



ClearStream

By ZDHC

F.LLI CIAMPOLINI & C. S.p.A.

Report Date:

16-Oct-2020

HIGG ID:

F.LLI CIAMPOLINI & C. S.p.A.

ZDHC ID:

A678SD57

E-mail:

ilio@ciampolini.com

Street Address:

Via delle casenuove,75 Galciana Prato Italy

Telephone:

+39 0574 5314

Version:

ZDHC Wastewater Guidelines V1.1

DETAILED PERFORMANCE BREAKDOWN

The section below shows the detailed results from your Laboratory test report in context with the ZDHC Wastewater guidelines and scoring methodology.

Temperature data is not currently scored on the Clearstream Report.

	INCOMING WATER	RAW WASTEWATER	SLUDGE	DISCHARGE WASTEWATER
<p>Conventional Legend:</p> <ul style="list-style-type: none"> ■ Aspirational ■ Progressive ■ Foundational ■ Alert ■ Not Analysed 				NOT ANALYSED
<p>MRSL Legend:</p> <ul style="list-style-type: none"> ■ Meets Requirements ■ Doesn't Meet Requirements ■ Not Analysed 				NOT ANALYSED

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
Conventional Parameters									
Phenol	NA - Test Item Not Requested		ND						-
COD	NA - Test Item Not Requested		1578	mg/l					-
Oil and Grease	NA - Test Item Not Requested		ND						-
TSS	NA - Test Item Not Requested		20	mg/l					-
BOD5	NA - Test Item Not Requested		310	mg/l					-
Temperature	NA - Test Item Not Requested		32.9	C					-
Persistent Foam	NA - Test Item Not Requested		ND						-
COLOUR 436 NM	NA - Test Item Not Requested		0	M-1					-
COLOUR 525 NM	NA - Test Item Not Requested		0	M-1					-
COLOUR 620 NM	NA - Test Item Not Requested		0	M-1					-
Coliform	NA - Test Item Not Requested		ND						-
Temp-Difference									-
Temp-Discharge Pipe									-
Total-P	NA - Test Item Not Requested		5.4	mg/l					-
Temp-Receiving Water									-
Total-N	NA - Test Item Not Requested		11.9	mg/l					-
pH	NA - Test Item Not Requested		7.8	None					-
Ammonium-N	NA - Test Item Not Requested		0.9	mg/l					-
AOX	NA - Test Item Not Requested		ND						-
Anions									
Cyanide	NA - Test Item Not Requested		ND						-
Sulfite	NA - Test Item Not Requested		ND						-
Sulfide	NA - Test Item Not Requested		0.3	mg/l					-
Metals									
Copper	NA - Test Item Not Requested		ND						-
Antimony	NA - Test Item Not Requested		ND						-
Cadmium	NA - Test Item Not Requested		ND						-
Mercury	NA - Test Item Not Requested		ND						-
Silver	NA - Test Item Not Requested		ND						-
Lead	NA - Test Item Not Requested		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
Chromium, total	NA - Test Item Not Requested		ND						-
Cobalt	NA - Test Item Not Requested		ND						-
Nickel	NA - Test Item Not Requested		ND						-
Zinc	NA - Test Item Not Requested		ND						-
Arsenic	NA - Test Item Not Requested		ND						-
Chromium (VI)	ND		0.028	mg/l					-
Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): Including All Isomers									
Octylphenol ethoxylates (OPEO)	NA - Test Item Not Requested		ND						-
Octylphenol (OP), mixed isomers	NA - Test Item Not Requested		ND						-
Nonylphenol (NP), mixed isomers	NA - Test Item Not Requested		ND						-
Nonylphenol ethoxylates (NPEO)	NA - Test Item Not Requested		ND						-
Chlorobenzenes and Chlorotoluenes									
2,3,4,5-Tetrachlorotoluene	NA - Test Item Not Requested		ND						-
2,3,4,6-Tetrachlorotoluene	NA - Test Item Not Requested		ND						-
Monochlorobenzene	NA - Test Item Not Requested		ND						-
2,4,6-Trichlorotoluene	NA - Test Item Not Requested		ND						-
2,3,5,6-Tetrachlorotoluene	NA - Test Item Not Requested		ND						-
Pentachlorobenzene	NA - Test Item Not Requested		ND						-
1,2-Dichlorobenzene	NA - Test Item Not Requested		ND						-
2,4-Dichlorotoluene	NA - Test Item Not Requested		ND						-
3-Chlorotoluene	NA - Test Item Not Requested		ND						-
Hexachlorobenzene	NA - Test Item Not Requested		ND						-
1,3,5-Trichlorobenzene	NA - Test Item Not Requested		ND						-
1,2,3,4-Tetrachlorobenzene	NA - Test Item Not Requested		ND						-
1,2,3,5-Tetrachlorobenzene	NA - Test Item Not Requested		ND						-
1,4-Dichlorobenzene	NA - Test Item Not Requested		ND						-
2,5-Dichlorotoluene	NA - Test Item Not Requested		ND						-
1,2,3-Trichlorobenzene	NA - Test Item Not Requested		ND						-
3,5-Dichlorotoluene	NA - Test Item Not Requested		ND						-
2,3,4-Trichlorotoluene	NA - Test Item Not Requested		ND						-
3,4,5-Trichlorotoluene	NA - Test Item Not Requested		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
3,4-Dichlorotoluene	NA - Test Item Not Requested		ND						-
2,3,6-Trichlorotoluene	NA - Test Item Not Requested		ND						-
2,4,5-Trichlorotoluene	NA - Test Item Not Requested		ND						-
Pentachlorotoluene	NA - Test Item Not Requested		ND						-
1,3-Dichlorobenzene	NA - Test Item Not Requested		ND						-
1,2,4-Trichlorobenzene	NA - Test Item Not Requested		ND						-
1,2,4,5-Tetrachlorobenzene	NA - Test Item Not Requested		ND						-
2-Chlorotoluene	NA - Test Item Not Requested		ND						-
4-Chlorotoluene	NA - Test Item Not Requested		ND						-
2,3-Dichlorotoluene	NA - Test Item Not Requested		ND						-
2,6-Dichlorotoluene	NA - Test Item Not Requested		ND						-
Chlorophenols									
2,4,6-trichlorophenol	NA - Test Item Not Requested		ND						-
2,3,5-trichlorophenol	NA - Test Item Not Requested		ND						-
2,6-dichlorophenol	NA - Test Item Not Requested		ND						-
2,3-dichlorophenol	NA - Test Item Not Requested		ND						-
2-chlorophenol	NA - Test Item Not Requested		ND						-
4-chlorophenol	NA - Test Item Not Requested		ND						-
2,5-dichlorophenol	NA - Test Item Not Requested		ND						-
2,3,4,5-tetrachlorophenol	NA - Test Item Not Requested		ND						-
2,3,6-trichlorophenol	NA - Test Item Not Requested		ND						-
Pentachlorophenol	NA - Test Item Not Requested		ND						-
3,4,5-trichlorophenol	NA - Test Item Not Requested		ND						-
2,3,4,6-tetrachlorophenol	NA - Test Item Not Requested		ND						-
2,3,5,6-tetrachlorophenol	NA - Test Item Not Requested		ND						-
2,4-dichlorophenol	NA - Test Item Not Requested		ND						-
2,4,5-trichlorophenol	NA - Test Item Not Requested		ND						-
3,5-dichlorophenol	NA - Test Item Not Requested		ND						-
3,4-dichlorophenol	NA - Test Item Not Requested		ND						-
3-chlorophenol	NA - Test Item Not Requested		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
2,3,4-trichlorophenol	NA - Test Item Not Requested		ND						-
Dyes - Azo (Forming Restricted Amines)									
4-methoxy-m-phenylenediamine	NA - Test Item Not Requested		ND						-
Benzidine	NA - Test Item Not Requested		ND						-
2-naphthylamine	NA - Test Item Not Requested		ND						-
4-methyl-m-phenylenediamine	NA - Test Item Not Requested		ND						-
2,4-xylidine	NA - Test Item Not Requested		ND						-
4,4'-thiodianiline	NA - Test Item Not Requested		ND						-
4,4'-methylenedianiline	NA - Test Item Not Requested		ND						-
4,4'-methylenedi-o-toluidine	NA - Test Item Not Requested		ND						-
4-aminoazobenzene	NA - Test Item Not Requested		ND						-
3,3'-dichlorobenzidine	NA - Test Item Not Requested		ND						-
4,4'-methylene-bis-(2-chloro-aniline)	NA - Test Item Not Requested		ND						-
4,4'-oxydianiline	NA - Test Item Not Requested		ND						-
4-chloroaniline	NA - Test Item Not Requested		ND						-
3,3'-dimethoxybenzidine	NA - Test Item Not Requested		ND						-
3,3'-dimethylbenzidine	NA - Test Item Not Requested		ND						-
6-methoxy-m-toluidine	NA - Test Item Not Requested		ND						-
2,4,5-trimethylaniline	NA - Test Item Not Requested		ND						-
2,6-xylidine	NA - Test Item Not Requested		ND						-
o-anisidine	NA - Test Item Not Requested		ND						-
4-aminodiphenyl	NA - Test Item Not Requested		ND						-
o-toluidine	NA - Test Item Not Requested		ND						-
4-chloro-o-toluidine	NA - Test Item Not Requested		ND						-
o-aminoazotoluene	NA - Test Item Not Requested		ND						-
5-nitro-o-toluidine	NA - Test Item Not Requested		ND						-
Dyes - Carcinogenic									
Disperse Orange 11	NA - Test Item Not Requested		ND						-
C.I. Basic Red 9	NA - Test Item Not Requested		ND						-
C.I. Acid Red 26	NA - Test Item Not Requested		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
C.I. Basic Green 4 (malachite green oxalate)	NA - Test Item Not Requested		ND						-
C.I. Direct Blue 6	NA - Test Item Not Requested		ND						-
C.I. Disperse Blue 3	NA - Test Item Not Requested		ND						-
C.I. Disperse Blue 1	NA - Test Item Not Requested		ND						-
C.I. Direct Red 28	NA - Test Item Not Requested		ND						-
C.I. Direct Black 38	NA - Test Item Not Requested		ND						-
C.I. Basic Violet 14	NA - Test Item Not Requested		ND						-
C.I. Basic Blue 26 (with Michler's Ketone > 0.1%)	NA - Test Item Not Requested		ND						-
C.I. Basic Green 4 (malachite green chloride)	NA - Test Item Not Requested		ND						-
C.I. Basic Green 4 (malachite green)	NA - Test Item Not Requested		ND						-
Dyes - Disperse (Sensitizing)									
Disperse Yellow 3	NA - Test Item Not Requested		ND						-
Disperse Red 17	NA - Test Item Not Requested		ND						-
Disperse Blue 7	NA - Test Item Not Requested		ND						-
Disperse Blue 26	NA - Test Item Not Requested		ND						-
Disperse Yellow 49	NA - Test Item Not Requested		ND						-
Disperse Blue 124	NA - Test Item Not Requested		ND						-
Disperse Orange 3	NA - Test Item Not Requested		ND						-
Disperse Yellow 1	NA - Test Item Not Requested		ND						-
Disperse Orange 37/59/76	NA - Test Item Not Requested		ND						-
Disperse Red 11	NA - Test Item Not Requested		ND						-
Disperse Red 1	NA - Test Item Not Requested		ND						-
Disperse Yellow 9	NA - Test Item Not Requested		ND						-
Disperse Brown 1	NA - Test Item Not Requested		ND						-
Disperse Blue 35	NA - Test Item Not Requested		ND						-
Disperse Blue 102	NA - Test Item Not Requested		ND						-
Disperse Blue 106	NA - Test Item Not Requested		ND						-
Disperse Yellow 39	NA - Test Item Not Requested		ND						-
Disperse Orange 1	NA - Test Item Not Requested		ND						-
Halogenated Solvents									
Methylene chloride	ND		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
Trichloroethylene	ND		ND						-
Tetrachloroethylene	ND		21.6	µg/l					-
1,2-dichloroethane	ND		ND						-
Flame Retardants									
Tris(2-chloroethyl)phosphate (TCEP)	NA - Test Item Not Requested		ND						-
Tris(2,3,-dibromopropyl)-phosphate (TRIS)	NA - Test Item Not Requested		ND						-
Pentabromodiphenyl ether (PentaBDE)	NA - Test Item Not Requested		ND						-
Octabromodiphenyl ether (OctaBDE)	NA - Test Item Not Requested		ND						-
Tris(1-aziridinyl)phosphine oxide (TEPA)	NA - Test Item Not Requested		ND						-
Tetrabromobisphenol A (TBBPA)	NA - Test Item Not Requested		ND						-
Hexabromocyclododecane (HBCDD)	NA - Test Item Not Requested		ND						-
2,2-bis(bromomethyl)-1,3-propanediol (BBMP)	NA - Test Item Not Requested		ND						-
Short-chain chlorinated Paraffins (SCCP) (C10-C13)	NA - Test Item Not Requested		ND						-
Tris(1,3-dichloro-isopropyl) phosphate (TDCP)	NA - Test Item Not Requested		ND						-
Polybromobiphenyls (PBB)	NA - Test Item Not Requested		ND						-
Bis(2,3-dibromopropyl)phosphate (BIS)	NA - Test Item Not Requested		ND						-
Decabromodiphenyl ether (DecaBDE)	NA - Test Item Not Requested		ND						-
Organotin Compounds									
Mono-, di- and tri-methyltin derivatives	NA - Test Item Not Requested		ND						-
Mono-, di- and tri-butyltin derivatives	NA - Test Item Not Requested		ND						-
Mono-, di- and tri-octyltin derivatives	NA - Test Item Not Requested		ND						-
Mono-, di- and tri-phenyltin derivatives	NA - Test Item Not Requested		ND						-
Perfluorinated and Polyfluorinated Chemicals (PFCs)									
PFBS	NA - Test Item Not Requested		ND						-
PFHxA	NA - Test Item Not Requested		ND						-
8:2 FTOH	NA - Test Item Not Requested		ND						-
6:2 FTOH	NA - Test Item Not Requested		ND						-
PFOS	NA - Test Item Not Requested		ND						-
PFOA	NA - Test Item Not Requested		ND						-
Glycols									
Bis(2-methoxyethyl)-ether	NA - Test Item Not Requested		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
2-ethoxyethyl acetate	NA - Test Item Not Requested		ND						-
Ethylene glycol dimethyl ether	NA - Test Item Not Requested		ND						-
2-methoxyethanol	NA - Test Item Not Requested		ND						-
Triethylene glycol dimethyl ether	NA - Test Item Not Requested		ND						-
2-methoxypropylacetate	NA - Test Item Not Requested		ND						-
2-ethoxyethanol	NA - Test Item Not Requested		ND						-
2-methoxyethylacetate	NA - Test Item Not Requested		ND						-
Otho-Phthalates - Including all ortho esters of phthalic acid									
Bis(2-methoxyethyl) phthalate (DMEP)	NA - Test Item Not Requested		ND						-
Di-iso-decyl phthalate (DIDP)	NA - Test Item Not Requested		ND						-
Di-n-hexyl phthalate (DnHP)	NA - Test Item Not Requested		ND						-
Dibutyl phthalate (DBP)	NA - Test Item Not Requested		ND						-
Dinonyl phthalate (DNP)	NA - Test Item Not Requested		ND						-
Di-n-propyl phthalate (DPRP)	NA - Test Item Not Requested		ND						-
Di-isobutyl phthalate (DIBP)	NA - Test Item Not Requested		ND						-
Di-iso-octyl phthalate (DIOP)	NA - Test Item Not Requested		ND						-
1,2-benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)	NA - Test Item Not Requested		ND						-
1,2-benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)	NA - Test Item Not Requested		ND						-
Di-isononyl phthalate (DINP)	NA - Test Item Not Requested		ND						-
Di(ethylhexyl) phthalate (DEHP)	NA - Test Item Not Requested		ND						-
Di-n-octyl phthalate (DNOP)	NA - Test Item Not Requested		ND						-
Butyl benzyl phthalate (BBP)	NA - Test Item Not Requested		ND						-
Diethyl phthalate (DEP)	NA - Test Item Not Requested		ND						-
Di-cyclohexyl phthalate (DCHP)	NA - Test Item Not Requested		ND						-
Polycyclic Aromatic Hydrocarbons (PAHs)									
Anthracene	ND		ND						-
Pyrene	ND		ND						-
Benzo[ghi]perylene	ND		ND						-
Benzo[e]pyrene	ND		ND						-
Indeno[1,2,3-cd]pyrene	ND		ND						-
Benzo[j]fluoranthene	ND		ND						-
Benzo[b]fluoranthene	ND		ND						-

CHEMICAL NAME		UNIT		UNIT		UNIT		UNIT	STANDARD TEST METHODS
	INCOMING WATER		RAW WASTEWATER		SLUDGE		DISCHARGE WASTEWATER		
Benzo[k]fluoranthene	ND		ND						-
Acenaphthylene	ND		ND						-
Chrysene	ND		ND						-
Dibenz[a,h]anthracene	ND		ND						-
Fluorene	ND		ND						-
Naphthalene	ND		1.68	µg/l					-
Fluoranthene	ND		ND						-
Phenanthrene	ND		ND						-
Benzo[a]pyrene (BaP)	ND		ND						-
Acenaphthene	ND		ND						-
Benzo[a]anthracene	ND		ND						-
Volatile Organic Compounds (VOC)									
o-Cresol	ND		ND						-
p-Cresol	ND		ND						-
m-Cresol	ND		ND						-
Xylene	ND		1.37	µg/l					-
Benzene	ND		ND						-

SAMPLE INFORMATION

The section below summarises the information regarding the samples and the testing laboratory.

SAMPLE DETAILS	
Sample Collection	10-Mar-2020
Duration Date	10-Mar-2020 10-Mar-2020
ZDHC Test ID	TR229BP14
Sample Notes	

LABORATORY DETAILS	
Laboratory	UL ITALY
Lab Test Reference	20.17061R1
ZDHC Lab Status	PROVISIONALLY ACCEPTED (17-SEP-2017)
Address	Viale Europe 28, Cabiato 22060, Italy Cabiato Como Italy
Contact Name	Serena Villa
Contact E-mail	serena.villa@ul.com