729-ISAW-1/2020 11.02.2020		Decision on the approval of works performance
1 kV cable lines for connecting the business facility (Car dealership Tasić) in Braće Nikolić St.	ROP-KRG-39253-ISAW-3/2020 21.02.2020		Decision on the approval of works performance
10 kV transmission line from SS No.200420 Drenjak to SS No.200272 Bešnjaja-the resort on Bešnjaja	ROP-KRG-3297-ISAWHA-2/2020 05.03.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in Crvenog barjaka St. No.7, cp 4120 and 4121 CM KG 3	ROP-KRG-5157-ISAWHA-2/2020 12.03.2020		Decision on the approval of works performance
10 kV cable line from SS KG013 Sobovica to SS 10/0.42 kV, 2×630 kVA, No. 200779 "Sobovica"	ROP-KRG-6326-ISAW-1/2020 13.03.2020		Decision on the approval of works performance
10 kV cable line for connecting the concrete pillar substation 10/0.42 kV, 1×250 kVA, No.1088 ĐURDEVO (PURE FRUIT)	ROP-RAC-8246-ISAW-1/2020 351-47/2020-IV-02 03.04.2020		Decision on the approval of works performance
1 kV cable lines for connecting the production hall and the business facility on the cadastral plot No. 6294/3, CM KG 4 "GRANIT" doo in Kragujevac	ROP-KRG-8582-ISAW-1/2020 09.04.2020		Decision on the approval of works performance
10 kV cable line for connecting the concrete pillar substation 10/0.42 kV, No.200828 "Rolosan" (cp 176, 177/4, 177/2, 177/3, 178/1, 187 CM Opornica)	ROP-KRG-9220-ISAW-1/2020 23.04.2020		Decision on the approval of works performance
Construction of the concrete pillar substation 10/0.42 kV No.200828 "Rolosan" on cp 186/12 CM: Opornica	ROP-KRG-10732-ISAW-1/2020 15.05.2020		Decision on the approval of works performance
1 kV cable lines for connecting the free-standing distribution cabinet (SRO) in Gavril Principa Street at	ROP-KRG-11299-ISAW-1/2020 21.05.2020		Decision on the approval of works performance

No. 14 and connecting the facility in 16 Gavrilica Principa Street			
1 kV cable lines for connecting the facility in 12 Gavrilica Principa Street, cp 4739,4745 CM KG 3	ROP-KRG-11297-ISAW-1/2020 22.05.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 17 Skerlićeva Street, cp 4302/2, 4309/1,4310/2,4717 CM KG 3	ROP-KRG-14044-ISAW-1/2020 18.06.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 32-36 Vojvode Putnika Street, cp 3256/1 CM KG 3	ROP-KRG-14610-ISAW-1/2020 22.06.2020		Decision on the approval of works performance
1 kV cable lines for connecting the PUBLIC GARAGE in Kneza Miloša Street nn, cp 2903/9, 2903/8, 2914/6 CM KG 3	ROP-KRG-16481-ISAW-1/2020 09.07.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 37 Skerlićeva Street, cp 4717, 4321 CM KG 3	ROP-KRG-17221-ISAW-1/2020 15.07.2020		Decision on the approval of works performance
35 kV cable lines from SS KG 001 Ilićevo to the distribution switchgear "DATA CENTAR"	ROP-KRG-16431-ISAW-1/2020 08.07.2020 ROP-KRG-16431-GR-2/2020 27.07.2020		Decision on the approval of works performance
10 kV cable lines for connecting SS 10/0.42 kV, 2x1250 kVA, No. 200827 "Apelacioni sud" in Kragujevac	ROP-KRG-19347-ISAW-1/2020 31.07.2020		Decision on the approval of works performance
1 kV cable lines for connecting the Healthcare facility in Dr Mihajlo Mika Marković Street No.1-ZASTAVINA AMBULANTA	ROP-KRG-19349-ISAW-1/2020 07.08.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 13 Andre Marinkovića Street, cp 4442/1, 4715, 4443 CM KG 3	ROP-KRG-29109-ISAW-1/2020 15.10.2020		Decision on the approval of works performance
1 kV cable lines for connecting the free-standing distribution cabinet (SRO) at the corner of Kralja Milana Street and Dalmatinska Street, cp 15260/1 CM KG 3	ROP-KRG-29110-ISAW-1/2020 15.10.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 6 Jadranska Street	ROP-KRG-29329-ISAW-1/2020 15.10.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 11 Vojvode Gligora Street, cp 5148, 5137 CM KG 3	ROP-KRG-29330-ISAW-1/2020 16.10.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility at the corner of Kralja Milana Street and Dalmatinska Street, cp 15260/1, 9363,9364,9365 and 9368 CM KG 3 and 4	ROP-KRG-29112-ISAW-1/2020 16.10.2020		Decision on the approval of works performance
Construction of the concrete pillar substation No. 200808 "Tomići" on cp 1095/1 CM Gornje Jarušice and 10 kV connecting overhead line with LV distribution network	ROP-KRG-27382-ISAW-1/2020 15.10.2020 ROP-KRG-27382-GR-2/2020 23.10.2020		Decision on the approval of works performance
Đurđevo relocation and cabling of part of OHL 10 kV SS 231015 Đurđevo river - pole on OHL 10 kV KG 06/4	ROP-RAC-30899-ISAW-1/2020 26.10.2020		Decision on the approval of works performance
Construction of the concrete pillar substation No. 200819 "Bojadžića mala" on cp 14550 CM:KG1, and 10 kV connecting overhead line	ROP-KRG-31446-ISAW-1/2020 02.11.2020		Decision on the approval of works performance
1 kV cable lines for connecting the free-standing distribution cabinet (SRO) in Daničićeva Street at No. 65 CP No. 4968, 5018 and 5028 CM: KG3	ROP-KRG-32887-ISAW-1/2020 09.11.2020		Decision on the approval of works performance

1 kV cable lines for connecting the facility in Kanicova Street nn, CP No.4961/43,4961/13,4961/17,4961/18.... CM:KG4	ROP-KRG-30575-ISAW-1/2020 04.11.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 70-72 Svetozara Markovića Street, cp 3732,3733,3714,3734,3742/1 CM KG 3	ROP-KRG-32888-ISAW-1/2020 10.11.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 17 Milice Srečković Street, cp 2338/1, 2405 CM KG 4	ROP-KRG-32260-ISAW-1/2020 07.12.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 6A Moravska Street, cp 3526/10,3526/7,3523/1,3548 CM KG 3	ROP-KRG-36259-ISAW-1/2020 08.12.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility in 65-69 Daničićeve Street, cp 5067,5068,5069 CM KG 3	ROP-KRG-36261-ISAW-1/2020 09.12.2020		Decision on the approval of works performance
Construction of the concrete pillar substation No. 242176 "Dragušica" - Knić on cp 6/1 CM: Dragušica, and 10 kV connecting transmission line	ROP-NKC-36263-ISAW-1/2020 08.12.2020		Decision on the approval of works performance
1 kV cable lines for connecting the facility of kindergarten "Bambi" in 30 Save Kovačevića Street, cp 3960/1 and 3960/2 CM KG 3	ROP-KRG-38150-ISAW-1/2020 28.12.2020		Decision on the approval of works performance
Cabling of existing lines in Kraljevačkog Bataljona Street from the number 119-121 CP No. 13417/2,15287 and 13413/2 CM KG 3	ROP-KRG-38272-ISAW-1/2020 30.12.2020		Decision on the approval of works performance
Construction of the precast concrete substation 35/10 kV 2x12.5 MVA "Sobovica" on cp No. 2/4 CM Desimirovac	ROP-KRG-17073-IUPH-10/2020 12.10.2020		Use permit
ED POŽAREVAC			
Construction of the compact concrete substation 10/0.4kV "Dušanovac 1" (compact concrete substation) 1x1000 (630) kVA with connecting 10kV underground lines and low voltage distribution network in Požarevac	ROP-PZR-31922-ISAW-2/2020 (04-351-3/2020) dated 20.1.2020		Decision on the approval of works performance
Construction of LV connecting underground line for power supply of the residential building in Despota Đurada Street in Golubac	ROP-GOL-2393-ISAW-1/2020 (351-14/2020-03) dated 4.2.2020		Decision on the approval of works performance
Construction of the concrete pillar substation "Dragovački put" in Požarevac	ROP-PZR-8970-ISAW-1/2020 (04-351-259/2020) dated 23.4.2020		Decision on the approval of works performance
Construction of 0.4 kV connecting line for the residential building in Veliko Gradište, c.p. No. 2366/385 and 4610 CM Veliko Gradište	ROP-VGR-11810-ISAW-1/2020 (351-154/2020-06) dated 29.5.2020		Decision on the approval of works performance
Construction of the concrete pillar substation 10/0.4 kV "Gajin potok donji" with low voltage distribution network in Ranovac	ROP-PML-12847-ISAW-1/2020 dated 4.6.2020		Decision on the approval of works performance
Reconstruction of part of 10 kV transmission line Kaona-Turija-Rakova Bara and low voltage network in Turija-Dajša	ROP-KUC-13481-ISAW-1/2020 (351-126/20-02) dated 16.6.2020		Decision on the approval of works performance
Construction of the pillar substation 10/0.4 kV "Veliko Crniće 3" with 10 kV connecting line and low voltage distribution network	ROP-MCR-14210-ISAW-1/2020 (351-35/20) dated 17.6.2020		Decision on the approval of works performance
Construction of the pillar substation 10/0.4 kV "Kalinovčić 3" with 10 kV connecting line and low voltage distribution network in Ostrovo	ROP-VGR-28521-ISAWHA-2/2020 (351-399/2020-06) dated 17.11.2020		Decision on the approval of works performance
Construction of 10 kV underground supply line for the masonry substation 10/0.4 kV "Nova Bolnica 2" with relocation of the existing 10 and 04 kV lines from the masonry substation 10/0.4 kV "Broj 6" in Požarevac	ROP-PZR-30351-ISAW-1/2019 (04-351-1073/2020) dated 22.10.2020		Decision on the approval of works performance

Construction of the precast concrete substation 10/0.4 kV "Toplana" with relocation of existing 10 and 04 kV lines from the compact concrete substation 10/0.4 kV "Toplana" in Petrovac na Mlavi	ROP-PML-32359-ISAW-1/2020 (350-617/20-03/2-1) dated 23.11.2020		Decision on the approval of works performance
Construction of 1kV underground cable line for connecting the residential building on CP No. 247/2 CM Kučevo in 1 Slobodana Miloradovića Street in Kučevo	ROP-KUC-32751-ISAW-1/2020 (351-253/20-02) dated 12.11.2020		Decision on the approval of works performance
Construction of 1kV low voltage line for the needs of connecting the residential and business building in 11A and 11B Koste Abraševića Street in Požarevac	ROP-PZR-36610-ISAW-1/2020 (04-351-1229/2020) dated 14.12.2020		Decision on the approval of works performance
Construction of the precast concrete substation "Igma nova" and 10kV underground cable lines for connecting SS with 1kV taps in Kostolac	ROP-PZR-38717-ISAW-3/2020 (04-351-1247/2020) dated 17.12.2020		Decision on the approval of works performance
10kV overhead line for the concrete pillar substation 10/0.4kV "Krvije 3"	ROP-PML-13565-ISAW-1/2019 dated 27.5.2019		Decision on the approval of works performance
Construction of 10 kV underground line for the precast concrete substation 10/0.4 kV "Pristanište" in Kostolac	ROP-PZR-34025-ISAW-1/2018 (04-351-777/2018 dated 20.11.2018)		Decision on the approval of works performance
Construction of 10 kV underground line from the precast concrete substation 10/0.4 kV "Privezište" to the compact concrete substation 10/0.4kV "Ostrovo 2"	ROP-VGR-26120-ISAW-2/2019, 351-349/2019-06 dated 8.10.2019		Decision on the approval of works performance
Construction of 10 kV underground line from SS 10/0.4kV "Milivoja Živanovića" to the in-house substation 10/0.4 kV "Suvoborska" in Požarevac	ROP-PZR-36822-ISAW-2/2019 dated 8.5.2019		Decision on the approval of works performance
Construction of 10kV underground line from SS 35/10kV Požarevac 2 to the in-house substation 10/0.4kV Suvoborska and from SS 35/10kV Požarevac 2 to the precast concrete substation 10/0.4kV Đura 1 in Požarevac	ROP-PZR-22805-ISAW-1/2019 dated 5.8.2019		Decision on the approval of works performance
Construction of 10 kV underground line from the compact concrete substation 10/0.4kV "Ostrovo 2" to the precast concrete substation 10/0.4kV "Vodoizvorište Ostrovo" in Ostrovo	ROP-VGR-26120-ISAW-2/2019, 351-349/2019-06 dated 8.10.2019		Decision on the approval of works performance
SS 10/0.4 kV "Suvoborska" in Požarevac	ROP-PZR-682-CPI-3/2017; 04-351-340/2017 dated 23.6.2017		Decision on the approval of works performance
The compact concrete substation 10/0.4kV "Ostrovo 2" in Ostrovo	ROP-VGR-26120-ISAW-2/2019, 351-349/2019-06 dated 8.10.2019		Decision on the approval of works performance
SS 10/0.4 kV "Krvije 3" in Krvije	ROP-PML-13565-ISAW-1/2019 dated 27.5.2019		Decision on the approval of works performance
Low voltage network from the concrete pillar substation 10/0.4kV "Krvije 3"	ROP-PML-13565-ISAW-1/2019 dated 27.5.2019		Decision on the approval of works performance
Construction of LV cable lines from the compact concrete substation 10/0.4kV "Kneza Lazara" towards Kneza Lazara Street in Požarevac	ROP-PZR-13823-ISAW-3/2018, 04-351-887/2018 dated 26.12.2018		Decision on the approval of works performance
Construction of LV network from the compact concrete substation 10/0.4kV "Ostrovo 2" in Ostrovo	ROP-VGR-26120-ISAW-2/2019, 351-349/2019-06 dated 8.10.2019		Decision on the approval of works performance
ED SMEDEREVO			
Precast concrete substation 10/0.4kV "Radinac 3" Radinac with 10 kV overhead line	ROP-SMD-13588-ISAW-2/2020 dated 24.08.2020		Decision on the approval of works performance

Pillar substation 10/0.4kV "Ribarsko naselje" Smederevo with 10kV connecting underground line	ROP-SMD-17151-ISAW-2/2020 dated 26.06.2020		Decision on the approval of works performance
Pillar substation 10/0.4kV "Vrbovac 4", Vrbovac with 10kV connecting overhead line	ROP-SMD-8206-ISAW-5/2020 dated 22.07.2020		Decision on the approval of works performance
Construction of 1kV underground line for connecting the building in 16. oktobar Street and Jadranska Street (Metalkon building) in Smederevo	ROP-SMD-11803-ISAW-14/2020 dated 20.07.2020		Decision on the approval of works performance
Pillar substation 10/0.4kV "Kolari 7" Kolari with 10kV connecting overhead line	ROP-SMD-8539-ISAW-2/2020 dated 11.06.2020		Decision on the approval of works performance
Construction of 10 KV line for precast concrete substation Radinac 3-STS 10/0.4 kV "Vranovo 4"	ROP-SMD-13588-ISAW-2/2020 dated 24.08.2020		Decision on the approval of works performance
Construction of 10 kV overhead line for pillar substation 10/0.4 kV Vrbovac 4	ROP-SMD-8206-ISAW-5/2020 dated 22.07.2020		Decision on the approval of works performance
Construction of 10 kV line for precast concrete substation Vodanj 7-STS 10/0.4 kV "Kolari 5"	ROP-SMD-8539-ISAW-2/2020 dated 11.06.2020		Decision on the approval of works performance
Construction of two 10 kV cable lines for Mihajlovac	ROP-SMD-4456-ISAW-5/2020 dated 05.05.2020		Decision on the approval of works performance
Construction of 1 kV cable line for connecting the residential building in Jovana Dučića Street in Velika Plana	ROP-VPL-31840-CPA-4/2020 dated 16.04.2020		Decision on the approval of works performance
Construction of 10 kV cable line for SS "Aša Ibelik" Velika Plana	ROP-VPL-30331-ISAW-3/2019 dated 16.12.2019		Decision on the approval of works performance
Construction of 10 kV cable line for precast concrete substation "Tirnatur" Krnjevo	ROP-VPL-4955-ISAW-2/2020 dated 27.04.2020		Decision on the approval of works performance
Construction of two 35 kV cable lines from 35 kV distribution switchgear Žabari to 110/35 kV "Velika Plana", the area of the municipality of Velika Plana	ROP-VPL-24587-ISAW-2/2020 dated 22.10.2020		Decision on the approval of works performance
Construction of two 35 kV cable lines from 35 kV distribution switchgear Žabari to 110/35 kV "Velika Plana", the area of the municipality of Žabari	ROP-ZAB-16129-ISAW-2/2020 dated 06.08.2020		Decision on the approval of works performance
Construction of 1 kV underground line for connecting the residential building in Smederevska Palanka	ROP-SPA-19835-ISAW-2/2020 dated 26.08.2020		Decision on the approval of works performance
Construction of 35 kV cable line for power supply of the business complex "Kyungshin Cable Europe" in Stojačak	ROP-SPA-928-ISAW-2/2020 dated 28.02.2020		Decision on the approval of works performance
Construction of 10 kV cable line and 10 kV distribution switchgear for power supply of the business complex "Kyungshin Cable Europe" in Stojačak	ROP-SPA-15446-ISAW-1/2020 dated 09.09.2020		Decision on the approval of works performance
Construction of 10 kV overhead line in Glibovac	ROP-SPA-8168-ISAW-2/2020 dated 04.05.2020		Decision on the approval of works performance

4.2. Monitoring and Environmental Impact

DA Kragujevac affects the environment via the following factors:

- **Electromagnetic fields**
- **Environmental noise**
- **Waste**
- **Surface and ground waters quality**
- **Soil quality**

4.2.1. Electromagnetic fields

Measurements of electric and magnetic fields size in the environment were not carried out in 2020.

4.2.2 . Environmental noise

Measurements of environmental noise were not carried out in 2020.

4.2.3. Waste

Waste amounts generated in DA Kragujevac in 2020 are presented in Table 196.

Table 196

DISTRIBUTION AREA KRAGUJEVAC								
Generated waste types in 2020								
NO.	Rules defining waste categories, its testing and classification ("Official Gazette of RS", № 56/2010 and 93/2019)	INDEX NUMBER	MEASUREMENT UNIT	Organizational unit				Note
				Branch ED KRAGUJEVAC	Branch ED POŽAREVAC	Branch ED SMEDEREVO	TOTAL: DA KRAGUJEVAC	
				QUANTITIES				
1.	Waste that has not been specified otherwise	08 03 99	t	0,000	0,000	0,000	0,000	Waste toners
2.	Mineral non chlorinated motor oils for gears and lubrication	13 02 05*	t	0,000	0,000	0,000	0,000	-
3.	Mineral non chlorinated oils for insulation and heat transportation	13 03 07*	t	0,000	0,000	0,000	0,000	Transformer oil
4.	Paper and cardboard packaging	15 01 01	t	0,000	0,000	0,000	0,000	Paper and cardboard
5.	Wooden packaging	15 01 03	t	0,000	0,000	0,000	0,000	Wooden packaging
6.	Packaging containing residual hazardous substances or is contaminated by hazardous substances	15 01 10*	t	0,000	0,000	0,000	0,000	Waste contaminated PVC packaging used for chemicals
			t	0,000	0,000	0,000	0,000	Waste metal packaging from used oils and lubricants
7.	Absorbents, filter materials (including oils filters not specified otherwise), wiping cloths, protection clothes, contaminated by hazardous substances	15 02 02*	t	0,000	0,000	0,000	0,000	Waste adsorbents with oil and heavy fuel oil
8.	Waste tires	16 01 03	t	0,000	0,430	0,860	1,290	Auto tires
9.	Colored metals	16 01 18	t	0,000	0,000	0,000	0,000	Copper residues (racks, ropes and wires)
10.	Transformers and condensers containing PCB	16 02 09*	t	0,000	0,000	0,000	0,000	Waste and used transformers with PCB oil
11.	Discarded equipment containing hazardous components other than specified in 16 02 09 to 16 02 12	16 02 13*	t	0,000	0,000	0,000	0,000	Lead batteries
12.	discarded equipment other than the one specified in 16 02 09 to 16 02 13	16 02 14	t	1,420	4,580	3,660	9,660	Discarded meters
13.	Lead batteries	16 06 01*	t	0,000	0,000	0,000	0,000	Accu-batteries
14.	Ni-Cd batteries	16 06 02*	t	0,000	0,000	0,000	0,000	-
15.	Concrete	17 01 01	t	53,060	0,000	0,000	53,060	Old concrete poles, pole foundations
16.	Tiles and ceramics	17 01 03	t	0,000	0,000	0,000	0,000	(porcelain insulators)
17.	Wood	17 02 01	t	4,420	0,000	0,000	4,420	Wooden poles - green
18.	Copper, bronze, brass	17 04 01	t	0,000	0,220	0,200	0,420	Cu, brass
19.	Iron and steel	17 04 05	t	0,000	4,850	3,460	8,310	Waste parts of SS equipment



20.	Mixed metals	17 04 07	t	0,000	2,050	0,000	2,050	Mixed metals, Al-Fe rope
21.	Cables containing oil, oil tar and other hazardous substances	17 04 10*	t	0,000	0,000	0,000	0,000	-
22.	Cables different than listed in 17 04 10	17 04 11	t	0,000	4,190	0,000	4,190	Waste aluminum cables
23.	Soil and stones containing dangerous substances	17 05 03*	t	0,000	0,000	0,000	0,000	Oily soil
24.	insulation materials other than specified in 17 06 01 and 17 06 03	17 06 04	t	0,000	0,710	0,000	0,710	Ceramic insulators
25.	paper and cardboard	20 01 01	t	2,650	0,000	0,310	2,960	-
26.	Waste clothes and footwear	20 01 10	t	0,000	0,440	0,000	0,440	-
27.	Fluorescent tubes and other waste containing mercury	20 01 21*	t	0,000	0,000	0,000	0,000	-
28.	Discarded electric and electronic equipment other than specified in 20 01 21 and 20 01 23 containing hazardous components	20 01 35*	t	0,000	0,000	0,000	0,000	Discarded electronic and electric equipment
29.	Discarded electric and electronic equipment other than specified in 20 01 21, 20 01 23 and 20 01 35	20 01 36	t	0,000	0,000	0,000	0,000	Electronic and induction meters, disconnectors, lamps and power switches
30.	Wood containing hazardous substances	20 01 37*	t	0,000	0,000	0,000	0,000	Impregnated wooden poles
31.	Wood other than specified in 20 01 37	20 01 38	t	0,000	0,000	0,000	0,000	Commercial waste

4.2.4. Surface, Ground Waters and Soil Monitoring

On the territory of DA Kragujevac, there were no measurements and monitoring related to surface and ground waters and soil in 2020.

4.3. Working environment monitoring, Occupational Health and Safety

Occupational Health and Safety Reports for 2020 include the following items:

- **Working environment monitoring**
 - Working environment noise measurements
 - Working environment electromagnetic fields
 - Working environment parameters
- **Safety**
 - Training of employees
 - Occupational injuries
- **Healthcare**

4.3.1. Working environment monitoring

- **Working environment noise measurements**

Noise measurements in working environment were not performed in 2020.

- **Electromagnetic fields in working environment**

Measurements of electric and magnetic field levels were not performed in 2020.

- **Working environment parameters**

In 2020, working environment parameters were not measured in business facilities of branches of DA Kragujevac.

4.3.2. Occupational safety

- **Training of employees**

Training of employees is shown in Table 197.

Table 197

DISTRIBUTION AREA KRAGUJEVAC					
Training of employees in 2020					
Organizational unit Elektro distribucija Kragujevac	Number of employees	For training		Trained	
		Number	%	Number	%
Occupational health and safety training	66	38	57,58	38	100,00
Elektro distribucija Požarevac	56	39	69,64	39	100,00
Occupational health and safety training					
Elektro distribucija Smederevo	85	45	52,94	45	100,00
Occupational health and safety training					
DA HQ	89	6	6,74	6	100,00
TOTAL: DA CENTER KRAGUJEVAC	296	128	43,24	128	100,00

- **Occupational injuries**

The data regarding the number of occupational injuries in 2020 is presented in Table 198.

Table 198

DISTRIBUTION AREA KRAGUJEVAC						
Occupational injuries in 2020						
Branch/Facility	Number of employees	Injuries in relation to the number of employees				
		Mild	Severe	Fatal	Total	%
ED Kragujevac	66	0	0	0	0	0,00
ED Požarevac	56	1	0	0	1	1,79
ED Smederevo	85	1	1	0	2	2,35
DA HQ	89	0	0	0	0	0,00
TOTAL: DISTRIBUTION AREA KRAGUJEVAC	296	2	1	0	3	1,01

4.3.3. Healthcare

Results of periodic examinations are given in Table 199.

Table 199

DISTRIBUTION AREA KRAGUJEVAC											
Work capability of employees in 2020											
Branch/Facility	Number of employees	Previous and periodical examinations				For work					
		Referred to examination		Examined/ Referred		Capable		Limited capability		Not capable	
		No.	%	No.	%	No.	%	No.	%	No.	%
ED Kragujevac	66	38	57,58	38	100,00	31	81,58	7	18,42	0	0,00
ED Požarevac	56	39	69,64	39	100,00	22	56,41	15	38,46	2	5,13
ED Smederevo	85	45	52,94	45	100,00	44	97,78	1	2,22	0	0,00
DA HQ	89	6	6,74	6	100,00	5	83,33	0	0,00	1	16,67
TOTAL: DISTRIBUTION AREA KRAGUJEVAC	296	128	43,24	128	100,00	102	79,69	23	17,97	3	2,34

4.4. Public complaints

There were no public complaints related to the environment in 2020

5. DISTRIBUTION AREA NIS

The structure of all facilities and systems within DA Nis is shown in Table 200.

Table 200

DISTRIBUTION AREA NIS												
Facilities and systems in 2020												
Branch	Power distribution Substations								Distribution network			
	110/10 KV	110/20 KV	110/35 KV	110/x/z KV	35/10 KV	20/0.4 KV	10/0.4 KV	Total:	Voltage level	Overhead in km	Cable in km	Distribution network total length in km
ED Zajecar									110 kV	0,000	0,000	0,000
									35 kV	588,150	27,610	615,760
									20 kV	0,000	0,000	0,000
									10 kV	2.227,960	411,280	2.639,240
									1.0 kV	0,000	0,000	0,000
									0.4 kV	5.197,270	269,570	5.466,840
Total	0	0	10	3	51	0	1.674	1.738	Total	8.013,380	708,460	8.721,840
ED Prokuplje									110 kV	0,000	0,000	0,000
									35 kV	172,680	9,900	182,580
									20 kV	0,000	0,000	0,000
									10 kV	756,940	90,260	847,200
									1.0 kV	0,000	0,000	0,000
									0.4 kV	2.113,200	94,230	2.207,430
Total	0	0	2	0	14	0	637	653	Total	3.042,820	194,390	3.237,210
ED Nis									110 kV	0,000	0,000	0,000
									35 kV	207,420	48,070	255,490
									20 kV	0,000	0,000	0,000
									10 kV	972,200	682,510	1.654,710
									1.0 kV	0,000	0,000	0,000
									0.4 kV	4.494,710	508,640	5.003,350
Total	3	0	3	2	27	0	1.495	1.530	Total	5.674,33	1.239,22	6.913,55
ЕД Пирот									110 kV	0,000	0,000	0,000
									35 kV	184,000	32,550	216,550
									20 kV	0,000	0,000	0,000
									10 kV	740,310	99,150	839,460
									1.0 kV	0,000	0,000	0,000
									0.4 kV	1.350,290	157,550	1.507,840
Total	0	0	3	0	19	0	514	536	Total	2.274,600	289,250	2.563,850
ED Leskovac									110 kV	0,000	0,000	0,000
									35 kV	368,290	7,500	375,790
									20 kV	0,000	0,000	0,000
									10 kV	1.621,990	282,180	1.904,170
									1.0 kV	0,000	0,000	0,000
									0.4 kV	3.752,030	143,950	3.895,980
Total	2	0	3	2	33	0	1.245	1.285	Total	5.742,310	433,630	6.175,940
ED Vranje									110 kV	0,000	0,000	0,000
									35 kV	127,500	27,500	155,000
									20 kV	0,000	0,000	0,000
									10 kV	1.484,180	204,500	1.688,680
									1.0 kV	0,000	0,000	0,000
									0.4 kV	3.010,530	122,100	3.132,630
Total	2	0	1	3	12	0	972	990	Total	4.622,210	354,100	4.976,310
EPS DISTRIBUTION AREA NIS									110 kV	0,000	0,000	0,000
									35 kV	1.648,040	153,130	1.801,170
									20 kV	0,000	0,000	0,000

									10 kV	7.803,580	1.769,880	9.573,460
									1.0 kV	0,000	0,000	0,000
									0.4 kV	19.918,030	1.296,040	21.214,070
TOTAL	7	0	22	10	156	0	6.537	6.732	TOTAL	29.369,650	3.219,050	32.588,700

Note: Data provided on 31st December 2020. Only power facilities owned by EPS Distribution are taken into account, while facilities owned by EMS, EPS, other users are facilities with split ownership on the territory of DA Niš are not taken into account

5.1. Overview and Status of Permits

Review and statuses of permits, licenses and other required approvals as well as new requests for obtaining permits in 2020 are presented in Table 201.

Table 201

DISTRIBUTION AREA NIS			
Overview and Permits Status in 2020			
Branch	Obtained approvals and permits (Number and Date)	New applications for obtaining new or extending existing permits	Note
ED ZAJECAR			
Decision on works approval on the construction of the transmission line TS 10/0,4 kV „HAJDUK VELJKOVA“ in Sokobanja	ROP-SBN-16457- ISAW-1/2020 10.07.2020		Sokobanja
Decision on construction permit for working on construction of pole transmission line STS 10/0,4 kV „PRAZNA VRECA 2“, municipality Luka, Bor	ROP-BOR-39584- ISAW-3/2020 20.07.2020		Bor
Decision on works approval on construction of transformer station TS 10/0,4 kV „MAKOTEKS“ in Knjazevac	ROP-KNJ-16643- ISAW-1/2020 16.07.2020		Knjazevac
Decision on works approval on mounting transmission line TS 10/0,4 kV „LETNJA POYORNICA“ in Sokobanja	ROP-SBN-39200- ISAWHA-2/2020 31.01.2020		Sokobanja
Decision on reconstruction approval of cable line 35 kV from TS 110/35 kV „3AJE4AP 2“ to newly designed end CP pole with route connection to existing DV 35 kV „RGOTINA“ in Zajecar	ROP-ZAJ-14604- ISAW-1/2020 351-536/2020 25.06.2020		Zajecar
Decision on works approval on construction of transformer station TS 10/0,4 kV „BEOGRADSKA“ in Sokobanja	ROP-SBN-8291- ISAW-1/2020 09.04.2020		Sokobanja
Decision on works approval on assembly of connection cable line XNE-49-A 3x(1x180mm ²) 10 kV from TS „SPORTSKA“ - TS „CUKA 1“, length 195m, in Beogradska bb, Sokobanja	ROP-SBN-20245- ISAW-1/2020 12.08.2020		Sokobanja
Decision on works approval on construction of temporary electrical substation RS 10 kV and connection part of medium voltage electro distribution line KO Selacka	ROP-ZAJ-26185- ISAWHA-2/2020 351-1213/2020 08.10.2020		Zajecar
Decision on works approval on prefabricated concrete substation (MBTC) 10/0,4 kV and cable line 10 kV in Zajecar	ROP-ZAJ-6440- ISAW-6/2020 351-82/2020 23.01.2020		Zajecar
Decision on works approval on construction of supply underground cable line 10 kV for power supply of TS 10/0,4 kV, 630kVA „LIDL“ supermarket in Zajecar	ROP-ZAJ-35817- ISAW-2/2020 351-175/2020 27.01.2020		Zajecar
Decision on works approval on installation and construction of underground double cable line 10 kV for new substation TS 10/0,4 kV, 1000kVA „TERMOVENT“, KO KLADUSNICA	ROP-KLA-39665- ISAW-1/2019 17.01.2020		Kladovo
Decision on works approval for construction of electricity distribution network – LV cable line from TS 10/0,4 kV	ROP-ZAJ-17437- ISAWHA-2/2020 351-765/2020		Zajecar

"KARADZICEVA" to the KPO residential building at 18 Milosa Velikog Street in Zajecar	10.08.2020		
ED NIS			
Decision on use permit for OHL 2x35kV TC 35/10kV "Klisura" – SS 35/10kV "Zitoradja", introduction in SS 110/35/10kV Nis 15" (Doljevac)	ROP-DOL-2369-IUPH-12/2020 Internal number: 351-142 Date: 26.06.2020.rod.		Nis
Decision on works approval for installation of two 35 kV cells and laying of three 35 kV lines from TS Nis 1 to RP in TS Xing Yu	ROP-NISP-16233-ISA-W-3/2020 од 23.09.2020.		Nis
Decision on works approval for laying two 10kv lines from point A in front TS 10/0,4 kv "Majakovskog1"to point B	351-76/2020-06 од 10.02.2020.	ROP-NISP-2682-ISA-WHA-1/2020	Nis
Decision on works approval for laying two 10kv lines of KO Nis-Bubanj,for the needs of the construction site „XIHG YU“	351-134/2020-06 од 27.02.2020.	ROP-NISP-4929-ISA-WHA-1/2020	Nis
Decision on legalization of three underground cable lines 10kv of TS 110/10кВ "Nis 8"to working zone "Donje Medjurovo"	UP.No. 351-1/20791-210-06 од 17.01.2020.		Nis
Decision on works approval on the low voltage network from STS 10/0,4 kv "Naselje Vrtiste 2"	351-178/2020-06 од 17.03.2020	ROP-NISP-2943-ISA-WHA-2/2020	Nis
Decision on leganization of 10kv of live of TS 35/10 kv "Apelovac" to the stadium "Cair" in Nis	UP.No. 351-1/1199-2016-06 од 02.11.2020		Nis
Decision on works approval on the expansion of the n.n. network by forming outlets from TS 10/0,4kv "Svajcarija"	351-158/2020-06 19.03.2020.	ROP-NISP-6033-ISA-WHA-1/2020	Nis
Decsion on works approval for STS 10/0,4 kv "Milos Obilic 2" and double connecting 10kv line	351-430/2020-06 26.06.2020.	ROP-NISP-14602-ISA-WHA-2/2020	Nis
Decision on works approval for TS 10/0,4 kv "Naselje Nikola Tesla" and double connecting 10kv line	351-484/2020-06 15.07.2020.	ROP-NISP-16159-ISA-WHA-2/2020	Nis
Decision on works approval for laying 10кВ line from point "A" in front TS10/0,4 кV "Zarka Djurica" to point "B" in front TS 10/0,4 кV "Prespanska"	351-650/2020-06 10.09.2020.	ROP-NISP-23181-ISA-WHA-1/2020	Nis
Decision on works approval on construction of TS 10/0,4 кV „Dragoljuba Ristica" and connecting 10 kv line	351-843/2020-06 02.11.2020.	ROP-NISP-30557-ISA-WHA-2/2020	Nis
ED PROKUPLJE			
Decision on construction works approval on KBTS Djurevacki Put 8	ROP-PRO-39459-ISA-W-1/2019 30.12.2019.		
Decision on construction works approval on KBTS Dobricka	ROP-PRO-1582-ISA-W-1/2020 31.1.2020.		
Decision on construction works approval on BSTS 10/04 кV Stocna pijaca	ROP-KUR-15020-ISA-W-3/2020 26.8.2020.		
Decision on construction works approval on 10 kV cable line from TS 35/10 кV Prokuplje IV to TS 10/04 кV DJ Put 8	ROP-PRO-4422-ISA-W-1/2016 26.5.2016.		
Decision on construction works approval on BSTS 10/04 кV BSTS D Grgure with unbundling nn network	Application of works D.10.20 -290692/1-2020 06.10.2020		
Decision on construction works approval on MBTS 10/04 кV Blace 6	Пријава радова Д.10.20 – 378589/1-19 27.11.2019		
Decision on approval of works for construction of 10 kV cable line for TS10/04кV "DOBRICKA" from point "A" (terminal from TS 35/10 кV "PROKUPLJE II", second cable from point "B" (terminal from TS 10/0,4 кV "TIKA STANKOVIC" in Prokuplje	ROP-PRO-1582-ISA-W-1/2020 31.1.2020.		

Decision on works approval for construction of 10 kV overhead line for BSTS Tasic KOP	ROP-KUR-15020- ISAW-3/2020 26.8.2020.		
Decision on works approval for construction of 10 kV overhead line for BSTS 10/04 kV Stocna Pijaca	ROP-KUR-15020- ISAW-3/2020 26.8.2020.		
Decision on works approval on forming new LV terminal from BSTS Donja Toponica - Most	ROP-PRO-26726- ISAW-1/2018 19.9.2018.		
Decision on works approval on forming new LV terminal from KBTS 10/0.4 kV "Dobricka" – terminal towards TS Obdaniste	ROP-PRO-1582- ISAW-1/2020 31.1.2020.		
Decision on works approval on expending LV network, St. Rengenova	ROP-PRO-19527- ISAWHA-3/2020 17.9.2020.		
Decision on works approval on expending LV network in Djurevacko Naselje	ROP-PRO-16030- ISAW-2/2020 7.8.2020.		
Decision on works approval on expending LV network from transformer area Oyrenska 6 PK (St. Zaplanska)	ROP-PRO-33369- ISAW-1/2016 13.12.2016.		
Decision on works approval on expending LV network from transformer area TS 10/04kV Samarinovac IV	ROP-ZRA-12000- ISAW-3/2018 28.9.2018		
Decision on works approval on expending LV network from transformer area TS 10/04kV Samarinovac V	ROP-ZRA-12000- ISAW-3/2018 28.9.2018		
Decision on works approval on expending LV network from transformer area TS 10/04kV Samarinovac VI	ROP-ZRA-12000- ISAW-3/2018 28.9.2018		
Decision on works approval on expending LV network from transformer area TS 10/04kV Samarinovac VII	ROP-ZRA-12000- ISAW-3/2018 28.9.2018		
ED PIROT			
Construction of TS 10/0,4 kV Senjak 2 (Decision on works approval)	03-Y-351-1622/2019 dated 11.12.2019.		Pirot
Construction of TS 10/0,4 kV Senjak 2 (Usage permit)	03-Y-351-979/2020 dated 10.12.2020.		Pirot
Construction of TS 10/0,4 kV Senjak 3 (Decision on works approval)	03-Y-351-218/2020 dated 07.04.2020.		Pirot
Construction of TS 10/0,4 kV Senjak 3 (Usage permit)	03-Y-351-883/2020 dated 13.11.2020.		Pirot
Construction of TC 10/0,4 kV Vuka Pantelica (Decision on works approval)	03-Y-351-756/2020 dated 12.10.2020		Pirot
Reconstruction of TS 35/10 kV Yvonce (Decision on works approval)	351-94-2019-02 dated 17.12.2019		Babusnica
Construction of STS Glogovac 2 with connecting 10kV line (Decision on works approval)	351-27/2019-IV/02 dated 31.05.2020		Bela Palanka
Construction of STS Bucic with connection 10kV line (decision on works approval)	351-32/2020-IV/02 dated 24.06.2020		Bela Palanka
Construction of 10 kV cable lines for TS Carinska, branch office Gradina (Decision on works approval)	351-181/2020-14 dated 30.10.2020.		Dimitrograd
Construction of LV cable line from TS 10/0,4 kV "Slavonska" to facility Pejic Smilje (Decision on works approval)	03-Y-351-753/2020 dated 09.10.2020.		Pirot
ED LESKOVAC			
Decision on the use permit for performed works on 10 kV cable line from TS 10 / 0.4 kV "Zelena pijaca-stara" to TS 10 / 0.4 kV "Savska" in Leskovac	351-20544/20-02 ROP-LES-18588-IUP- 4/2020 dated 16.09.2020		Leskovac

Decision on the use permit of the premises within the machine building of SHPP Reka RP 10 kV for connection of SHPP Reka	351-132/20 ROP-BOS-38710-IUP-1/2020 dated 05.01.2021		Bosilegrad
Decision on the use permit of the distribution 10kV plant - for connection of solar power plant "Bim-tex" 2 and gas power plant MSE KP no. 15235 KO Leskovac	351-20478/20-02 ROP-LES-20943-IUP-1/2020 17.08.2020		Leskovac
Decision on approval for execution of works on construction of connecting 10 kV cable line through KP no.2107/2, 14301/1, 2099/8, 2099/27, 2099/29, 2099/13 и 2099/10 KO Leskovac,	Бпој: 351-20402/20-02 ROP-LES-8568-ISAWA-10/2020 20.07.2020.		Leskovac
Decision on approval for construction works on 0.4 kV cable line 2xPPOO-A 4x150 mm ²	351-20440/20-02, ROP-LES-7205 dated 04.08.2020		Leskovac
Decision on approval for construction works on the pole transformer station STS 10 / 0.4 kV " ABD Komerc ", power 250 kVA, at KP no.846 / 1 KO Belanovce with connecting 10 kV line, through KP no.2287, 2460, 846/1, 846/2, 844, 843, 842, 841 and 840 KO Belanovce	Бпој: 351-20002/20-02 ROP-LES -2780-ISAWhA-2/2020 26.02.2020.		Leskovac
Decision on construction works approval on STS 10/0,4kV and supply line 0,4kV for base station of Telenor „Mirosevce“ at KP no. 344 KO Gorina.	351-20397/20-02 ROP-LES-2975-ISAWhA-7/2020 22.07.2020.		Leskovac
Decision on works approval on Underground 10 kV cable line – interconnection – between TS 10/0,4 kV "Service" and TS 10/0,4 kV "Sportska hala",	ROP-BOJ-16289-ISAWh-1/2020 06 No: 351-1-11/2020 Dated: 06.07.2020.		Bojnik
Decision on use permit for TS 35/10Kv „Gornji Orah“ (municipality of Vlasotince), TS 35/10Kv Sastav Reka (municipality of Crna Trava) part of territory of municipality Crna Trava	351-04/2020-05 ROP-CTR-28341-IUP-1/2020 dated: 09.10.2020.		Crna Trava
Decision on works approval on reconstruction of the existing 10 kV Dv from TS 35/10 kV "Velika Biljanica" ti TS 10/ 0.4 kV " Jasunja"	351-20462/20-02 ROP-LES-16284-ISAWhA-2/2020 11.08.2020.		Leskovac
Decision on approval for construction works on the reconstruction of the existing 10 kV OHL - branch for Zlokućane, from the separate pole of the main line for Jašunja to KBTS 10 / 0,4kV „Zlokućane“	351-20463/20-02 ROP-LES-16288-ISAWhA-2/2020 10.08.2020.		Leskovac
Decision on approval for the execution of works for the reconstruction of the existing 10 kV OHL - branch for Navalín, from the separate pole of the main line for Bogojevci to TS 10 / 0.4 kV "Navalin 2" tower	351-20520//20-02 ROP-LES-21784-ISAWh-1/2020 20.08.2020.		Leskovac
Decision on approval for the execution of works on the reconstruction of the existing 10 KV OHL line "Prekopčelica" and the direction "Nova Topola" (exit from TS 35/10 KV Lebane 2, in the length of 175 m between TS Lebane 2 and ČRS)	ROP-LEB-17554-ISAWhA-3/2020 Int.06 No 351-165-P/2020 17.11.2020.		Lebane
Decision on approval for construction works on the secondary electricity distribution network - connection to the electricity distribution system of the building number 1. Elementary school " 8. Oktobar " , Vlasotince	ROP-VLS-22616-ISAWh-2/2020 Registration no 03-351-125/2020 30.12.2020.		Vlasotince
Decision on changing the decision to the approval for cable works - from the newly designed TS 10 / 0.4 kV "Nova" to the existing 10 kV cable (TS 10 / 0.4 kV "Trolist" - TS 10 / 0.4 kV "Ratko Pavlovića") to kp.no.4023 KO Vlasotince, the laying of two 10 kV cables is planned	ROP-VLS-19053-ISAWhA-5/2020 Registration no 03-351-136/2020 10.11.2020.		Vlasotince
Decision on the use permit for the masonry substation 10 / 0.4 kV "Brestovac" at CP no. 4780/3 KO Brestovac and	Number: 351-19998/20-02		Leskovac

connecting 10kV underground line at KP no. 4780/3 KO Brestovac and 4780/2 KO Brestovac	ROP-LES-294-IUP-3/2020 25.02.2020.		
ED VRANJE			
Decision on the use permit for TS 35/10 kV "Vladičin Han 1"	IV Бпој: 351-224/2/2020-03 ROP-HAN-79-IUPH-14/2020 14.07.2020.		Vladicin Han
Decision on the use permit for TS 35/10 kV "Momin kamen"	IV Number: 351-102/2020-03 ROP-HAN-28504-IUP-12/2020 24.01.2020.		Vladicin Han
Decision on works approval on upgrade and reconstruction of OHL 35kV TS 110/35 / 10kV "Vladicin Han" - TS 35 / 10kV "Vladicin Han 1"	IV Number: 351-252/2020-03 ROP-HAN-17323-ISAHA-13/2020 03.08.2020.		Vladicin Han
Decision on approval for construction works on 35 kV lines from TS 35/10 kV "Momin kamen" to TS 35/10 kV "Predejane"	351-05-00767/2019-07 ROP-MSGI-38461-ISAHA-3/2019 Date:07.08.2019.	ROP-MSGI-38461-ISAHA-8/2020 dated 09.11.2020.	Vladicin Han

5.2. Monitoring and Environmental Impact

Distribution Area Niš affects the environment by following factors that are currently not completely covered by the monitoring:

- **Electromagnetic fields**
- **Environmental noise**
- **Waste**
- **Surface and ground waters quality**
- **Soil quality**

5.2.1 Electromagnetic Fields

Environmental electromagnetic fields measuring was not carried out during 2020.

5.2.2. Environmental noise

Environmental Noise measuring at the territory of DA Niš was not carried out during 2020.

5.2.3. Waste

Waste production in 2020 is presented in Table 202 according to the Serbian waste management regulation.

Table 202

DISTRIBUTION AREA NIŠ											
Defined waste categories in 2020											
NUMBER	Rules defining waste categories, its testing and classification (Official Gazette of RS No 56/2010 and 93/2019)	Index number	Unit	Branch						Total	NOTE
				ED ZAJECAR	ED PROKUPLJE	ED NIS	ED PIROT	ED LESKOVAC	ED VRANJE	TOTAL: DA NIS	
				AMOUNTS							
1	Mineral non-chlorinated motor oils, oils for gears and lubrication oils	13 02 05*	t	0,000	0,000	0,000	0,03	0,000	0,000	0,030	Motor oil
2	Mineral non-chlorinated oils for insulation and heat transfer	13 03 07*	t	1,650	0,000	0,000	0,065	0,000	0,000	1,715	Transformer oil
3	Waste not otherwise specified	13 08 99*	t	0,000	0,000	0,000	0,020	0,000	0,000	0,020	Oily soil and absorbents
4	Wooden packaging	15 01 03	t	2,050	0,000	8,960	0,200	0,000	7,00	18,210	(Wooden packaging)
5	Waste tires	16 01 03	t	2,495	0,000	0,000	0,060	0,000	0,000	2,555	Car and truck tires
6	Discarded vehicles not containing fluids or other hazardous components	16 01 06	t	18,000	0,000	0,000	1,400	0,000	0,000	19,400	Old vehicles without hazardous fluids
7	Ferrous materials	16 01 17	t	0,030	0,000	0,000	0,000	0,000	0,000	0,030	Switchers and disconnectors
8	Hazardous components other than specified in 16 01 07 - 16 01 11 and 16 01 13 and 16 01 14	16 01 21*	t	0,425	0,000	0,000	0,000	0,000	0,000	0,425	Waste vehicles components
9	Discarded equipment containing hazardous components other than specified in 16 02 09 - 16 02 12	16 02 13*	t	1,180	0,000	0,000	1,800	0,000	0,000	2,980	Transformers. cable heads
10	Lead batteries	16 06 01*	t	1,370	0,000	0,000	0,050	0,000	0,000	1,420	Batteries
11	Ni-Cd batteries	16 06 02*	t	0,020	0,000	0,000	0,000	0,000	0,000	0,020	Ni-Cd batteries
12	Concrete	17 01 01	t	6,000	0,000	30,250	1,000	0,000	319,120	356,370	Old concrete columns. column foundation
13	Tiles and ceramics	17 01 03	t	1,426	0,000	5,24	0,020	0,000	19,82	26,506	(porcelain insulators)
14	Copper, bronze, brass	17 04 01	t	0,6314	0,000	3,86	0,000	1,982	0,000	6,4734	Copper
15	Aluminum	17 04 02	t	4,350	0,000	0,000	0,100	0,738	12,000	17,188	Aluminum
16	Iron and steel	17 04 05	t	2,835	0,000	15,760	0,320	0,000	27,280	46,195	Pieces
17	Al/Fe waste wire	17 04 07	t	0,000	0,000	7,440	0,000	0,000	0,000	7,440	Waste wire – aluminum-steel
18	Cables other than specified in 17 04 10	17 04 11	t	1,570	0,000	30,940	0,150	0,000	5,020	37,680	Waste cables with plastic protection



19	Paper and card board	20 01 01	t	1,000	0,000	2,220	0,150	2,940	0,000	6,310	Paper and card board
20	Fluorescent pipes and other waste containing mercury	20 01 21*	t	0,016	0,000	0,000	0,001	0,000	0,000	0,017	Fluorescent pipes
21	Discarded electrical and electronic equipment other than specified in 20 01 21 and 20 01 23 containing hazardous substances	20 01 35*	t	1,900	0,000	0,000	0,100	0,000	0,000	2,000	(Electricity meters)
22	Discarded electrical and electronic equipment other than specified in 20 01 21, 20 01 23, 20 01 35	20 01 36	t	0,395	0,000	0,000	0,100	0,000	0,000	0,495	(Computers, monitors)
23	Wood containing hazardous substances	20 01 37*	t	0,000	0,000	0,000	0,200	0,000	0,000	0,200	(Impregnated wooden poles)
24	Oily water	13 08 99*	τ	0,000	0,000	0,000	0,000	10,500	0,000	10,500	

5.2.4. Surface, Ground Waters and Soil Monitoring

In 2020, on the territory of DA Nis, services were provided for the improvement of the environment and land protection, preparation of technical documentation for rehabilitation on TS 110 / x and 35/10 kV. Wastewater sampling was performed from oil pits installed in the facilities of TS 110/35/6 kV Veliki Krivelj and TS Zaječar 2.

5.3. Working Environment Monitoring, Occupational Health and Safety

Occupational Health and Safety Reports for 2020 include following items:

- **Working Environment Monitoring**
 - working environment noise measurement
 - working environment electromagnetic fields
 - working environment parameters
- **Safety**
 - Training of the employees
 - Work injuries
- **Health**

5.3.1. Working Environment Monitoring

Measurements and testing of working environment conditions were carried out according to the Occupational Safety and Health Law ("Official Gazette of RS", No 101/05) and the Rules on procedure of inspection and testing of working equipment and testing of working environment conditions ("Official Gazette of RS", No 94/06, 108/06 and 102/2015).

- **Working environment noise measurement**

During 2020 in DA Niš hasn't been conducted noise measurements in the working environment for winter period.

- **Working environment electromagnetic fields**

During 2020 electromagnetic fields measurings has not been performed in working environment in DA Niš.

- **Working environment parameters**

During 2020 the testing of working environmental parameters were not performed in DA Nis.

During 2020 vibration measurings were not performed in working environment in DA Niš.

During 2020 chemical hazards measurings were not performed in working environment in DA Niš.

5.3.2. Occupational Safety

- **Training**

Training report is presented in Table je y Табели 203.

Table 203

Table 200

DISTRIBUTION AREA NIS					
Training in 2020					
Branch/Facility	Number of employees	For training		Trained	
		број	%	број	%
ED NIS	129				
Knowledge testing in HSTP		17	13,18	17	100,00
Safety training		3	2,33	3	100,00
Branch ED NIS	134				
Knowledge testing in HSTP		75	55,97	75	100,00
Safety training		2	1,49	2	100,00
Branch ED Leskovac	76				
Knowledge testing in HSTP		43	56,58	43	100,00
Safety training		1	1,32	1	100,00
Branch ED Zajecar	120				
Safety training		2	1,68	2	100,00
Knowledge testing in HSTP		70	58,82	70	100,00
Safety training for newly employed workers		1	0,84	1	100,00
Branch ED Pirot	28				
Knowledge testing in HSTP		28	100,00	28	100,00
Traing based in work position change		1	3,57	1	100,00
Branch ED Prokuplje	45				
Knowledge testing in HSTP		32	71,11	32	100,00
Training for operating the new MILLER harness in divison for reception and control of measuring points		1	2,22	1	100,00
Traing based in work position change		2	4,44	2	100,00
Traing based in work position change		6	13,33	6	100,00
Branch ED Vranje	32				
Knowledge testing in HSTP		21	65,63	21	100,00
TOTAL NUMBER OF TRAININGS OF EMPLOYEES IN 2019 DA NIŠ					
Knowledge testing in HSTP	564	286	50,71	286	100,00
Safety training		8	1,42	8	100,00
Traing based in work position change		3	0,53	3	100,00
Training for operating the new MILLER harness in divison for reception and control of measuring points		1	0,18	1	100,00
Training for operating the new ladders		7	1,24	7	100,00

Note: The number of employees on 31st December 2020

Additional trainings which are not connected to permanently employed in DA Niš but which were conducted in 2020 are presented in Table 204.

Table 204

DISTRIBUTION AREA NIŠ				
Additional trainings which are not connected to permanently employed in DA Niš but which were conducted in 2020				
Branch/Facility	For training		Trained	
	број	%	број	%
Management DA Nis and Branch ED Nis				
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	218	100,00	218	100,00
Branch ED Leskovac				
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	217	100,00	217	100,00
Branch ED Zajecar				
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	95	100,00	95	100,00
Annual knowledge testing in HSTP of EPS employees based on SLA contract	2	100,00	2	100,00
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	45	100,00	45	100,00
Safety training of agency-employed workers	4	100,00	4	100,00
Branch ED Pirot				
Safety training of agency-employed workers	3	100,00	3	100,00
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	82	100,00	82	100,00
Compliance with Article 29, Law on OHS, for employees with a place of work Branch ED Pirot (engaged in EEO under the SLA contract through PE EPS, TC Nis, OTU Pirot and employed electricians through the agency)	76	100,00	76	100,00
Branch ED Prokuplje				
Safety training of agency-employed workers	5	100,00	5	100,00
Annual knowledge testing in HSTP of EPS employees based on SLA contract	10	100,00	10	100,00
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	100	100,00	100	100,00
Branch ED Vranje				
Annual knowledge testing in HSTP of EPS employees based on SLA contract	1	100,00	1	100,00
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	100	100,00	100	100,00
BZ training - management services support	1	100,00	1	100,00
TOTAL: DISTRIBUTION AREA NIS				
Acquainting contractors with dangers and hazards, OHS measures and rules of conduct	812	100,00	812	100,00
Compliance with Article 29, Law on OHS, for employees with a place of work Branch ED Pirot (engaged in EEO under the SLA contract through PE EPS, TC Nis, OTU Pirot and employed electricians through the agency)	76	100,00	76	100,00
Safety training of agency-employed workers	12	100,00	12	100,00
Annual knowledge testing in HSTP of EPS employees based on SLA contract	13	100,00	13	100,00
BZ training - management services support	1	100,00	1	100,00
Acquainting visitors and service providers with OHS measures and rules of conduct	45	100,00	45	100,00

▪ Work injuries

The number of injuries in 2020 is presented in Table 205.

Table 205

DISTRIBUTION AREA NIŠ						
Work injuries in 2020						
Branch/Facility	Number of employees	Work injuries in relation to the number of employees				
		Light	Heavy	Deadly	Total	%
Management DA Nis	129	0	0	0	0	0,00
Branch ED Nis	134	2	1	0	3	2,24
Branch ED Leskovac	76	0	0	0	0	0,00
Branch ED Zajecar	120	0	0	0	0	0,00
Branch ED Pirot	28	0	0	0	0	0,00
Branch ED Prokuplje	45	0	0	0	0	0,00
Branch ED Vranje	32	0	0	0	0	0,00
TOTAL: DISTRIBUTION AREA NIŠ	564	2	1	0	3	0,53

5.3.3. Health

Periodic medical examinations of employees are presented in Table 206 and they are performed regularly for all newly employed workers and for employees working on posts with special working conditions.

Table 206

DISTRIBUTION AREA NIŠ											
Work capability of the employees in 2020											
Branch/Facility	Number of employee	Periodic examination				Work capability					
		Referred to examination		Examined		Capable		Limited capability		Incapable	
		No.	%	No.	%	No.	%	No.	%	No.	%
Management DA Nis	129	24	18,60	24	100,00	22	91,67	2	8,33	0	0,00
Branch ED Nis	134	81	60,45	79	97,53	69	87,34	10	12,66	0	0,00
Branch ED Leskovac	76	44	57,89	44	100,00	42	95,45	2	4,55	0	0,00
Branch ED Zajecar	120	70	58,33	70	100,00	63	90,00	6	8,57	1	1,43
Branch ED Pirot	28	17	60,71	17	100,00	14	82,35	3	17,65	0	0,00
Branch ED Prokuplje	46	29	63,04	29	100,00	27	93,10	2	6,90	0	0,00
Branch ED Vranje	32	19	59,38	19	100,00	18	94,74	1	5,26	0	0,00
TOTAL DISTRIBUTION AREA NIS	564	284	50,35	282	99,30	255	90,43	26	9,22	1	0,35

5.4. Public complaints

There were no public complaints regarding the environment in 2020 in DA Niš.

APPENDIX 1

EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT ENVIRONMENTAL MODEL REPORT

Coal Production, Processing and Transportation Facilities

For each mining company:

- Summarize the Status of permits, licenses and other approvals required for each major facility (e.g. coal mine). Note any incidents of non-compliance with the applicable national environment, health and safety requirements.
- Identify any new permits required during reporting year or permits that will expire in less than a year and therefore require renewal.

Please provide data on the following parameters for each facility.

- Air Emissions (key air emissions, permitted limits, actual emissions)
- Solid wastes (type and quantity of waste)
- Water use (quantities of water used, permitted limits)
- Liquid effluents (key liquid effluents, permitted limits, actual effluents produced)
- Noise
- Summarize the health and safety record, including the accident rate and any initiatives implemented or planned during the reporting period, including training programs
- Summarize public complaints, if any, relating to the project, take steps to address these.

Power Generation Facilities

For each Power Plant:

- Summarize the status of permits, licenses or other approvals required for each plant. Note any incidents of non-compliance with the applicable national environment, health and safety requirements.
- Identify any new permits required during reporting year or permits that will expire in less than a year and therefore require renewal.

Please provide data on the following parameters for each plant:

Air Emissions

	Actual emissions	Limited values
Content of particulate matter		
CO ₂ (Sulphur Dioxide)		
NO _x (NO ₂) Nitrogen Oxides		

Identified negative impact on river flow and ecological system below the reservoir

- Solid Wastes (type and quantity of waste);
- Water Use (quantities of water used, permitted limits);
- Liquid effluents (key liquid effluents, permitted limits, actual effluents produced);
- Noise
- Summarize the Health and Safety record, including the accident rate and any initiatives implemented or planned during the reporting period, including training programs
- Summarize Public Complaints, if any, relating to the project, steps taken to address these.

Power Transmission

- Summarize the status of permits, licenses or other approvals required for each facility. Note any incidents of non-compliance with the applicable national environment, health and safety requirements.
- Identify any new permits required during reporting year or permits that will expire in less than a year and therefore require renewal.
- Summarize the health and safety record, including the accident rate and any initiatives implemented or planned during the reporting period, including training programs
- Summarize public complaints, if any, relating to the project, steps taken to address these.

Power Distribution

- Summarize the status of permits, licenses or other approvals required for each facility. Note any incidents of non-compliance with the applicable national environment, health and safety requirements;
- Identify any new permits required during reporting year or permits that will expire in less than a year and therefore require renewal.
- Summarize the health and safety record, including the accident rate and any initiatives implemented or planned during the reporting period, including training programs.
- Summarize public complaints, if any, relating to the project, steps taken to address these.

APPENDIX 2

SERBIAN ENVIRONMENTAL LEGISLATION

LAWS

1. Law on environmental protection "Official Gazette RS", No.135/2004, 36/2009, 36/2009- other law, 72/2009, 43/2011- Constitutional Court decision и 14/2016, 76/2018, 95/2018 - other law)
2. Law on Environmental Impact Assessment "Official Gazette RS", No. 135/04 and 36/2009)
3. Law on environmental impact strategic assessment ("Official Gazette RS", no 135/2004 and 88/2010)
4. Law on integrated environmental pollution prevention and control, ("Official Gazette RS", No.135/2004 and 25/2015)
5. Air protection law ("Official Gazette RS" no.36/2009 and 10/2013)
6. Law on noise environmental protection ("Official Gazette RS" no. 36/2009 and 88/2010)
7. Law on non-ionizing radiation protection ("Official Gazette RS", no. 36/2009)
8. Law on packaging and packaging waste ("Official Gazette RS", no. 36/2009, 95/2018)
9. Law on Biocidal Products ("Official Gazette RS", no. 36/2009, 88/2010 and 92/2011 and 25/2015)
10. Law on chemicals ("Official Gazette RS", no. 36/2009,88/2010, 92/2011 and 93/2012 and 25/2015)
11. Law on waste management ("Official Gazette RS", no. 36/2009, 88/2010 and 14/2016, 95/2018)
12. Law on Environmental Protection ("Official Gazette RS", no. 36/2009, 88/2010, 91/2010 14/2016, 95/2018)
13. Water Law ("Official Gazette RS", no. 30/02010, 93/2012 and 101/2016, 95/2018 and other law)
14. Law on meteorological and hydrological activities ("Official Gazette RS", no. 88/2010)
15. Law on protection and sustainable use of fish stocks, ("Official Gazette RS", No 128/2014, 95/2018)
16. Law on Mining and Geological Research ("Official Gazette RS", No 101/2015, 95/2018)
17. Law on planning and construction ("Official Gazette RS", no. 72/2009, 81/2009- correction, 64/2010- Constitutional Court decision, 24/2011,121/2012, 42/2013 – Constitutional Court decision, 50/2013 – Constitutional Court decision, 98/2013 - Constitutional Court decision, 132/2014 and 145/2014,83/2018, 31/2019, 37/2019, 9/2020)
18. Agricultural Land Law ("Official Gazette RS", No. 62/2006, 65/2008 and 41/2009, 112/2015 и 80/2017, 95/2018)
19. Law on forests ("Official Gazette RS", No. 30/2010, 93/2012 and 89/2015,95/2018)
20. Law on confirmation of the convention on access to information, public participation in decision-making and access to justice in environmental matters („Official Gazette RS“, No. 38/09, 8/2011)
21. Law on confirmation of the Protocol of the pollutants registration and release within the convention on access to information, public participation in decision-making and access to justice in environmental matters („Official Gazette RS“, No. 8/2011)
22. Occupational Safety and Health Protection Law („Official Gazette RS“, No. 101/2005, 91/2015 and 113/2017)
23. Law on Fees for Use of Public Goods („Official Gazette RS“, No. 95/2018, 49/2019 and 86/2019 – adjusted amounts in RSD)

REGULATIONS

1. Regulation on establishing the list of projects which require environmental impact assessment and list of projects which may require environmental impact assessment ("Official Gazette of the RS", No. 114/2008)
2. Regulation on noise indicators, limit values, method for assessment of noise indicators, disturbance and harmful environmental impact of noise ("Official Gazette of the RS", No.75/2010)
3. Air Quality Monitoring Conditions and Requirements Regulation ("Official Gazette RS", № 11/2010, 75/2010 and 63/2013)

4. Regulation on Emissions Limit Values of Pollutants in the Air from stationary sources of pollution other than combustion plants ("Official Gazette of the RS", No. 111/2015,.6/2016)
5. Regulation on the Methodology for Data Collection for the National Inventory of Unintentional Emissions of Persistent Organic Pollutants ("Official Gazette RS", No. 76/2010)
6. Regulation on the Methodology for Data Collection for the National Greenhouse Gases Inventory ("Official Gazette RS", No. 81/2010)
7. Regulation on ozone depleting substances management, as well as on conditions for license issuance to import and export of such substances („Official Gazette”, No. 114/2013, 23/2018, 44/2018 other regulation 95/2018 other regulation)
8. Regulation on zones and agglomerations classification ("Official Gazette RS", no. 58/2011 and 98/2012)
9. Regulation on determining program of air quality control in national network ("Official Gazette RS", no. 58/2011)
10. Regulation on types of waste subject to thermal treatment, conditions and criteria for determination of location, technical and technological conditions for projecting, construction, equipping and work of the thermal waste treatment plants and handling of combustion residues ("Official Gazette of RS", No. 102/2010 and 50/2012)
11. Regulation on the landfill of waste ("Official Gazette RS", no. 92/2010)
12. Regulation on Non hazardous waste List for which the permit is not issued with the documentation accompanying trans-boundary shipments. („Official Gazette", No.102/2010)
13. Regulation on determination of certain types of hazardous waste that can be imported as secondary raw material ("Official Gazette RS", no. 60/2009)
14. Regulation on products that become special waste streams after use, form of daily record on the amount and type of produced and imported products and annual report, manner and deadlines for submission of annual report to the persons liable, calculation criteria, amount of compensation and method for calculation and payment of compensation ("Official Gazette RS", no. 54/2010, 86/2011, 15/2012, 41/2013, 3/2014, 8/2014 and 31/2015, 44/2016, 43/2017 state rulebook, 45/2018 – state rulebook, 67/2018 – state rulebook and 95/2018 state law)
15. Regulation on limit values of priority and priority hazardous substances polluting surface water and deadlines for their achievement ("Official Gazette RS", No. 24/2014)
16. Regulation on types of activities and facilities for which integrated permit is issued ("Official Gazette RS", No. 84/2005)
17. Regulation on content of the program for adaptation measures of the existing facilities or activities by prescribed conditions ("Official Gazette RS", No. 84/2005)
18. Regulation on the criteria for determination of the best available techniques, for the implementation of quality standards, as well as for determination of limit values of emissions in integrated permit ("Official Gazette RS", No. 84/2005)
19. Regulation on establishing the program for dynamics of completing the application for integrated permit ("Official Gazette RS", No. 108/2008)
20. Regulation establishing a program of systematic soil quality monitoring, indicators for assessing the risk of soil degradation and remediation programs development methodology ("Official Gazette RS", № 88/2010, 30/2018)
21. Regulation on Limit Values for Polluting, Harmful and Hazardous Substances in Soil („Official Gazette RS“ No. 30/2018 and 64/2019)
22. Regulation on Systemic Monitoring of Condition and Quality of the Soil ("Official Gazette RS" No. 73/2019)
23. Regulation on Establishing Criteria for Determining of the Status of Endangered Environment and Priorities for Sanitation and Remediation ("Official Gazette RS", No. 22/2010)
24. Regulation on Determining the Activities that Affect the Environment According to the Amount of Pollution ("Official Gazette RS" No. 86/2019 and 89/2019)
25. Regulation on the waste lists for trans-boundary shipments, content and layout of documents accompanying the transboundary transport of the waste with the instructions how they should be filled in ("Official Gazette RS", No. 60/2009)

26. Regulation on Determination of Activities with Impact on the Environment ("Official Gazette RS", No.109/2009 and 8/10)
27. Regulation on the Criteria for Determination of the Best Available Techniques, for the Implementation of Quality Standards, as well as for Determination of Limit Values in the integrated permit ("Official Gazette RS", No 84/2005)
28. Regulation on Content of the Program for Adaptation Measures of the Existing facilities or Activities by Prescribed Conditions ("Official Gazette RS", No. 84/2005)
29. Regulation on types of activities and facilities for which the integrated permit is issued ("Official Gazette RS", no.135/04 and 84/2005)
30. Decree on establishing the list of projects which require environmental impact assessment and list of projects which may require environmental impact assessment ("Official Gazette of the RS", No. 114/2008)
31. Regulation on amount and conditions for allocation of stimulation funds ("Official Gazette RS", No. 88/2009, 67/2010,101/2010,86/2011, 35/2012, 48/2012, 41/2013 и 81/2014, 30/2015, 44/2016, 43/2017, 45/2018)
32. Regulation on products that become special waste streams after use, form of daily record on the amount and type of produced and imported products and annual report, manner and deadlines for submission of annual report to the payers of such fees, calculation criteria, fee amount and manner of fee calculation and payment ("Official Gazette RS", no. 54/2010, 86/2011, 15/2012, 3/2014, 31/2015, 44/2016, 43/2017, 45/2018-other regulation, 67/2018 – other regulation, 95/2018 – other regulation)
33. Regulation on termination of the Regulation on way and procedures for management of waste containing asbestos ("Official Gazette RS", No. 74/10)
34. Regulation on the list of industrial facilities and activities which control emission of volatile organic compounds, on the value of volatile organic compounds at certain consumption of solvents and total allowed emissions, as well as the emission reduction scheme ("Official Gazette RS", No. 100/2011)
35. Regulation amending the air quality monitoring conditions and requirements regulation ("Official Gazette RS", No 11/10, 75/2010 и 63/2013)
36. Regulation on the criteria and method for counting of the programs and projects being realized within the mechanism of clean development ("Official Gazette RS", No. 44/2010)
37. Regulation on emission limit values in waters and deadlines for the achievement thereof ("Official Gazette RS", No. 67/11 ,48/12 and 1/2016)
38. Regulation on emission limit values of polluting substances in surface and groundwaters and deadlines for their achievement (Official Gazette of the RS, no. 50/2012, 67/2011,48/2012, 1/2016)
39. Regulation on establishing the program for systematic testing of non-ionizing radiation levels in the environment for the period from 2017 to 2018. ("Official Gazette RS", no. 105/2015)
40. Regulation on the content and methods of management of environmental information system, methodology, structure, common grounds, categories and levels of data acquisition, as well as the content of information the public is regularly and necessarily informed about ("Official Gazette RS", No. 112/09)
41. Regulation on termination of the Regulation on waste management ("Official Gazette RS", no 71/2010)
42. Regulation on determination of activities which performing affect to the environment ("Official Gazette of the RS, no. 101/2009, 8/2010)
43. Regulation on detailed conditions which should be fulfilled by beneficiaries of funds, on conditions and on methods of distribution of funds, on criteria and measures for evaluating the requests for the distribution of funds, on the method of monitoring the use of funds and contracted rights and obligations, and other Issues significant for the allocation and use of funds Green Fund ("Official Gazette of the RS, no. 25/2018)
44. Regulation on management of greenhouse gases with fluorinated gases as well as the conditions for import and export of these gases.(" Official Gazzette RS" No 120/2013, 44/2018)
45. Regulation on methodology for the preparation of inventory of emissions and the projections of pollutants in the air ("Official Gazzette RS" No. 3/2016)

46. Regulation on measuring of the emission of air pollutants from stationary sources of pollution ("Official Gazette RS" No. 5/2016)
47. Regulation on measurements of the emissions of pollutants in the air from stationary pollutants ("Official Gazette RS" No. 6/2016)
48. Regulation on the establishment of the Packaging waste reduction plan for the period 2015-2019 ("Official Gazette RS" No. 144/2014)
49. Regulation on the amount of fees, payers, as well as the manner of payment of fees for assessment and verification of data on biocidal products ("Official Gazette RS" No 90/2015)
50. Regulation on the establishment of Annual Water monitoring program for 2008("Official Gazette RS" No. 35/2018)
51. Regulation on the establishment of Annual Water monitoring program for 2019("Official Gazette RS" No. 48/2019)
52. Regulation on the establishment of the Water management program in 2018 ("Official Gazette RS" No. 13/2018, 52/2018, 94/2018)
53. Regulation on placing under control of the use and trade of wild flora and faune ("Official Gazette RS" No. 31/2005, 45/2005, 22/2007, 38/2008, 9/2010, 69/2011, 95/2018)

RULEBOOKS

1. Rulebook stipulating the emission limit values, measuring and data recording methods and time limits ("Official Gazette RS", number 30/1997, 35/1997)
2. Rulebook on contents, appearance and method of keeping the public book of implemented procedures and taken decisions on environmental impact assessment, "Official Gazette RS", No. 69/2005)
3. Rulebook on public insight, presentation and public discussion about the EIA Study, ("Official Gazette of the RS", No. 69/2005)
4. Rulebook on work of technical committee for environmental impact assessment study, ("Official Gazette of the RS", No. 69/2005)
5. Rulebook on contents of the request for necessity of environmental impact assessment and contents of the request for defining the scope and content of EIA Study ("Official Gazette of the RS", No. 69/2005)
6. Rulebook on contents of the Environmental Impact Assessment Study ("Official Gazette of the RS", No. 69/2005)
7. Rules on methods of noise measurement, content and scope of report on noise measurement "Official Gazette RS", No. 72/2010)
8. Rules on conditions which have to be complied by the expert organization for noise measurement, as well as on the documents submitted together with the request for authorization for noise measurement ("Official Gazette RS"; No. 72/2010)
9. Rules on methodology for determining of acoustic zones "Official Gazette RS", No. 72/2010)
10. Rules on content and methods for preparation of strategic noise maps and the manner of their presentation to the public ("Official Gazette RS", No. 80/2010)
11. Rules on methodology for preparation of action plans ("Official Gazette RS ", No. 72/2010)
12. Rules on manner of the exchange of information about the metering points in state and local network, measurement techniques, as well as the manner of the exchange of data obtained during the monitoring of air quality in state and local network ("Official Gazette RS", no. 84/2010)
13. Rulebook on contents of air quality plans ("Official Gazette of the RS", No. 21/2010)
14. Rulebook on contents of short-term air action plans ("Official Gazette of the RS", No. 65/2010)
15. Rules on categories, testing and classification of waste ("Official Gazette RS", No. 56/10, 93/2019)
16. Rules on form of document for movement of waste and instruction for its completion ("Official Gazette RS", No.114/2013, 17/2017)
17. Rules on form of request for the issuance of permit for treatment, i.e.waste storage, the reuse and disposal of waste ("Official Gazette RS", no. 38/18.
18. Rules on the content and the design of the permits for the storage, the treatment and disposal of hazardous waste („Official Gazette RS" No.96/2009, 93/2019)

19. Rules on the content, manner of record keeping and design of the register of issued permits for waste storage, treatment and disposal ("Official Gazette RS", no.95/2010)
20. Rules on the content of the certificate on exemption from the obligation to obtain the permit for of internal non-hazardous waste storage ("Official Gazette RS", no. 73/2010)
21. Rules on daily evidence form and annual waste report form with the instruction for its completion ("Official Gazette RS", No.88/2015)
22. Rules on the form of the document on hazardous waste transport, on the form of the previous report, the way of its delivery and instructions how to fill in the form („Official Gazette RS“ No.17/2017)
23. Rules on hazardous waste storage, packing and labelling method („Official Gazette RS“, no. 92/2010)
24. Rules on conditions, method and procedure for waste oil management, ("Official Gazette RS", No. 71/2010)
25. Rules on the way and procedure of old batteries and accumulators management ("Official Gazette RS", No. 86/10)
26. Rules on the way and procedure of waste tires management ("Official Gazette RS"; No.104/2009 and 81/2010)
27. Rules on manner and procedure for management end-of-life vehicles ("Official Gazette RS", No. 98/10)
28. Rules on method and procedure for the management of waste fluorescent tubes containing mercury ("Official Gazette RS", No. 97/10)
29. Rules on the management the waste containing asbestos ("Official Gazette RS", no. 75/2010)
30. Rules on medical waste management ("Official Gazette RS", no. 78/2010, 48/2019)
31. Rules on conditions and way of collecting, transportation, storage and treatment of waste used as secondary raw material or for energy generating "Official Gazette RS ", No.98/2010, 97/2013, 23/2016)
32. Rules on methodology for collection of data on the content and amounts of municipal waste on the territory of local self-government unit ("Official Gazette RS", no. 61/2010)
33. Rules on the management with devices and waste containing PCB ("Official Gazette RS", no. 37/2011)
34. Instructions defining preventive measures for safe keeping, storage, i.e. use of extremely hazardous chemicals ("Official Gazette RS", no.6/2017)
35. Rules on import and export of extremely hazardous chemicals ("Official Gazette RS", 89/2010,15/2013 and 114/2014)
36. Rules on the content of the safety list ("Official Gazette RS", No. 100/11)
37. Rules on chemical registry ("Official Gazette RS", No.100/2011, 16/2012, 47/2012, 15/2013, 115/2013, 1/2015, 16/2016, 6/2017 и 117/2017, 44/2018, 7/2019, 93/2019)
38. Rules on bans and restrictions of production, placement on the market and use of chemicals ("Official Gazette of RS", no.90/2013, 25/2015, 2/2016 and 44/2017, 36/2018, 9/2020)
39. Rules on the criteria to identify substances as PBT or vPvB ("Official Gazette RS" no. 23/2010)
40. Rules on permits allowing transactions, i.e. on permits allowing the use extremely hazardous chemicals ("Official Gazette RS", no.29/2018)
41. Rules on detergents („Official Gazette RS“ no. 25/2015)
42. List of surfactants for which an approval has been issued or an act has been adopted allowing the use of surfactants in detergent in the EU and list of surfactants for which a request for approval has been rejected and surfactants banned in the EU ("Official Gazette RS" no. 94/2010)
43. Rules on the manner of chemical record keeping ("Official Gazette", no. 31/2011)
44. Rules on classification, packaging, labelling and advertising of certain chemicals and products ("Official Gazette RS", no. 59/2010, 25/2011 and 5/2012)
45. Rules on classification, packaging, labelling, and advertising of certain chemicals and products in line with globally harmonized classification and marking system of the UN ("Official Gazette RS", No. 105/2013,52/2017, 21/2019)
46. Rules on detailed conditions how to store hazardous chemicals in shops and the manner how to label those shops ("Official Gazette RS", No. 31/2011 and 16/2012)
47. Rules on the content and form of request for the issuance of water acts and content of the opinion in the procedure of water conditions issuance and the content of the report in the procedure of issuing of permits ("Official Gazette RS", no.72/2017, 44/2018)

48. Regulation on water information system that defines data collection, methodology, structure, categories and procedures, and form of information to be presented to public ("Official Gazette RS", no. 54/2011)
49. Rules on water facilities/ structures cadaster ("Official Gazette RS", no. 34/2011)
50. Rules on the content and manner of keeping the register of issued integrated permits ("Official Gazette RS" no. 69/2005)
51. Rules on the content, layout and manner of completing the application for integrated permit ("Official Gazette RS", no. 30/2006 and 32/2016, 44/2018)
52. Rules on the content and layout of integrated permit ("Official Gazette RS", no. 30/2006, 44/2018 – state law)
53. Rules on the methodology for the preparation of national and local register of pollution sources as well as the methodology for types, manners and deadlines of data collection ("Official Gazette RS", no. 91/2010 and 10/2013, 98/2016)
54. Rulebook on the limits of exposure to non-ionizing radiation ("Official Gazette of the RS", no. 104/2009)
55. Rulebook on the sources of non-ionizing radiation of special interest, types of sources, manner and period of their examination ("Official Gazette of the RS" No. 104/2009)
56. Rulebook on the content of records of the sources of non-ionizing radiation of special interest ("Official Gazette of the RS" No. 104/2009)
57. Rulebook on the content and appearance of the form of the report on systematic examination of the levels of non-ionizing radiation in the environment ("Official Gazette of the RS" No. 104/2009)
58. Rulebook on conditions to be fulfilled by legal entities performing tasks of examination of the levels of non-ionizing radiation of the sources of special interest in the environment ("Official Gazette of the RS" No. 104/2009)
59. Rulebook on conditions to be fulfilled by legal entities performing tasks of systematic examination of the levels of non-ionizing radiation, and the manner and methods of systematic examination in the environment ("Official Gazette of the RS" No. 104/2009)
60. Rulebook on the methodology for the development of rehabilitation and remediation projects ("Official Gazette of the RS" No. 74/2015)

STRATEGIES

1. Waste Management Strategy for period 2010-2019 ("Official Gazette RS", № 29/2010)
2. The National Strategy for Sustainable Use of Natural Resources and Goods ("Official Gazette RS", № 33/2012)
3. National Environmental Approximation Strategy of the RS ("Official Gazette RS", № 80/2011)
4. Strategy of Cleaner Production Introduction in the RS ("Official Gazette RS", № 17/2009)
5. Strategy for Convention introduction on access to information, public participation in decision – making, and access to justice in Environmental Matters – The Aarhus Convention ("Official Gazette RS", № 103/2011)
6. National Sustainable Development Strategy ("Official Gazette RS", № 57/2008)
7. National Strategy on the Inclusion of the Republic of Serbia into Clean Development Mechanism of the Kyoto Protocol for the Waste Management Sector, Agriculture and Forestry ("Official Gazette RS", № 8/2010)
8. Strategy of Mineral Resources Management in the Republic of Serbia by 2030(Official Gazette of the RS, no. 09/2010)
9. Biodiversity Strategy of the Republic of Serbia for the period 2011 – 2018 (Official Gazette of the RS, no. 13/2011)
10. National Strategy for Sustainable Use of Natural Goods and Resources ("Official Gazette of RS" no. 33/2012)
11. Energy Sector Development Strategy of the Republic of Serbia for the period by 2025 with Projections by 2030 ("Official Gazette of the RS", no. 101/2015).

PROVISIONS FROM OTHER AREAS APPLIED IN THE AREA OF ENVIRONMENTAL PROTECTION

Ratified International treaties of significance for the Republic of Serbia

1. Law on confirmation of the Kyoto Protocol with United Nations Framework Convention on Climate Change, "Official Gazette RS", No. 88/07
2. Law Ratifying the Convention on Environmental Impact Assessment in a Transboundary Context, ("Official Gazette RS", No. 102/2007, 4/2016)
3. Law on confirmation of the Stockholm Convention on Persistent Organic Pollutants „Official Gazette RS“, No. 42/09
4. Law ratifying the Convention on Biological Diversity ("Official Journal of SRJ - International Treaties ", No. 11/01)
5. Law ratifying the Convention on International Trade in Endangered Species of Wild Fauna and Flora ("Official Journal of SRJ - International Treaties ", No. 11/01)
6. Law ratifying the Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal ("Official gazette of FNRY– International Treaties", № 2/99)
7. Law ratifying The United Nations Framework Convention on Climate Change, with Annexes ("Official Journal of SRJ - International Treaties ", No. 2/97)
8. The Montreal Protocol on Substances that Deplete the Ozone Layer ("Official Journal of SFRY - International Treaties", No. 16/90 "Official Journal of Serbia and Montenegro - International Treaties ", No. 24/04)
9. The Vienna convention for the protection of the ozone layer, with Appendices I and II ("Official Journal of SFRY - International Treaties ", No. 1/90)
10. International Convention on bird protection ("Official Journal of SFRY- International Treaties ", No. 6/73)
11. Convention on swamps of international significance, especially as habitat of water birds - ("Official Journal of SFRY - International Treaties ", No. 9/77)
12. European Convention on the protection of animals in international transportation ("Official Journal of SRY "- International Treaties ", No. 1/92)
13. Convention on cooperation for the protection and sustainable use of the Danube River ("Official Journal of SCG"- International Treaties ", No. 4/2003)
14. Montreal amendment to Vienna Convention on substances damaging the ozone layer ("Official Journal of SCG- International Treaties ", No. 2/2004)
15. Regulation on fish stock and waters of the Danube between the Government of FNRY, National Republic of Bulgaria, the Romanian National Republic and the Union of Soviet Republics ("Official Journal of FNRY" International Treaties, No. - 8/58)
16. Law ratifying the Convention for the protection of world cultural and natural heritage "Official Journal of SFRY" International Treaties, No. 8/74
17. Law ratifying the Convention for the Protection of Cultural Property in the Event of Armed Conflict "Official Journal of SFRY" International Treaties, No. 4/56
18. Law ratifying the Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property "Official Journal of SFRY" International Treaties, No. 50/73
19. Law ratifying the Vienna Convention on Civil Liability for Nuclear Damage "Official Journal of SFRY" International Treaties, No. 5/77
20. Regulation on ratification of the Convention on establishing European organization for plant protection "Official Journal of SFRY" International Treaties, No.12/57
21. Regulation on ratification of the International Plant Protection Convention "Official Journal of SFRY" International Treaties, No.7/55
22. Law Ratifying the Convention on Environmental Protection from Pollution of the Tisa River and its tributaries "Official Journal of SFRY" International Treaties, No.1/90
23. Law Ratifying the Convention on Long-range Trans-boundary Air Pollution "Official Journal of SFRY" International Treaties, No.11/86

24. Law Ratifying the Protocol with the Convention on Long-range Trans-boundary Air Pollution on Long-term Financing of the Cooperative Program for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) "Official Journal of SFRY "- International Treaties, No. 2/87
25. Law Ratifying The Montreal Protocol on Substances that Deplete the Ozone Layer ("Official Gazette of Serbia and Montenegro - International Treaties, No. 24/04)
26. Law on confirmation of the amendments and supplements to the Convention on the Physical Protection of Nuclear Material (Official Gazette of the RS - International Treaties, No. 04/ 2016)
27. Law on the Conventions adopted based on Versailles treaty 8 June 1919, and based on appropriate provisions of other treaties adopted on International labor conferences, held in Washington, Geneva and Genoa 1919-1926) "Official Gazette of The Kingdom of Yugoslavia", No. 44 XBI/30
28. Regulation on Ratification of the Convention on Protection against Benzol Poisoning "Official Journal of SFRY "- International Treaties, No. 16/76
29. Law Ratifying the Convention for prohibition and control of professional risks caused by carcinogens substances and agents "Official Journal of SFRY "- International Treaties, No. 3/77
30. Law on prohibition of experiments with nuclear weapons into the atmosphere, cosmos and under water "Official Journal of SFRY "- International Treaties, No. 11/63)
31. Law Ratifying the Convention for prohibition of development, production and stockpiling of bacteriological (biological and toxic) weapons and their destruction "Official Journal of SFRY "- International Treaties, No. 43/74
32. Law Ratifying the Convention for protection of employees from professional risks in working environment caused by air pollution, noise and vibration "Official Journal of SFRY "- International Treaties, No. 14/82
33. Law Ratifying the Convention for occupational health, medical protection and working environment "Official Journal of SFRY "- International Treaties, No. 7/87
34. Law Ratifying the Convention for safe use of asbestos "Official Gazette SRJ "- International Treaties, No. 4/89
35. Law Ratifying the European Convention for the Protection of the Archaeological Heritage "Official Gazette SRJ "- International Treaties, No. 9/90
36. Law Ratifying the European Convention for the Protection of the Architectural Heritage "Official Gazette SRJ "- International Treaties, No. 4/91
37. Law Ratifying the Agreement between the Federal Government of the Federal Republic of Yugoslavia and the Government of the Russian Federation on cooperation in the field of environment protection and improvement "Official Gazette SRJ"- International Treaties, No. 6/96)6poj 6/96)

APPENDIX 3

ABBREVIATIONS

BOD	Biological Oxygen Demand
LEV	Limit Emission Value
MPC	Maximum Permissible Concentration
MP	Measuring Point
FGD	Flue Gas Desulfurization
OCM	Open Cast Mine
MB	Mining Basin
PSHPP	Pumped Storage Hydro Power Plant
TPP	Thermal Power Plant
TPP- OCM	Thermal Power Plant – Open Cast Mine
TPP- HP	Thermal Power Plant – Heating Plant
TS	Transformer Substation
TPM	Total Particulate Matters
HPP	Hydro Power Plant
COD	Chemical Oxygen Demand
DA	Distribution Area
OU	Organisation Unit
CP	Cadastral Plot
MME	Ministry of Mining and Energy
PS	Powdery Substances
RV	Referential Value
IPH	Institute for Public Health
PPE	Personal Protective Equipment
MCTI	Ministry of Construction, Transport and Infrastructure
SKO	<i>Srednje Kosačko Ostrvo</i>