

Supplement 1: Results of Analysis of Effluent and Influent Samples

						Effluent samples								Influent sample
						Date of 24h-composite sample					Statistic values			Date of 24h-composite sample
Content of Figure 2	Substance	Substance group	Specification	Unit	DL*	03.11.2017	04.12.2017	26.03.2018	03.04.2018	02.05.2018	mean	max	min	10.04.2018
drugs I	Atenolol	drug	beta blockers	µg/L	0,05	0,220	0,240	0,280	0,290	0,310	0,268	0,310	0,220	0,440
	Bezafibrat	drug	lipid reducers	µg/L	0,05	0,240	0,260	0,660	1,500	0,360	0,604	1,500	0,240	2,300
	Carbamacepin	drug	psychotropic drugs	µg/L	0,05	0,450	0,410	0,450	0,480	0,470	0,452	0,480	0,410	0,750
	Ciprofloxacin	drug	antibiotic	µg/L	0,1	0,160	0,180	0,280	0,330	0,410	0,272	0,410	0,160	2,700
	Clarithromycin	drug	antibiotic	µg/L	0,05	0,190	0,400	0,510	0,400	0,240	0,348	0,510	0,190	0,420
	Cyclophosphamid	drug	cytostatic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Metoprolol	drug	beta blockers	µg/L	0,05	< DL	0,350	1,800	2,200	2,500	1,713	2,500	0,350	2,300
	Sulfamethoxazol	drug	antibiotic	µg/L	0,05	0,420	0,360	0,220	0,150	0,280	0,286	0,420	0,150	0,830
drugs II analgetics	Diclofenac	drug	analgetic	µg/L	0,05	2,300	2,000	2,200	2,300	2,900	2,340	2,900	2,000	6,300
	Ibuprofen	drug	analgetic	µg/L	0,05	< DL	0,068	0,350	0,310	0,150	0,220	0,350	0,068	4,000
	Ketoprofen	drug	analgetic	µg/L	0,05	< DL	< DL	0,079	0,095	0,085	0,086	0,095	0,079	0,190
	Naproxen	drug	analgetic	µg/L	0,05	0,160	0,210	1,100	1,000	0,570	0,608	1,100	0,160	5,100
X-ray contrast agent	Amidotrizoic acid	X-ray contrast agent	-	µg/L	0,05	2,900	2,400	2,500	3,400	2,600	2,760	3,400	2,400	2,200
	Iomeprol	X-ray contrast agent	-	µg/L	0,05	70,000	48,000	91,000	80,000	90,000	75,800	91,000	48,000	100,000
	Ioexol	X-ray contrast agent	-	µg/L	0,05	4,400	3,900	9,900	8,000	11,000	7,440	11,000	3,900	8,200
	Iopamidol	X-ray contrast agent	-	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Iopromid	X-ray contrast agent	-	µg/L	0,05	0,560	0,170	0,300	1,000	0,840	0,574	1,000	0,170	2,400
	Acesulfam	artificial sweetener	-	µg/L	0,05	0,700	1,500	16,000	7,600	2,000	5,560	16,000	0,700	40,000
	Cyclamat	artificial sweetener	-	µg/L	0,05	< DL	< DL	0,084	< DL	< DL	0,084	0,084	0,084	100,000
	Saccharin	artificial sweetener	-	µg/L	0,05	0,065	0,210	< DL	< DL	0,630	0,302	0,630	0,065	27,000
	Sucralose	artificial sweetener	-	µg/L	0,25	9,200	7,100	8,200	8,900	9,900	8,660	9,900	7,100	9,100
	EDTA (Ethylen-dinitrilotetraacetate)	complexing agent	-	µg/L	0,5	100,000	120,000	110,000	87,000	63,000	96,000	120,000	87,000	78,000
	ADA (beta-Alanindiacetate)	complexing agent	-	µg/L	1	< DL	< DL	< DL	< DL	< DL				< DL
	NTA (Nitrilotriacetate)	complexing agent	-	µg/L	0,5	0,620	0,600	< DL	< DL	< DL	0,610	0,620	0,600	77,000
	PDTA (1,3-Propylendiamintetraacetate)	complexing agent	-	µg/L	1	< DL	< DL	< DL	< DL	< DL				< DL
	MGDA (Methylglycindiacetate)	complexing agent	-	µg/L	1	< DL	< DL	7,900	4,700	< DL	6,300	7,900	4,700	380,000
	Benzotriazol	corrosion inhibitor	-	µg/L	0,05	9,600	9,400	11,000	9,700	12,000	10,340	12,000	9,400	19,000
	4-Methylbenzotriazol	corrosion inhibitor	-	µg/L	0,05	1,500	1,300	2,100	2,600	4,000	2,300	4,000	1,300	3,500
	5-Methylbenzotriazol	corrosion inhibitor	-	µg/L	0,05	0,970	0,930	1,300	1,500	1,600	1,260	1,600	0,930	1,900
	Gabapentin	drug	anti-epileptic	µg/L	0,05	1,800	2,900	3,700	5,700	2,900	3,400	5,700	1,800	17,000
	Metformin	drug	biguanide	µg/L	0,05	0,860	0,630	0,790	0,870	1,200	0,870	1,200	0,630	140,000
	10,11-Dihydro-10,11-dihydroxycarbamazepin	drug	metabolite	µg/L	0,05	1,100	1,000	1,200	1,500	1,700	1,300	1,700	1,000	2,400
	Amoxicillin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL				< DL
	Azithromycin	drug	antibiotic	µg/L	0,05	0,570	0,630	0,700	0,750	0,560	0,642	0,750	0,570	0,750
	Betaxolol	drug	beta blockers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				-
	Bisoprolol	drug	beta blockers	µg/L	0,05	0,200	0,240	0,260	0,310	0,300	0,262	0,310	0,200	0,350
	Cetirizin	drug	antiallergic	µg/L	0,05	0,360	0,350	1,000	1,600	2,600	1,182	2,600	0,350	3,200
	Chloramphenicol	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Chlortetracyclin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL				< DL
	Clenbuterol	drug	antiasthmatic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Clofibric acid	drug	metabolite	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Cloxacillin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL				< DL
	Dapson	drug	antirheumatic drug	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Dehydrato-Erythromycin A	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Diazepam	drug	anti-epileptic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Dicloxacillin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL				< DL
	Guanylhurea	drug	metabolite	µg/L	0,25	24,000	8,600	56,000	48,000	12,000	29,720	56,000	8,600	2,300

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Content of Figure 2						Effluent samples									Influent sample
						Date of 24h-composite sample					Statistic values			Date of 24h-composite sample	
	Substance	Substance group	Specification	Unit	DL*	03.11.2017	04.12.2017	26.03.2018	03.04.2018	02.05.2018	mean	max	min	10.04.2018	
	Paracetamol	drug	analgetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					2,900
	Penicillin G	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Penicillin V	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Dimethylaminophenazon	drug	analgetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Doxycyclin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Enoxacin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Enrofloxacin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Etofibrat	drug	lipid reducers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Fenofibrat	drug	lipid reducers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Fenofibric acid	drug	lipid reducers	µg/L	0,05	0,260	0,210	0,310	0,480	0,410	0,334	0,480	0,210		1,100
	Fenoprofen	drug	analgetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Furazolidon	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Gemfibrozil	drug	lipid reducers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					0,200
	Hydrochlorothiazid	drug	diureticum	µg/L	0,05	3,500	3,400	3,700	4,000	4,300	3,780	4,300	3,400		8,700
	Ifosfamid	drug	cytostatic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Indomethacin	drug	analgetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Lamotrigin	drug	anti-epileptic	µg/L	0,05	0,450	0,400	0,430	0,550	0,420	0,450	0,550	0,400		< DL
	Meclocyclin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Metronidazol	drug	antibiotic	µg/L	0,05	0,068	< DL	0,110	0,080	0,077	0,084	0,110	0,068		< DL
	N-Acetyl-4-aminoantipyrin	drug	metabolite	µg/L	0,05	0,640	0,880	6,600	6,800	0,750	3,134	6,800	0,640		12,000
	N-Formyl-4-aminoantipyrin	drug	metabolite	µg/L	0,05	3,600	4,800	2,800	7,000	3,800	4,400	7,000	2,800		4,300
	Nafcillin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Norfloxacin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Levofloxacin	drug	antibiotic	µg/L	0,1	0,110	0,120				0,115	0,120	0,110		-
	Ofloxacin	drug	antibiotic	µg/L	0,1			0,230	0,140	0,170	0,180	0,230	0,140		0,360
	Oleandomycin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Oxacillin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Oxazepam	drug	psychotropic drugs	µg/L	0,05	0,110	0,110	0,095	0,100	0,120	0,107	0,120	0,095		0,160
	Oxytetracyclin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL
	Pentoxifyllin	drug	anti-inflammatory	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Phenazon	drug	analgetic	µg/L	0,05	0,570	0,890	1,600	2,200	1,400	1,332	2,200	0,570		< DL
	Pindolol	drug	beta blockers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Primidon	drug	anti-epileptic	µg/L	0,05	0,340	0,330	0,350	0,370	0,360	0,350	0,370	0,330		0,840
	Propranolol	drug	beta blockers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Propyphenazon	drug	analgetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Ronidazol	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Roxithromycin	drug	antibiotic	µg/L	0,05	< DL	0,100	0,110	0,090	< DL	0,100	0,110	0,090		< DL
	Salbutamol	drug	sympathomimetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Simvastatin	drug	lipid reducers	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Sotalol	drug	beta blockers	µg/L	0,05	0,110	0,120	0,120	0,120	0,150	0,124	0,150	0,110		0,150
	Spiramycin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Sulfadiazin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Sulfadimidin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Sulfamerazin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Sulfapyridin	drug	antibiotic	µg/L	0,05	0,071	0,083	0,058	0,055	0,071	0,068	0,083	0,055		0,180
	Terbutalin	drug	sympathomimetic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL					< DL
	Tetracyclin	drug	antibiotic	µg/L	0,1	< DL	< DL	< DL	< DL	< DL					< DL

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	Trimethoprim	drug	antibiotic	µg/L	0,025	0,210	0,200	0,310	0,300	0,370	0,278	0,370	0,200	0,240
	Tylosin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Virginiamycin	drug	antibiotic	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	17-beta-Estradiol	hormone	estrogene	µg/L	0,0002	< DL	< DL	< DL	< DL	< DL				0,036
	Estron	hormone	estrogene	µg/L	0,0002	0,0004	0,0003	0,0010	0,0009	0,0007	0,001	0,001	0,000	0,076
	Estriol	hormone	estrogene	µg/L	0,002	< DL	< DL	< DL	< DL	< DL				0,360
	17-alpha-Ethinyl-estradiol	hormone	estrogene	µg/L	0,0002	< DL	< DL	0,001	0,000	0,000	0,000	0,001	0,000	< DL
	Mestranol	hormone	estrogene	µg/L	0,002	< DL	< DL	< DL	< DL	< DL				< DL
	Norethisteron	hormone	gestagen	µg/L	0,002	< DL	< DL	< DL	< DL	< DL				< DL
	Bisphenol A	others	-	µg/L	0,01	0,010	0,032	0,300	0,100	0,360	0,160	0,360	0,010	9,800
	4-tert.-Oktylphenol	others	estrogene active	µg/L	0,01	0,022	0,026	0,044	0,042	0,051	0,037	0,051	0,022	0,120
	4-iso-Nonylphenol	others	estrogene active	µg/L	0,05	< DL	< DL	< DL	0,087	0,100	0,094	0,100	0,087	0,260
	Triclosan	personal care	desinfectant	µg/L	-**	0,046	-	-	-	-	0,046	0,046	0,046	-
	perfluorooctane sulfonic acid (PFOS)	others	fluorosurfactant	µg/L	-**	0,064	0,068	-	-	-	0,066	0,068	0,064	-
	perfluorooctance acid (PFOA)	others	fluorosurfactant	µg/L	-**	0,009	0,011	-	-	-	0,010	0,011	0,009	-
	Carbendazim	pesticide	fungicide	µg/L	0,05	0,059	0,160	< DL	0,079	0,084	0,096	0,160	0,059	< DL
	DEET	pesticide	insecticide	µg/L	0,05	< DL	0,074	0,520	0,810	0,540	0,486	0,810	0,074	1,100
	Glyphosate	pesticide	herbicide	µg/L	0,02	0,160	0,100	0,026	0,064	0,290	0,128	0,290	0,026	1,800
	AMPA	pesticide	metabolite	µg/L	0,02	0,900	0,640	0,280	0,270	0,580	0,534	0,900	0,270	1,300
	MCPP (Mecoprop)	pesticide	herbicide	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Terbutryn	pesticide	herbicide		-**	0,048	0,039	-	-	-	0,044	0,048	0,039	< DL
	HHCB	personal care	synthetic fragrances	µg/L	0,025	0,480	0,380	0,540	0,640	0,680	0,544	0,680	0,380	3,200
	DTPA (Diethylentriaminpentaacetat)	X-ray contrast agent	X-ray contrast agent	µg/L	1	3,100	3,000	3,200	2,800	2,200	2,860	3,200	2,800	< DL
	Iotalamin acid	X-ray contrast agent	X-ray contrast agent	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Ioxaglic acid	X-ray contrast agent	X-ray contrast agent	µg/L	0,05	< DL	< DL	< DL	< DL	< DL				< DL
	Ioxithalamin acid	X-ray contrast agent	X-ray contrast agent	µg/L	0,05	1,700	1,100	2,500	3,500	3,200	2,400	3,500	1,100	2,700

*DL: Determination Limit; **: DL not available