



NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0023728

Final: Surface Water Major Mod Permit Action

Permittee:

Western Monmouth Utilities Authority
103 Pension Road
Manalapan, NJ 07726-8401

Co-Permittee:

Property Owner:

Western Monmouth Utilities Authority
103 Pension Road
Manalapan, NJ 07726-8401

Location Of Activity:

Pine Brook STP
2 Utility Road
Manalapan, NJ 07726-0390

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
A – Sanitary Wastewater	8/13/2014	10/1/2014	9/30/2019
Modification to Category A to change copper requirements and to reflect the continued stay for phosphorus and TDS.	1/14/2016	2/1/2016	9/30/2019

By Authority of:
Commissioner's Office

Susan Rosenwinkel

DEP AUTHORIZATION
Susan Rosenwinkel, Section Chief
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality

(Terms, conditions and provisions attached hereto)

Division of Water Quality

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION: 001A Sanitary Outfall **RECEIVING STREAM:** Pine Brook **STREAM CLASSIFICATION:** FW2-NT(C2) **DISCHARGE CATEGORY(IES):** A - Sanitary Wastewater

Location Description

The influent shall be monitored before any treatment, other than degritting, and before the addition of any internal waste streams. The effluent shall be monitored after the last treatment step. Outfall 001A shall discharge treated wastewater to the Pine Brook, within the Raritan River basin, classified as FW2-Non Trout waters at : Latitude 40deg. 18' 59" and Longitude 74deg. 21' 26".

Contributing Waste Types

Sanitary

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

E. Coli sampling must be conducted at a minimum of five samples per month once every quarter. For the other two months of the quarter when no sampling is required, the permittee may report "CODE=N." The E. Coli samples shall be split samples with four of the fecal coliform samples taken that month.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1 Final **PHASE Start Date:** 02/01/2016 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	*****	*****	*****	REPORT Annual Average	REPORT Monthly Average	REPORT Daily Maximum	MGD	Continuous	Continuous
	January thru December	QL	***		***	***	***			
pH	Raw Sew/Influent	*****	*****	*****	REPORT Report Per Minimum	*****	REPORT Report Per Maximum	SU	2/Day	Grab
	January thru December	QL	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	2/Day	Grab
	January thru December	QL	***		***	***	***			
Solids, Total Suspended	Raw Sew/Influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
	January thru December	QL	***		***	***	***			



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Comments:

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Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1 Final PHASE Start Date: 02/01/2016 PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Suspended	Effluent Gross Value	1000 Monthly Average	1500 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	1/Week	24 Hour Composite
	January thru December	QL	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	Calculated
	January thru December	QL	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	1/Quarter	Grab
	January thru December	QL	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	50 Monthly Average	74.9 Weekly Average	KG/DAY	*****	1.5 Monthly Average	2.25 Weekly Average	MG/L	1/Week	24 Hour Composite
	May thru October	QL	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	333 Monthly Average	753 Daily Maximum	KG/DAY	*****	10 Monthly Average	22.6 Daily Maximum	MG/L	1/Week	24 Hour Composite
	November thru April	QL	***		***	***	***			
Nitrogen, Nitrate Total (as N)	Effluent Gross Value	*****	*****	*****	*****	*****	REPORT Daily Maximum	MG/L	1/Month	24 Hour Composite
	January thru December	QL	***		***	***	***			
E. Coli	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Geo Avg	REPORT Report Per Maximum	#/100ML	5/Month	Grab
	January thru December	QL	***		***	***	***			



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Comments:

E. Coli sampling must be conducted at a minimum of five samples per month once every quarter. For the other two months of the quarter when no sampling is required, the permittee may report "CODE=N." The E. Coli samples shall be split samples with four of the fecal coliform samples taken that month.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1 Final PHASE Start Date: 02/01/2016 PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Dissolved (TDS)	Effluent Gross Value	20000 Monthly Average	30000 Weekly Average	KG/DAY	*****	600 Monthly Average	900 Weekly Average	MG/L	2/Week	24 Hour Composite
	January thru December	QL	***		***	***	***			
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	4/Month	Grab
	January thru December	QL	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Week	24 Hour Composite
	January thru December	QL	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Effluent Gross Value	333 Monthly Average	500 Weekly Average	KG/DAY	*****	10 Monthly Average	15 Weekly Average	MG/L	1/Week	24 Hour Composite
	January thru December	QL	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	1/Week	Calculated
	January thru December	QL	***		***	***	***			
IC25 Statre 7day Chr Ceriodaphnia	Effluent Gross Value	*****	*****	*****	48.5 Report Per Minimum	*****	*****	%EFFL	1/Year	Composite
	January thru December	QL	***		***	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.35 Monthly Average	0.9 Daily Maximum	KG/DAY	*****	0.01 Monthly Average	0.03 Daily Maximum	MG/L	2/Day	Grab
	January thru December	RQL	3.33		3.33	***	0.1			

Surface Water DMR Reporting Requirements:

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Comments:

E. Coli sampling must be conducted at a minimum of five samples per month once every quarter. For the other two months of the quarter when no sampling is required, the permittee may report "CODE=N." The E. Coli samples shall be split samples with four of the fecal coliform samples taken that month.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: I Final PHASE Start Date: 02/01/2016 PHASE End Date:

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Temperature, oC January thru December	Raw Sew/influent	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
	QL	***	***		***	***	***			
Temperature, oC January thru December	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	REPORT Monthly Average	REPORT Report Per Maximum	DEG.C	2/Day	Grab
	QL	***	***		***	***	***			
Oxygen, Dissolved (DO) January thru December	Effluent Gross Value	*****	*****	*****	6.0 Weekly Av Minimum	REPORT Daily Avg Minimum	*****	MG/L	1/Week	Grab
	QL	***	***		***	***	***			
Phosphorus, Total (as P) January thru December	Effluent Gross Value	REPORT Monthly Average	REPORT Weekly Average	KG/DAY	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	1/Month	24 Hour Composite
	QL	***	***		***	***	***			

**Surface Water WCR - Annual Reporting Requirements:**

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date: 02/01/2016

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Manganese, Total Recoverable	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Cyanide, Total (as CN)	Effluent Gross Value	REPORT RQL = 40	UG/L	Grab	January thru December
Arsenic, Total Recoverable (as As)	Effluent Gross Value	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Selenium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Thallium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Beryllium, Total Recoverable (as Be)	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Barium, Total Recoverable (as Ba)	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Nickel, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Silver, Total Recoverable	Effluent Gross Value	REPORT RQL = 2	UG/L	24 Hour Composite	January thru December
Zinc, Total Recoverable	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Cadmium, Total Recoverable	Effluent Gross Value	REPORT RQL = 4	UG/L	24 Hour Composite	January thru December
Lead, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Chromium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Copper, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Antimony, Total Recoverable	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

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PHASE Start Date: 02/01/2016

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Mercury Total Recoverable	Effluent Gross Value	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Acenaphthylene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Acenaphthene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT RQL = 26.5	UG/L	24 Hour Composite	January thru December
Bis (2-chloroiso- propyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Chrysene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,2-Diphenyl- hydrazine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

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Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements

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PHASE Start Date: 02/01/2016

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Fluoranthene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Fluorene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorocyclopentadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachloroethane	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Isophorone	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodiphenylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodimethylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Nitrobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Phenanthrene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	24 Hour Composite	January thru December

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Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements

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PHASE Start Date: 02/01/2016

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2,4-Trichloro-benzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dibenzo(a,h)anthracene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	24 Hour Composite	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Di-n-octyl Phthalate	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
2,6-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Naphthalene	Effluent Gross Value	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzidine	Effluent Gross Value	REPORT RQL = 50	UG/L	24 Hour Composite	January thru December
Malathion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

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Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Demeton	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Mirex	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
1,2,4,5-Tetrachlorobenzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosodiethylamine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-nitrosopyrrolidine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT RQL = 8	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Toluene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December

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Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Acrylonitrile	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Tetrachloroethylene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Trichlorofluoro-methane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT RQL = 23.5	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December

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Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements

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PHASE Start Date: 02/01/2016

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Bromodichloromethane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Trichloroethylene	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Methoxychlor	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
N-Nitrosodi-n-butylamine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Asbestos	Effluent Gross Value	REPORT	FIBERS/L	24 Hour Composite	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Parathion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
2,4,5-Trichloro-phenol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT RQL = 0.08	UG/L	24 Hour Composite	January thru December

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PHASE Start Date: 02/01/2016

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Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Beta Endosulfan	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT RQL = 0.1	UG/L	24 Hour Composite	January thru December
PCB-1016 (Arochlor 1016)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2,3,7,8-Tetrachloro- dibenzo-p-dioxin	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT RQL = 0.06	UG/L	24 Hour Composite	January thru December
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Aldrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha BHC	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Beta BHC	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Gamma BHC (lindane),	Effluent Gross Value	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Chlordane	Effluent Gross Value	REPORT RQL = 0.2	UG/L	24 Hour Composite	January thru December
Dieldrin	Effluent Gross Value	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Endosulfans, Total (alpha and beta)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

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Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Endrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Toxaphene	Effluent Gross Value	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Heptachlor	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT RQL = 0.4	UG/L	24 Hour Composite	January thru December
PCB-1221 (Arochlor 1221)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1232 (Arochlor 1232)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1242 (Arochlor 1242)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1248 (Arochlor 1248)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1254 (Arochlor 1254)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1260 (Arochlor 1260)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Polychlorinated Biphenyls (PCBs)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chlorpyrifos	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT RQL = 18	UG/L	24 Hour Composite	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 2: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 02/01/2016 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,4-Dimethylphenol	Effluent Gross Value	REPORT RQL = 13.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT RQL = 40	UG/L	24 Hour Composite	January thru December
2,4,6-Trichloro-phenol	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 21	UG/L	24 Hour Composite	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT RQL = 12	UG/L	24 Hour Composite	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Pentachlorobenzene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Guthion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

MONITORED LOCATION: RWBR Beneficial Reuse SW
RECEIVING STREAM:
STREAM CLASSIFICATION:
DISCHARGE CATEGORY(IES): A - Sanitary Wastewater

Location Description

Specific requirements for monitoring beneficial reuse can be found in Part IV. Approved public access sites can be found in Appendix B.

Contributing Waste Types

Sanitary

Surface Water WCR - Monthly Reporting Requirements:

Submit a Monthly WCR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Table III - B - 1: Surface Water WCR - Monthly Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 02/01/2016 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT	MGD	Metered	January thru December
Nitrogen, Total (as NO ₃ + NH ₃)	Effluent Gross Value	REPORT	MG/L	Grab	January thru December
Solids, Total Suspended	Effluent Gross Value	REPORT	MG/L	Grab	January thru December
Coliform, Fecal General	Effluent Gross Value	REPORT	MPN/100ML	Grab	January thru December
Chlorine Produced Oxidants	Effluent Gross Value	REPORT	MG/L	Continuous	January thru December
Turbidity	Effluent Gross Value	REPORT	NTU	Continuous	January thru December

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Sanitary Wastewater

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.
- b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136, unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.
- c. The permittee shall utilize analytical methods that will ensure compliance with the Quantification Levels (QLs) listed in PART III. QLs include, but are not limited to, Recommended Quantification Levels (RQLs) and Method Detection Levels (MDLs). If the permittee and/or contract laboratory determines that the QLs achieved for any pollutant(s) generally will not be as sensitive as the QLs specified in PART III, the permittee must submit a justification of such to the Bureau of Surface Water Permitting. For limited parameters with no QL specified, the sample analysis shall use a detection level at least as sensitive as the effluent limit.
- d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.
- e. All monitoring shall be conducted as specified in Part III.
- f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- g. Annual and semi-annual wastewater testing shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.
- h. Any influent and effluent sampling for toxic pollutant analyses shall be collected concurrently.
- i. E. Coli sampling must be conducted at a minimum of five samples per month once every quarter. For the other two months of the quarter when no sampling is required, the permittee may report "CODE=N." The E. Coli samples shall be split samples with four of the fecal coliform samples taken that month.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. REPORTING

1. Standard Reporting Requirements

- a. The permittee shall submit all required monitoring results to the Department on the forms provided to them. The Monitoring Report Forms (MRFs) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.
- b. Any MRFs in paper format shall be submitted to the following addresses:
 - i. Mail Code 401-02B
NJDEP
Division of Water Quality
Bureau of Permit Management
P.O. Box 420
Trenton, New Jersey 08625-0029.
 - ii. (if requested by the Water Compliance and Enforcement Bureau)
NJDEP: Central Bureau of Water Compliance and Enforcement
P.O. Box 407
Trenton, New Jersey 08625-0407
- c. Any electronic data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.
- d. All monitoring report forms shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current Discharge Monitoring Report Manual and any updates thereof.
- g. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.

- h. If there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results. This is accomplished by placing a check mark in the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

D. SUBMITTALS

1. Standard Submittal Requirements

- a. The permittee shall prepare/update the Operation and Maintenance (O&M) Manual including an emergency plan in accordance with requirements of N.J.A.C. 7:14A-6.12(c).
- b. Submit a certification that an Operations and Maintenance (O&M) Manual has been prepared: within 90 days from the effective date of the permit (EDP). (Activity #: DSW080002 - Effective: 10/1/2014)
- c. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

2. E Coli. and Fecal Coliform Split Sample Report

- a. The permittee shall submit to the Department both hardcopy and electronic version of the E Coli and fecal coliform split sample summary report including the dates the samples were taken along with the renewal application forms. The data submitted in the electronic version shall be provided in spreadsheet form (i.e. Microsoft Access, Microsoft Excel, Etc.) and submitted on CD-ROM.

E. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that 1) forms objectionable deposits on the receiving water, 2) forms floating masses producing a nuisance, or 3) interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.
- e. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.
- f. When an average of three (3) consecutive rolling monthly average values of the committed flow (actual flow and approved allocated flow) reaches or exceeds 80% of 8.8 MGD (the permitted capacity of the facility), the permittee shall:
 - i. Develop a Capacity Assurance Program (CAP) in accordance with N.J.A.C. 7:14A-22.16.
 - ii. For more information concerning the CAP, please contact the Bureau of Engineering and Construction Permitting South at (609) 984-6840.

- iii. Contact the Division of Watershed Management to discuss whether an amendment to the Water Quality Management Plan (WQMP) or Wastewater Management Plan (WMP) will be necessary.

2. Applicability of Discharge Limitations and Effective Dates

a. Surface Water Discharge Monitoring Report (DMR) Form Requirements

- i. The final permit issued August 13, 2014 contained an initial and final phase since copper limitations would become effective in the final phase (October 1, 2017). Because a major modification has been issued to remove the copper limitations, two phases are no longer necessary and only a final phase is included. Copper shall be monitored as a WCR condition.

b. Wastewater Characterization Report (WCR) Form Requirements

- i. The final effluent monitoring conditions contained in PART III for DSN001A annual WCR apply for the full term of this permit action.

3. Operation, Maintenance and Emergency conditions

- a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.

- b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with N.J.A.C. 7:14A-6.12(d).

4. Introduction to RWBR Requirements

- a. The following RWBR sections contain the conditions for the permittee to beneficially reuse treated effluent or Reclaimed Water for Beneficial Reuse (RWBR), provided the effluent is in compliance with the criteria specified for the particular use specified below.

- b. There are two levels of RWBR uses. Public Access and Restricted Access.

5. Inactive RWBR Requirements

- a. The following RWBR sections are included in this permit for various reuse applications. These sections are inactive and not effective unless the status column in Appendix B states the reuse activity is approved. Any specific RWBR type not approved in the Appendix, may be approved at a later date by a minor modification permit action once the appropriate submittal requirements have been received and approved by the Department.

6. RWBR Requirements for Public Access

- a. The Public Access reuse types authorized by this permit are those approved in Appendix B. Other Public Access reuse types may be added by minor modification of this permit.

- b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.

- c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

- i. Total Suspended Solids (TSS): Instantaneous maximum of 5.0 mg/L prior to disinfection.

- ii. Nitrogen, Total (NO₃ + NH₃): Daily maximum of 10.0 mg/L. This requirement only applies when RWBR is land applied.
 - iii. Fecal Coliform: 7-day median maximum of 2.2 colonies per 100 mL and an instantaneous maximum of 14 colonies per 100 mL.
 - iv. Chlorine Produced Oxidants (CPO): If the permittee disinfects utilizing chlorine, an instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow must be met.
- d. Monitoring of the diverted public access RWBR shall be conducted in the following manner:
- i. Sampling for TSS shall be immediately prior to disinfection. Monitoring for TSS shall be a grab sample once per week.
 - ii. Sampling for Turbidity in systems shall be sampled immediately prior to disinfection. The permittee shall establish a correlation between Turbidity and TSS in their effluent as detailed in the Reuse Technical Manual. A statistically significant correlation between Turbidity and TSS shall be established prior to commencement of the RWBR program and shall be incorporated into the Operations Protocol and updated annually. The initial correlation should be done as part of a daily monitoring program for at least 30 days. To ensure continuous compliance with the 5.0 mg/L TSS level, Turbidity must be monitored continuously and achieve the level established in the Operations Protocol.
 - iii. For chlorine disinfection, monitoring for CPO shall be continuous and shall be monitored after the appropriate contact time is achieved.
 - iv. Monitoring for Fecal Coliform shall be a grab sample, taken in accordance with Part III, at least a minimum of once per week taken immediately after disinfection. Fecal coliform shall be monitored immediately after disinfection.
 - v. Monitoring for Total Nitrogen (NO₃ + NH₃) shall be a composite sample, taken in accordance with Part III, at least once per week taken prior to RWBR diversion. Total Nitrogen (NO₃ + NH₃) shall be monitored after the appropriate disinfection treatment is achieved.
- e. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.
- i. If chlorine is used for disinfection, the lowest sampling result obtained during the reporting month shall be reported for CPO.

7. RWBR Requirements for Restricted Access--Land Application and Non Edible Crops

- a. The Restricted Access--Land Application and Non Edible Crops reuse types authorized by this permit are those approved in Appendix B. Other Restricted Access--Land Application and Non Edible Crops reuse types may be added by minor modification of this permit.
- b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.
- c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

- d. Nitrogen, Total (NO₃ + NH₃): Daily maximum of 10 mg/L. Frequency of sampling for Total Nitrogen shall be at a minimum monthly. The sample shall be collected as a composite sample taken prior to diversion for RWBR. Nitrogen, Total (NO₃ + NH₃) shall be monitored after the appropriate disinfection treatment time is achieved. This requirement only applies when RWBR is land applied, however, this requirement does not apply to spray irrigation within a fenced perimeter or otherwise restricted area.
- e. Fecal Coliform: 200 colonies per 100 ml monthly average Geometric Mean, 400 colonies per 100 ml maximum in any one sample. Frequency of sampling for Fecal Coliform shall be at a minimum weekly. The sample shall be collected as a grab sample taken immediately after disinfection.
- f. Chlorine Produced Oxidants (CPO): For chlorine disinfection, instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow. Frequency of sampling for CPO shall be at a minimum weekly. The sample shall be collected as a grab sample taken immediately after disinfection. The value reported for CPO shall be the minimum sampling result obtained during the reporting month for diverted RWBR. Chlorine Produced Oxidants (CPO) shall be monitored after the appropriate contact time is achieved.
- g. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.

8. RWBR Requirements for Restricted Access--Construction and Maintenance Operations

- a. The Restricted Access--Construction and Maintenance Operations reuse types authorized by this permit are those approved in Appendix B. Other Restricted Access--Construction and Maintenance Operations reuse types may be added by minor modification of this permit.
- b. Fecal Coliform: 200 colonies per 100 ml monthly average Geometric Mean, 400 colonies per 100 ml maximum in any one sample. Frequency of sampling for Fecal Coliform shall be at a minimum weekly. Fecal coliform shall be monitored immediately after disinfection. This requirement does not apply to sanitary sewer jetting.

9. RWBR Requirements for Restricted Access--Industrial Systems

- a. The Restricted Access--Industrial Systems reuse types authorized by this permit are those approved in Appendix B. Other Restricted Access--Industrial Systems reuse types may be added by minor modification of this permit.

10. RWBR Submittal Requirements

- a. For all types of RWBR, with the exception of sanitary sewer jetting and STP washdown water, the permittee shall submit and receive approval of an Operations Protocol or modify the existing Operations Protocol as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of any RWBR activity. A copy of the approved Operations Protocol shall be maintained onsite. Specific requirements for the Operations Protocol are identified in the Reuse Technical Manual.
- b. The permittee shall submit a copy of the Reuse Supplier and User Agreement with each request for authorization to distribute RWBR in which the user is a different entity than the supplier. Specific requirements for the Reuse Supplier and User Agreement are identified in the Reuse Technical Manual.

- c. For Public Access RWBR on Edible Crops, the permittee shall submit an annual inventory of edible crop irrigation with the Beneficial Reuse Annual Report. Specific requirements for the annual inventory are identified in the Reuse Technical Manual.
- d. Submit a Beneficial Reuse Annual Report: by February 1 of each year beginning from the effective date of the permit (EDP). The permittee shall compile the total volume of RWBR distributed to each type of authorized RWBR activity for the previous calendar year. Specific requirements for the Annual Reuse Report are identified in the Reuse Technical Manual. (Activity #: DSW080002 - Effective: 10/1/2014)
- e. The permittee shall submit and receive approval of an Engineering Report in support of RWBR authorization requests for new or expanded RWBR projects as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of this/these type/s of RWBR activity. A copy of the approved Engineering Report shall be maintained onsite. Specific requirements for the Engineering Report are identified in the Reuse Technical Manual.
- f. All submittals shall be mailed or delivered to: Mail Code 401-02B New Jersey Department of Environmental Protection, Division of Water Quality, Bureau of Surface Water Permitting, P.O. Box 420, Trenton, New Jersey 08625.

11. RWBR Operational Requirements

- a. Effluent that does not meet the requirements for RWBR established in Part III, Part IV and the operational requirements specified in the facility's approved Operations Protocol shall not be diverted for RWBR.
- b. The land application of RWBR shall not produce surface runoff or ponding.
- c. All setback distances shall be consistent with the distances outlined in the Reuse Technical Manual.
- d. Land application sites shall not be frozen or saturated when applying RWBR.
- e. A daily log noting the volume of RWBR distributed to each approved application site shall be maintained on-site by the permittee and made available to the Department upon request. The volume of RWBR to be distributed shall be determined through the use of a totalizing flow meter, or other means of accurate flow measurement.
- f. Any vehicle used to transport and/or distribute RWBR shall be appropriately marked. The vehicle shall not be used to transport water or other fluid that does not meet all limitations and requirements as specified in this permit for water diverted for RWBR, unless the tank has been emptied and adequately cleaned prior to the addition of the RWBR.
- g. The permittee shall post Access Control and Advisory Signs in accordance with the requirements of the Reuse Technical Manual.
- h. There shall be no cross-connections to potable water systems.
- i. All RWBR piping, pipelines, valves, and outlets shall be appropriately color coded, tagged or labeled to warn the public and employees that the water is not intended for drinking. Worker contact with RWBR shall be minimized.
- j. The issuance of this permit for the use of RWBR shall not be considered as a waiver of any applicable federal, state or local rule, regulation or ordinance.

12. Toxicity Testing Requirements - Chronic Whole Effluent Toxicity

- a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.
- b. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.
- c. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.
- d. The permittee shall collect and analyze the concentration of ammonia-N in the effluent on the day a sample is collected for WET testing. This result is to be reported on the Biomonitoring Report Form.
- e. IC25 - Inhibition Concentration - Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).
- f. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.
- g. The permittee shall resubmit a Chronic Methodology Questionnaire within 60 days of any change in laboratory.
- h. Submit a chronic whole effluent toxicity test report: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms. (Activity #: DSW080002 - Effective: 10/1/2014)
- i. Test reports shall be submitted to:
 - i. Mail Code 401-02B New Jersey Department of Environmental Protection
Division of Water Quality, Bureau of Surface Water Permitting, P.O. Box 029, Trenton, New Jersey 08625.

13. Toxicity Reduction Implementation Requirements (TRIR)

- a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit specified in Part III of this permit.
 - i. If the exceedence of the toxicity limit is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.
- b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits in Part III. The monitoring frequency for toxicity testing shall be increased to monthly. Up to 12 additional tests may be required.

- i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit.
 - ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit in Part III, the permittee shall repeat the Toxicity Reduction Implementation Requirements.
- c. The permittee shall initiate a preliminary toxicity identification (PTI) upon the third exceedence of the toxicity limit specified in Part III during toxicity characterization.
- i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.
 - ii. As appropriate, the PTI shall include:
 - (1) treatment plant performance evaluation,
 - (2) pretreatment program information,
 - (3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
 - (4) evaluation of chemical use and processes at the facility, and
 - (5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.
 - iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.
 - iv. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.
- d. The permittee must demonstrate compliance with the WET limitation in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.
- e. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit in Part III can not be made.
- i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.
 - ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit in Part III, a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.
 - iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.

- iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.
- f. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.
 - i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit in Part III in four consecutive toxicity tests.
 - ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit in Part III, the permittee shall submit a plan for resuming the CTI.
- g. Optional Instream Study
 - i. The permittee may conduct an instream study prior to initiating a CTI after completing the PTI which was unsuccessful in identifying and remediating effluent toxicity.
 - ii. The study shall, at a minimum include an evaluation of the major stream communities including but not limited to: Benthics, fish, phytoplankton and periphyton, shall be performed at or near 7Q10 flow conditions and shall address seasonal community structure and system function. The study shall evaluate measures of growth, reproduction and incidences of diseases.
 - iii. The permittee electing to conduct an instream study shall submit a project work plan to the Department for approval prior to initiating the study.
 - iv. The permittee shall satisfy the requirements of the Instream study and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the next four consecutive toxicity tests.

F. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. Requirement to Identify and Locate Industrial Users

- a. The Permittee shall identify all indirect users which meet the significant indirect user definition in N.J.A.C. 7:14A-1.2 or have reasonable potential to:
 - i. interfere with attainment of the effluent limitations contained in the permittee's NJPDES permit
 - ii. pass through the treatment works and impair the water quality of the receiving stream; or
 - iii. affect sludge quality so as to interfere with the use or management of the municipal sludge

2. Notification Requirements

- a. The permittee shall provide adequate notice to the NJDEP, Division of Water Quality, Bureau of Pretreatment and Residuals, of the name, address, telephone number and facility contact of all:
 - i. new SIUs at the time the proposed user applies to the permittee for connection to the permittee's system,
 - ii. any substantial change or proposed change in the volume or character of pollutants being introduced into the POTW by existing SIUs, or

- iii. any substantial change or proposed change in the volume or character of pollutants being introduced into the POTW by a user that causes the user to become an SIU.
- b. For purposes of this subsection, adequate notice shall include information on the quality and quantity of effluent introduced into the POTW and any anticipated impact of such change on the quantity or quality of effluent to be discharged from the POTW.

3. Requirement to Develop Local Limits

- a. If necessary to ensure compliance with the requirements in paragraph ii below, the permittee shall perform a headworks analysis. The headworks analysis and, if necessary, development of local limits shall:
 - i. be conducted in accordance with the Local Limits Development Guidance (July 2004, USEPA Office of Wastewater Management), including all supplements and amendments thereto, including: identifying the sources and pollutants which should be limited in order to address environmental protection criteria of paragraph ii.; characterizing industrial discharges; reviewing applicable environmental protection criteria and pollutant effects data; monitoring of IU discharges, POTW collection system and treatment plant; and calculating local limits for the identified pollutants of concern;
 - ii. ensure compliance with the following minimum environmental protection criteria: the numerical effluent limitations in the Part III; The local agency's process inhibition and upset criteria; the local agency's worker health and safety protection criteria; the sludge quality criteria for a chosen method(s) of sludge management; and the limitations in the local agency's Air Pollution Control permit, where applicable.
- b. At a minimum, the permittee shall evaluate the need for a local limit for copper (total). This local limit analysis must be conducted in accordance with paragraphs i. and ii. above. With respect to the evaluation for copper, The permittee shall conduct a Local Limits Evaluation: within 18 months from the effective date of this document. (Activity #: DSW080002 - Effective: 10/1/2014)

4. Submittal Requirements

- a. Submit the Local Ordinance: within 60 days from the effective date of the permit (EDP). (Activity #: DSW080002 - Effective: 10/1/2014)
- b. The permittee shall submit updates to its Local Sewer Use Ordinance within 30 days of modification.
- c. The permittee shall prepare a Pretreatment Program Report which consists of a listing of all indirect users which meet the significant indirect user definition in N.J.A.C. 7:14A-1.2. The report shall include the name, address, and type of business for each facility.
- d. Submit the Annual Pretreatment Program Report: by June 1 of each year beginning from the effective date of the permit (EDP). (Activity #: DSW080002 - Effective: 10/1/2014)
- e. The reports shall be submitted to: Mail Code 401-02B NJDEP, Bureau of Pretreatment and Residuals, 401 East State Street, P. O. Box 420, Trenton, NJ. 08625-0029.

G. CONDITIONS FOR MODIFICATION

1. Notification requirements

- a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using the specified QL.

2. Causes for modification

- a. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.
- b. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

3. Removal or Modification of Final WQBELs or Criteria End-of-Pipe Effluent Limitations for Chemical Specific Toxic Pollutants

- a. The Department will consider proposing to remove or modify a toxic pollutant's newly imposed final effluent limitation from the permit if any or all of the information in item "b" below is submitted for Departmental review and consideration.
- b. Items that will be considered include, but are not limited to:
 - i. Submission of additional effluent data (minimum of 2.5 consecutive years of monthly data) using an approved quantification level equal to or better than the Department's Recommended Quantification Level (RQL).
 - ii. Acceptable site-specific ambient data (e.g. hardness, pollutant specific data) collected in accordance with a NJDEP approved work plan.
 - iii. Acceptable site-specific translator values developed in accordance with a NJDEP approved work plan.
 - iv. Acceptable site-specific criteria developed in accordance with a NJDEP approved work plan.
 - v. Updated 1Q10, 7Q10, 75th percentile, and/or other appropriate stream flow values where applicable.
 - vi. Updated regulatory mixing zone dilution factors where applicable.
- c. All studies require a NJDEP approved workplan that shall be submitted to the Department for approval on or before the effective date of the permit (EDP) + 6 months.
 - i. It is recommended that all ambient monitoring associated with the establishment of hardness values, pollutant concentrations, and site specific translator values be conducted under the confines of a single work plan.
- d. All final study reports and/or additional information shall be submitted to the Department on or before EDP + 24 months.
- e. The Department will review all submitted information and will either propose a permit action to remove/modify the final effluent limitation(s) or deny the modification request.