



COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Water Quality Control Division

**CDPS GENERAL PERMIT COG591000
DOMESTIC WASTEWATER TREATMENT PLANTS
THAT DISCHARGE TO RECEIVING WATERS THAT ARE UNCLASSIFIED; USE PROTECTED; REVIEWABLE; OR
ARE DESIGNATED THREATENED AND ENDANGERED SPECIES HABITAT**

**AUTHORIZATION TO DISCHARGE UNDER THE
COLORADO DISCHARGE PERMIT SYSTEM (CDPS)**

In compliance with the provisions of the Colorado Water Quality Control Act (25-8-101 et. seq. CRS, 1973 as amended), and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), domestic wastewater treatment plants, with a design hydraulic capacity of less than one million gallons per day, are authorized to discharge from approved locations throughout the State of Colorado to waters of the state that are considered unclassified, use protected, reviewable, or are discharging to waters designated as threatened and endangered species habitat. Such discharges shall be in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof. All discharges authorized herein shall be consistent with the terms and conditions of this permit.

This permit specifically authorizes the entity identified in the certification of this permit to discharge from their domestic wastewater treatment plants, at the location described in the certification of this permit, to waters of the state as identified in the certification of this permit.

The authorization to discharge under this permit is in effect from the date of the certification of this permit until the expiration date identified below.

This permit and the authorization to discharge shall expire at midnight May 31st, 2027.

Issued and Signed September 30th, 2022.

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Erin Scott

Erin Scott, Acting Permits Section Manager
Water Quality Control Division

PERMIT ACTION SUMMARY:

Modification #3 - Minor Amendment - Issued September 30, 2022, Effective November 1, 2022 (Parts I.B.2-6, I.E.5, Part III)

Modification #2 - Minor Modification - Issued July 14 2022, Effective July 14, 2022 (Parts I.B.2-3)

Modification #1 - Minor Modification - Issued June 2, 2022, Effective June 2, 2022 (Parts I.B.3.c and I.B.3.d)

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TABLE OF CONTENTS

PART I	3
A. COVERAGE UNDER THIS PERMIT	3
1. Eligibility	3
2. Application Requirements	3
3. Certification Requirements	4
B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS	4
1. Limitations, Monitoring Frequencies, and Sample Types for Effluent Parameters	4
2. Discharges to Unclassified Waters	6
3. Discharges to Classified Waters	10
4. New Facilities With Design Flows Of Less Than 1.0 MGD	34
5. EPA Periodic Pollutant Monitoring	38
6. PFAS Monitoring	38
7. Influent Parameters	39
C. TERMS AND CONDITIONS	41
1. Service Area	41
2. Design Capacity	42
3. Expansion Requirements	42
4. Facilities Operation and Maintenance	42
5. Best Management Practices	43
6. Change In Conditions	43
7. Lagoon Liner Integrity	43
8. Acute WET Testing	43
9. Chronic WET Testing	46
10. Compliance Schedule(s)	50
11. Special Studies and Additional Monitoring	51
12. Industrial Waste Management	51
D. DEFINITIONS OF TERMS	53
E. PERMIT SPECIFIC MONITORING, SAMPLING AND REPORTING REQUIREMENTS	60
1. Routine Reporting of Data	60
2. Annual Biosolids Report	60
3. Representative Sampling	61
4. Influent and Effluent Sampling Points	61
5. Analytical and Sampling Methods for Monitoring and Reporting	61
6. Flow Measuring Devices	64
A. DUTY TO COMPLY	65
B. DUTY TO REAPPLY	66
C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE	66
D. DUTY TO MITIGATE	66
E. PROPER OPERATION AND MAINTENANCE	66
F. PERMIT ACTIONS	66
G. PROPERTY RIGHTS	66
H. DUTY TO PROVIDE INFORMATION	67
I. INSPECTION AND ENTRY	67
J. MONITORING AND RECORDS	67
K. SIGNATORY REQUIREMENTS	68
L. REPORTING REQUIREMENTS	69
M. BYPASS	71
N. UPSET	71
O. REOPENER CLAUSE	72
P. OTHER INFORMATION	73
Q. SEVERABILITY	73
R. NOTIFICATION REQUIREMENTS	73
S. RESPONSIBILITIES	73
T. OIL AND HAZARDOUS SUBSTANCE LIABILITY	73
U. EMERGENCY POWERS	74
V. CONFIDENTIALITY	74
W. FEES	74
X. DURATION OF PERMIT	74
Y. SECTION 307 TOXICS	74
PART III	75

PART I

A. COVERAGE UNDER THIS PERMIT

1. Eligibility

In order to be eligible for authorization to discharge under the terms and conditions of this permit, the owner of any domestic wastewater treatment plant that can meet the conditions identified at Part I.A.3., below, must submit a complete permit application form obtained from the Water Quality Control Division (Division). Such application shall be submitted to the address listed on the application, at least 180 days prior to the anticipated date of first discharge.

Authorization to discharge shall be site specific and not transferable to alternative locations. Authorization to discharge will occur when the permittee receives a letter of certification for discharge under this permit, and is allowed to discharge on the effective date noted on the certification. Authorization to discharge will expire on the expiration date of this general permit, which will also be noted on the certification. A permittee desiring continued coverage under this general permit must reapply 180 days in advance of the expiration date.

Upon receipt of a new or a renewal application, the Division will determine if the applicant continues to be eligible to continue to operate under the terms of the general permit. If the Division determines that the operation does not fall under the authority of the general permit or is determined to be better suited for an individual permit, then the application received will be treated as an individual permit application, and the applicant will be notified about the decision to require an individual permit by a letter from the Division. For a renewal permit, any such applicant will continue to be covered under this general permit until such time as their application to discharge under another applicable general permit or individual permit is issued or denied by the Division.

2. Application Requirements

The application referenced in Part I.A.1., above, will require the following information:

- a. The name, address, and location information of the municipality/company and its domestic wastewater treatment plant along with an accompanying USGS map, or a map of similar quality and sufficient detail to show the location of all unit processes on the property, and location of effluent discharge point and receiving water;
- b. The name, address, and phone number of the owner and of the certified operator in responsible charge;
- c. The name of water(s) receiving the discharge(s) and a listing of any downstream waters into which the receiving stream flows within five miles of the point of discharge;
- d. The latitude and longitude of the proposed discharge outfall or outfalls;
- e. A United States Geological Survey (USGS) map, or a map of similar quality, which shows the service area for the domestic wastewater treatment plant;
- f. A list of non-residential users (commercial users, including hauled septage from Individual Sewage Disposal Systems (ISDSs), and industrial users) whose waste is treated by the facility;
- g. A description of the method(s) and chemicals used for treatment and/or disposal of grit, screenings, and sludge (biosolids);
- h. A summary of recent flow, loading, and influent and effluent quality data along with a description of the operation and management procedures to be used at the domestic wastewater treatment plant;

- i. A description of the analytical methods and equipment to be used to measure flows and to analyze pollutants of concern in the discharge; and,

3. Certification Requirements

The applicant must certify, or the Division must find, that the following conditions exist at the domestic wastewater treatment plant or the domestic wastewater treatment plant will not be certified to discharge under the authority of the general permit:

- a. The treatment plant is a domestic wastewater treatment plant as defined in Regulation No. 22 (5 CCR 1002-22): Site Location And Design Approval Regulations for Domestic Wastewater Treatment Works;
- b. The domestic wastewater treatment plant is not required to develop an industrial pretreatment program pursuant to either Section 307 of the federal Clean Water Act or Section 63.9 of Regulation No. 63 (5 CCR 1002-63): Pretreatment Regulations;
- c. The domestic wastewater treatment plant does not accept any hazardous waste as defined at Part 261 of the Solid and Hazardous Waste Commission's Regulations (6 CCR 1007-3) for treatment and discharge by truck, rail, or dedicated pipeline;
- d. Design Capacity: The rated design capacity of the wastewater treatment works must be less than 1.0 Million Gallons per Day (MGD);
- e. The facility is a domestic wastewater treatment facility discharging to at least one of the following: 1) an unclassified water; 2) a use protected water; 3) a reviewable water; or 3) a water that has been designated as threatened and endangered species habitat (including an area within the associated 100-year flood plain).
- f. The discharge to an unclassified water must not return flow to a classified water that has an Outstanding Water designation.

B. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Limitations, Monitoring Frequencies, and Sample Types for Effluent Parameters

In order to obtain an indication of the probable compliance or non-compliance with the effluent limitations specified in Part I.B, the permittee shall monitor all effluent parameters at the frequencies and sample types, as identified in the certification of this permit. Such monitoring will begin immediately and last for the life of the permit unless otherwise noted. The results of such monitoring shall be reported on the Discharge Monitoring Report form (See Part I.E).

Self-monitoring sampling by the permittee for compliance with the effluent monitoring requirements specified in this permit, shall be performed at the location(s) designated in the certification authorizing discharge under this permit, following final treatment but prior to entering the receiving stream or potentially mixing with or influenced by other waters, unless otherwise specified in the certification. Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited.

If the permittee, using an approved analytical method, monitors any parameter more frequently than required by this permit, then the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (DMRs) or other forms as required by the Division. Such increased frequency shall also be indicated.

- a. Flow Recording Device - Treatment facilities are typically required to have both influent and effluent flow measuring and recording devices. Where influent flow metering is not practicable, the Division may approve on a case-by-case basis flow metering at the effluent end of the treatment facility or flow metering by some other means. For these facilities, influent and/or

effluent flow measuring and sampling type will be specified in the certification. If only one device is applicable, then that device will be used to report both influent and effluent flow. Reported flows will be used to monitor compliance with the effluent flow limitation and hydraulic loading to the plant.

- b. Percentage Removal Requirements (BOD₅ and TSS Limitations) - If noted in the limits table(s), the arithmetic mean of the BOD₅ and TSS concentrations for effluent samples collected during the DMR reporting period shall demonstrate a minimum of eighty-five percent (85%) removal of both BOD₅ (or CBOD₅), and TSS, as measured by dividing the respective difference between the mean influent and effluent concentrations for the DMR monitoring period by the respective mean influent concentration for the DMR monitoring period, and multiplying the quotient by 100. Percent removal for TSS for lagoon facilities is waived in accordance with Regulation 62.5(3). Dischargers to the surface water through hydrologically connected groundwater that are neither mechanical nor lagoon facilities will be evaluated on a case-by-basis for technology-based effluent limitations.
- c. Oil and Grease Monitoring: For every outfall with oil and grease monitoring, in the event an oil sheen or floating oil is observed, a grab sample shall be collected and analyzed for oil and grease, and reported on the appropriate DMR under parameter 03582. In addition, corrective action shall be taken immediately to mitigate the discharge of oil and grease. A description of the corrective action taken should be included with the DMR.
- d. Total Residual Chlorine: Monitoring for TRC is required only when chlorine is in use.
- e. Metals: Metals concentrations measured in compliance with the effluent monitoring requirements listed in Part I.A of this permit may be used to satisfy any industrial waste management metals monitoring requirements listed in Part I.C.12, if the metals are in the same form (i.e. total). Sampling must be conducted in accordance with Part I.C.12.
- f. Additional or Alternate Limitations: The certification may include limitations or monitoring requirements for any pollutant(s) based on site specific considerations including but not limited to: inclusion on the 303(d) or Monitoring and Evaluation List in Regulation No. 93; an approved TMDL with a waste load allocation; an approved Discharger Specific Variance (DSV); compliance with any Division compliance order on consent, cease and desist order, or an EPA administrative order, or similar decree promulgated by the Division, EPA or any other public entity. The limitations and monitoring requirements will vary depending on the parameter, and will be fully enforceable under this permit.
- g. Salinity Parameters: Regulation 61.8(2)(l) contains requirements regarding salinity for any discharges to the Colorado River Watershed. For discharges tributary to the Colorado River Basin, the permittee shall monitor the raw water source and the wastewater effluent at the frequencies identified in the appropriate table below. The results are to be reported on the Discharge Monitoring Report.

Self-monitoring samples taken in compliance with the monitoring requirements specified above shall be taken prior to treatment of the raw drinking water source (with a composite sample proportioned to flow prepared from individual grab samples if more than one source is being utilized), and at the established domestic wastewater treatment plant effluent sampling point identified in the certification and in Part I.B of this permit.

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations and the Colorado Discharge Permit System Regulations, Section 61.8(2), the permitted discharge shall not contain effluent parameter concentrations, which exceed the limitations for the facility types listed below in Parts I.B.2, I.B.3, I.B.4 or I.B.5.

2. Discharges to Unclassified Waters

The following effluent limitations, listed in Part I.B.2, Tables 1a-1d will apply to discharges to unclassified waters where there is no return flow to a classified water of the state. Footnotes for Tables 1a - 1d are defined following Table 1d.

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), the permitted discharge shall not contain effluent parameter concentrations, which exceed the following limitations:

Table 1a						
Mechanical Facilities with Design Flows Less Than or Equal to 0.25 MGD Discharging to Unclassified Waters						
ICIS Code	Parameter	Limitation			Sampling	
		30-day Avg.	7-day Avg.	Daily Max	Frequency ¹	Type ²
50050	Flow, MGD ³	TBD		Report	Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45		Monthly	Composite
81010	BOD ₅ , percent removal ^{5, 6}	85% (min)			Monthly	Calculated
00530	Total Suspended Solids, mg/l	30	45		Monthly	Composite
81011	TSS, percent removal ⁶	85% (min)			Monthly	Calculated
50060	Total Residual Chlorine, mg/l			0.5	Weekly	Grab
00400	pH, s.u.			6.0-9.0	Weekly	Grab
84066	Oil and Grease, mg/l			Report	Weekly	Visual
03582	Oil and Grease, mg/l			10	Contingent	Grab
51040	<i>E. coli</i> , #/100 ml ⁷	2,000	4,000		Monthly	Grab
00610	Total Ammonia, mg/l as N	Report		Report	Monthly	Composite
00665	Total Phosphorous, mg/l ⁸	TBD		TBD	Monthly	Composite
00665	Total Phosphorous, lbs/month ⁸	Report		Report	Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁹	TBD		NA	Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report	Quarterly	Composite
	Other Pollutants, units	TBD		TBD	TBD	TBD
	Regulation 85 or Regulation 31 Nutrients ¹⁰	Running Annual Median	95% percentile		Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a		Monthly	Composite
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a		Monthly	Composite

TBD means to be determined for each certification.

Table 1b						
Mechanical Facilities with Design Flows Greater Than 0.25 MGD and less than 1.0 MGD Discharging to Unclassified Waters						
ICIS Code	Parameter	Limitation			Sampling	
		30-day Avg.	7-day Avg.	Daily Max	Frequency ¹	Type ²
50050	Flow, MGD ³	TBD		Report	Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45		Weekly	Composite
81010	BOD ₅ , percent removal ^{5, 6}	85% (min)			Weekly	Calculated
00530	Total Suspended Solids, mg/l	30	45		Weekly	Composite
81011	TSS, percent removal ⁶	85% (min)			Weekly	Calculated
50060	Total Residual Chlorine, mg/l			0.5	3 days/week	Grab
00400	pH, s.u.			6.0-9.0	Daily	Grab
84066	Oil and Grease, mg/l			Report	Daily	Visual
03582	Oil and Grease, mg/l			10	Contingent	Grab
51040	<i>E. coli</i> , #/100 ml ⁷	2,000	4,000		Weekly	Grab
00610	Total Ammonia, mg/l as N ⁸	Report		Report	Weekly	Composite
00665	Total Phosphorous, mg/l ⁸	TBD		TBD	Monthly	Composite
00665	Total Phosphorous, lbs/month ⁸	Report		Report	Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA	Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report	Quarterly	Composite
	Other Pollutants, units	TBD		TBD	TBD	TBD
	Regulation 85 or Regulation 31 Nutrients ¹⁰	Running Annual Median	95% percentile		Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a		Monthly	Composite
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a		Monthly	Composite

TBD means to be determined for each certification.

Table 1c						
Lagoon or Other Non- Mechanical Facilities With Design Flows Less or Equal to 0.5 MGD Discharging to Unclassified Waters						
ICIS Code	Parameter	Limitation			Sampling	
		30-day Avg.	7-day Avg.	Daily Max	Frequency ¹	Type ²
50050	Flow, MGD ³	TBD		Report	Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45		Monthly	Grab
81010	BOD ₅ , percent removal ^{5, 6}	85% (min)			Monthly	Calculated
00530	Total Suspended Solids, mg/l					
	<i>Aerated Lagoons</i>	75		110	Monthly	Grab
	<i>Non-Aerated Lagoons</i>	105		160	Monthly	Grab
81011	TSS, percent removal ⁶	85% (min)			Monthly	Calculated
50060	Total Residual Chlorine, mg/l			0.5	Weekly	Grab
00400	pH, s.u.			6.0-9.0	Weekly	Grab
84066	Oil and Grease, mg/l			Report	Weekly	Visual
03582	Oil and Grease, mg/l			10	Contingent	Grab
51040	<i>E. coli</i> , #/100 ml ⁷	2,000	4,000		Monthly	Grab
00610	Total Ammonia, mg/l as N	Report		Report	Monthly	Grab
00665	Total Phosphorous, mg/l ⁸	TBD		TBD	Monthly	Grab
00665	Total Phosphorous, lbs/month ⁸	Report		Report	Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA	Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report	Quarterly	Grab
	Other Pollutants, units	TBD		TBD	TBD	TBD
	Regulation 85 or Regulation 31 Nutrients ¹⁰	Running Annual Median	95% percentile		Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a		Monthly	Grab
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a		Monthly	Grab

TBD means to be determined for each certification.

Table 1d						
Lagoon or Other Non- Mechanical Facilities With Design Flows Greater than 0.5 MGD Discharging to Unclassified Waters						
ICIS Code	Parameter	Limitation			Sampling	
		30-day Avg.	7-day Avg.	Daily Max	Frequency ¹	Type ²
50050	Flow, MGD ³	TBD		Report	Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45		Weekly	Grab
81010	BOD ₅ , percent removal ^{5, 6}	85% (min)			Weekly	Calculated
00530	Total Suspended Solids, mg/l					
	<i>Aerated Lagoons</i>	75		110	Weekly	Grab
	<i>Non-Aerated Lagoons</i>	105		160	Weekly	Grab
81011	TSS, percent removal ⁶	85% (min)			Weekly	Calculated
50060	Total Residual Chlorine, mg/l			0.5	5 days/week	Grab
00400	pH, s.u.			6.0-9.0	5 day/week	Grab
84066	Oil and Grease, mg/l			Report	5 days/week	Visual
03582	Oil and Grease, mg/l			10	Contingent	Grab
51040	<i>E. coli</i> , #/100 ml ⁷	2,000	4,000		Weekly	Grab
00610	Total Ammonia, mg/l as N	Report		Report	Weekly	Grab
00665	Total Phosphorous, mg/l ⁸	TBD		TBD	Monthly	Grab
00665	Total Phosphorous, lbs/month ⁸	Report		Report	Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA	Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report	Quarterly	Grab
	Other Pollutants, units	TBD		TBD	TBD	TBD
	Regulation 85 or Regulation 31 Nutrients¹⁰	Running Annual Median	95% percentile		Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a		Monthly	Grab
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a		Monthly	Grab

FOOTNOTES FOR TABLES 1a-1d

- 1 Monitoring frequency reductions may be granted, in accordance with the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities (WQP-20).
- 2 See the definition of “composite” in Part I.D of this permit. If the division determines that a flow-weighted composite sample is impracticable for a facility, a time composite sample of four equal aliquots collected at two-hour intervals will be allowed. The monitoring frequency and sample type will be specified in the certification. See Section VI.A of the fact sheet for more information.
- 3 The 30-day average effluent limitation for flow is identified in the certification, is generally based on the design capacity of the facility as outlined in the most recent site approval, and is enforceable under this permit. Facilities with flow equalization basin and reclaimed water configurations may be addressed differently. See 61.8(2)(f).
- 4 The monitoring frequency and sample type for effluent flow is specified in the certification and is fully enforceable under this permit. Mechanical type treatment facilities are typically required to have both influent and effluent flow measuring and recording devices. This requirement may be waived in cases where the division determines that either influent or effluent flow measurements are impractical. For these facilities, flow measuring and sampling type will be specified in the certification. If only one device is applicable, then that device will be used to report both influent and effluent flow. However, where these devices are not in place at the time of certification, the permittee has one year from the end of the

calendar month that certification was given to install the required equipment. Where such equipment is in place, the frequency and type of flow monitoring will be "Continuous" and "Recorder", respectively. Where such equipment is not in place, the frequency and type of flow monitoring, during the interim period, will be specified in the certification. For certain facilities, the use of a metered pumping rate or potable water use or may be allowed. In these cases, the monitoring frequency and sample type are determined and specified in the certification.

- 5 Limitations for 5-day Carbonaceous Biochemical Oxygen Demand (CBOD₅) of 25 mg/l (30-day average) and 40 mg/l (maximum 7-day average) may be substituted for the limits for BOD₅ as identified in the certification. 85% removal of CBOD₅ would also be required.
- 6 For domestic sources, where the permittee has demonstrated that the treatment facility is unable to meet the 85 percent removal requirement for a parameter and the inability to meet the requirement is not caused by infiltration and inflow, a lower percent removal requirement or a mass loading limit may be substituted provided that the permittee can demonstrate that the numeric limitations for BOD₅, CBOD₅, and TSS can be met.
- 7 For *E. coli* the statistic used is the Geometric Mean, which is based on Method 1: Geometric Mean = $(a*b*c*d*...)^{(1/n)}$, or Method 2: Geometric Mean = $\text{antilog}([\log(a)+\log(b)+\log(c)+\log(d)+...]/n)$.
- 8 Total Phosphorous limits will be established and included in the certification, where applicable, and may be based on Regulation 85 phosphorus limits, Regulation 31 phosphorus limits, basin regulations (Reg 32-38) phosphorus limits, or Regulations 71-74. The limits and reporting requirements, where applicable, will be fully enforceable under this permit.
- 9 TDS monitoring requirement applies to discharges in the Colorado River basin. Samples are to be of the raw water supply. If more than one source is being utilized, a composite sample proportioned to flow shall be prepared from individual grab samples.
- 10 New facilities will also be subject to total inorganic nitrogen and total phosphorus requirements in Part I.B.4 of the permit.

3. Discharges to Classified Waters

For discharges to unclassified water where return flow to a classified state water is possible or for discharges into classified water, the limitations under Part I.B. Tables 2a-2d will apply. **For discharges where the receiving stream is a T&E water, the zero dilution limitations shown under Tables 3a through 7e will apply. Footnotes for Tables 2a-2d are defined following Table 2d.**

In accordance with the Water Quality Control Commission Regulations for Effluent Limitations, Section 62.4, and the Colorado Discharge Permit System Regulations, Section 61.8(2), the permitted discharge shall not contain effluent parameter concentrations, which exceed the following limitations:

Table 2a

Mechanical Facilities with Design Flows Less Than or Equal to 0.25 MGD Discharging to Classified Waters

ICIS Code	Parameter	Limitation				Sampling	
		30-day Avg.	7-day Avg.	Daily Max	2-year Avg.	Frequency ¹	Type ²
50050	Flow, MGD	TBD ¹		Report		Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45 ²			Monthly	Composite
81010	BOD ₅ , percent removal ^{5,6}	85% (min)				Monthly	Calculated
00530	Total Suspended Solids, mg/l	30	45			Monthly	Composite
81011	TSS, percent removal ⁶	85% (min)				Monthly	Calculated
00400	pH, s.u.			6.5-9.0		Weekly	Grab
84066	Oil and Grease, mg/l			Report		Weekly	Visual
03582	Oil and Grease, mg/l			10		Contingent	Grab
51040	<i>E. coli</i> , no/100 ml ⁷	See Tables 3a-3c	2 X 30-day Avg.		See Tables 3d - 3f	Monthly	Grab
50060	Total Residual Chlorine, mg/l	See Table 4a		See Table 4b	See Table 4c	Weekly	Grab
00640	Total Inorganic Nitrogen			See Table 5a	See Table 5b	Monthly	Composite
00610	Total Ammonia, mg/l as N	See Table 6a or 6c		See Table 6e or 6g	See Table 6i or 6k	Monthly	Composite
00665	Total Phosphorous, mg/l ⁸	TBD		TBD		Monthly	Composite
00665	Total Phosphorous, lbs/month ⁸	Report		Report		Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA		Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report		Quarterly	Composite
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
	Other Pollutants, units	TBD		TBD	TBD	TBD	TBD
	WET, Acute ¹⁰						
TAN6 C	LC50 Statre 96Hr Acute <i>Pimephales promelas</i>			LC ₅₀ ≥ 100		TBD	Grab
TAM3 B	LC50 Statre 48Hr Acute <i>Ceriodaphnia dubia</i>			LC ₅₀ ≥ 100		TBD	Grab
	WET, Chronic ¹⁰						
TKP6 C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>			NOEC or IC ₂₅ ≥ IWC		TBD	³ Composites /Test
TKP3 B	Static Renewal 7 Day Chronic <i>Ceriodaphnia Dubia</i>			NOEC or IC ₂₅ ≥ IWC		TBD	³ Composites /Test
	Regulation 85 or Regulation 31 Nutrients¹¹	Running Annual Median	95% percentile			Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a			Monthly	Composite
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a			Monthly	Composite
00600	Total Nitrogen, mg/l ¹²	See Table 7b/7c				Monthly	Composite

TBD means to be determined for each certification.

Table 2b

Mechanical Facilities with Design Flows Greater Than 0.25 MGD and Less Than 1.0 MGD Discharging to Classified Waters

ICIS Code	Parameter	Limitation				Sampling	
		30-day Avg.	7-day Avg.	Daily Max	2-year Avg.	Frequency ¹	Type ²
50050	Flow, MGD ³	TBD		Report		Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45			Weekly	Composite
81010	BOD ₅ , percent removal ^{5,6}	85% (min)				Weekly	Calculated
00530	Total Suspended Solids, mg/l	30	45			Weekly	Composite
81011	TSS, percent removal ⁶	85% (min)				Weekly	Calculated
00400	pH, s.u.			6.5-9.0		Daily	Grab
84066	Oil and Grease, mg/l			Report		Daily	Visual
03582	Oil and Grease, mg/l			10		Contingent	Grab
51040	<i>E. coli</i> , no/100 ml ⁷	See Tables 3a - 3c	2 X 30-day Avg.		See Tables 3d - 3f	Weekly	Grab
50060	Total Residual Chlorine, mg/l	See Table 4a		See Table 4b	See Table 4c	3 days/week	Grab
00640	Total Inorganic Nitrogen			See Table 5a	See Table 5b	Weekly	Composite
00610	Total Ammonia, mg/l as N	See Table 6a or 6c		See Table 6e or 6g	See Table 6i or 6k	Weekly	Composite
00665	Total Phosphorous, mg/l ⁸	TBD		TBD		Monthly	Composite
00665	Total Phosphorous, lbs/month ⁸	Report		Report		Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA		Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report		Quarterly	Composite
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
	Other Pollutants, units	TBD		TBD	TBD	TBD	TBD
	WET, Acute ¹⁰						
TAN6C	LC50 Statre 96Hr Acute <i>Pimephales promelas</i>			LC ₅₀ ≥ 100		TBD	Grab
TAM3B	LC50 Statre 48Hr Acute <i>Ceriodaphnia dubia</i>			LC ₅₀ ≥ 100		TBD	Grab
	WET, Chronic ¹⁰						
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>			NOEC or IC ₂₅ ≥ IWC		TBD	3 Composites /Test
TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia Dubia</i>			NOEC or IC ₂₅ ≥ IWC		TBD	3 Composites /Test
	Regulation 85 or Regulation 31 Nutrients¹¹	Running Annual Median	95% percentile			Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a			Monthly	Composite
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a			Monthly	Composite
00600	Total Nitrogen, mg/l ¹²	See Table 7b/7c				Monthly	Composite

Table 2c

Non-Mechanical Facilities with Design Flows Less Than or Equal to 0.5 MGD Discharging to Classified Waters

ICIS Code	Parameter	Limitation				Sampling	
		30-day Avg.	7-day Avg.	Daily Max	2-year Avg.	Frequency ¹	Type ²
50050	Flow, MGD ³	TBD		Report		Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45			Monthly	Grab
81010	BOD ₅ , percent removal ^{5,6}	85% (min)				Monthly	Calculated
00530	Total Suspended Solids, mg/l ⁶						
	<i>Aerated Lagoons</i>	75	110			Monthly	Grab
	<i>Non-aerated Lagoons</i>	105	160			Monthly	Grab
81011	TSS, percent removal ⁶	NA					
00400	pH, s.u.			6.5-9.0		Weekly	Grab
84066	Oil and Grease, mg/l			Report		Weekly	Visual
03582	Oil and Grease, mg/l			10		Contingent	Grab
51040	<i>E. coli</i> , no/100 ml ⁷	See Tables 3a - 3c	2 X 30-day Avg.		See Tables 3d - 3f	Monthly	Grab
50060	Total Residual Chlorine, mg/l	See Table 4a		See Table 4b	See Table 4c	Weekly	Grab
00640	Total Inorganic Nitrogen			See Table 5a	See Table 5b	Monthly	Grab
00610	Total Ammonia, mg/l as N	See Table 6b or 6d		See Table 6f or 6h	See Table 6j or 6l	Monthly	Grab
00665	Total Phosphorous, mg/l ⁸	TBD		TBD		Monthly	Grab
00665	Total Phosphorous, lbs/month ⁸	Report		Report		Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA		Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report		Quarterly	Grab
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
	Other Pollutants, units	TBD		TBD	TBD	TBD	TBD
	WET, Acute ¹⁰						
TAN6C	LC50 Statre 96Hr Acute <i>Pimephales promelas</i>			LC ₅₀ ≥ 100		TBD	Grab
TAM3B	LC50 Statre 48Hr Acute <i>Ceriodaphnia dubia</i>			LC ₅₀ ≥ 100		TBD	Grab
	WET, Chronic ¹⁰						
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>			NOEC or IC ₂₅ ≥ IWC		TBD	3 Composites /Test
TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia Dubia</i>			NOEC or IC ₂₅ ≥ IWC		TBD	3 Composites /Test
	Regulation 85 or Regulation 31 Nutrients¹¹	Running Annual Median	95% percentile			Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a			Monthly	Grab
00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a			Monthly	Grab
00600	Total Nitrogen, mg/l ¹²	See Table 7b/7c				Monthly	Grab

Table 2d

Non-Mechanical Facilities with Design Flows Greater Than 0.5 MGD and Less Than 1.0 MGD Discharging to Classified Waters

ICIS Code	Parameter	Limitation				Sampling	
		30-day Avg.	7-day Avg.	Daily Max	2-year Avg.	Frequency ¹	Type ²
50050	Flow, MGD	TBD ³		Report		Continuous ⁴	Recorder ⁴
00310	BOD ₅ , mg/l ⁵	30	45			Weekly	Grab
81010	BOD ₅ , percent removal ^{5,6}	85% (min)				Weekly	Calculated
00530	Total Suspended Solids, mg/l						
	<i>Aerated Lagoons</i>	75	110			Weekly	Grab
	<i>Non-aerated Lagoons</i>	105	160			Weekly	Grab
81011	TSS, percent removal ⁶	NA					
00400	pH, s.u.			6.5-9.0		5 days/week	Grab
84066	Oil and Grease, mg/l			Report		5 days/week	Visual
03582	Oil and Grease, mg/l			10		Contingent	Grab
51040	<i>E. coli</i> , no/100 ml ⁷	See Tables 3a - 3c	2 X 30-day Avg.		See Tables 3d - 3f	Weekly	Grab
50060	Total Residual Chlorine, mg/l	See Table 4b		See Table 4a	See Table 4c	5 days/week	Grab
00640	Total Inorganic Nitrogen			See Table 5a	See Table 5b	Weekly	Grab
00610	Total Ammonia, mg/l as N	See Table 6b or 6d		See Table 6f or 6h	See Table 6j or 6l	Weekly	Grab
00665	Total Phosphorous, mg/l ⁸	TBD		TBD		Monthly	Grab
00665	Total Phosphorous, lbs/month ⁸	Report		Report ⁶		Monthly	Calculated
00665	Total Phosphorous, cumulative lbs/previous 12 consecutive months ⁸	TBD		NA		Monthly	Calculated
70295	Total Dissolved Solids, mg/l ⁹	Report		Report		Quarterly	Grab
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp Daily Max (°C)			TBD		Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
00010	Temp MWAT (°C)		TBD			Continuous	Recorder
	Other Pollutants, units	TBD		TBD	TBD	TBD	TBD
	WET, Acute ¹⁰						
TAN6C	LC50 Statre 96Hr Acute <i>Pimephales promelas</i>			LC ₅₀ ≥ 100		TBD	Grab
TAM3B	LC50 Statre 48Hr Acute <i>Ceriodaphnia dubia</i>			LC ₅₀ ≥ 100		TBD	Grab
	WET, Chronic ¹⁰						
TKP6C	Static Renewal 7 Day Chronic <i>Pimephales promelas</i>			NOEC or IC ₂₅ ≥ IWC		TBD	³ Composites /Test
TKP3B	Static Renewal 7 Day Chronic <i>Ceriodaphnia Dubia</i>			NOEC or IC ₂₅ ≥ IWC		TBD	³ Composites /Test
	Regulation 85 or Regulation 31 Nutrients¹¹	Running Annual Median	95% percentile			Frequency	Type
00665	Total Phosphorus, mg/l	See Table 7a or 7d/7e	See Table 7a			Monthly	Grab

00640	Total Inorganic Nitrogen, mg/l	See Table 7a	See Table 7a			Monthly	Grab
00600	Total Nitrogen, mg/l ¹²	See Table 7b/7c				Monthly	Grab

Footnotes for Table 2a-2d

- 1 Monitoring frequency reductions may be granted, in accordance with the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities (WQP-20).
- 2 See the definition of “composite” in Part I.D of this permit. If the division determines that a flow-weighted composite sample is impracticable for a facility, a time composite sample of four equal aliquots collected at two-hour intervals will be allowed. The monitoring frequency and sample type will be specified in the certification. See Section VI.A of the fact sheet for more information.
- 3 The 30-day average effluent limitation for flow is identified in the certification, is generally based on the design capacity of the facility as outlined in the most recent site approval, and is enforceable under this permit. Facilities with flow equalization basin and reclaimed water configurations may be addressed differently. See 61.8(2)(f).
- 4 The monitoring frequency and sample type for effluent flow is specified in the certification and is fully enforceable under this permit. Mechanical type treatment facilities are typically required to have both influent and effluent flow measuring and recording devices. This requirement may be waived in cases where the division determines that either influent or effluent flow measurements are impractical. For these facilities, flow measuring and sampling type will be specified in the certification. If only one device is applicable, then that device will be used to report both influent and effluent flow. However, where these devices are not in place at the time of certification, the permittee has one year from the end of the calendar month that certification was given to install the required equipment. Where such equipment is in place, the frequency and type of flow monitoring will be “Continuous” and “Recorder”, respectively. Where such equipment is not in place, the frequency and type of flow monitoring, during the interim period, will be specified in the certification. For certain facilities, the use of a metered pumping rate or potable water use or may be allowed. In these cases, the monitoring frequency and sample type are determined and specified in the certification.
- 5 Limitations for 5-day Carbonaceous Biochemical Oxygen Demand (CBOD₅) of 25 mg/l (30-day average) and 40 mg/l (maximum 7-day average) may be substituted for the limits for BOD₅ as identified in the certification. 85% removal of CBOD₅ would also be required.
- 6 For domestic sources, where the permittee has demonstrated that the treatment facility is unable to meet the 85 percent removal requirement for a parameter and the inability to meet the requirement is not caused by infiltration and inflow, a lower percent removal requirement or a mass loading limit may be substituted provided that the permittee can demonstrate that the numeric limitations for BOD₅, CBOD₅, and TSS can be met.
- 7 For *E. coli* the statistic used is the Geometric Mean, which is based on Method 1: Geometric Mean = $(a*b*c*d*...)^{(1/n)}$, or Method 2: Geometric Mean = $\text{antilog}([\log(a)+\log(b)+\log(c)+\log(d)+...]/n)$.
- 8 Total Phosphorus limits are established and included in the certification, where applicable, and are based on the applicable regulation (Regulation Nos. 71-74).
- 9 TDS monitoring requirement applies to discharges in the Colorado River basin. Samples are to be of the raw water supply. If more than one source is being utilized, a composite sample proportioned to flow shall be prepared from individual grab samples.
- 10 Monitoring frequency for WET testing are implemented in accordance with the Division’s Whole Effluent Toxicity (WET) Testing Policy. For chronic WET, “Composite” = 24 hour Composite. The in-stream waste concentration (IWC) for each facility is specified in the certification and determined using the following equation: $IWC = [Facility\ Flow\ (FF)/(Stream\ Chronic\ Low\ Flow\ (annual) + FF)] \times 100\%$
- 11 New facilities will also be subject to total inorganic nitrogen and total phosphorus requirements in Part I.B.4 of the permit.
- 12 This facility is eligible for Regulation 31 Total Nitrogen due to available dilution instead of Regulation 85 Total Inorganic Nitrogen.

a. Effluent limitations for *E. Coli*

The following chronic 30-day Geometric Mean *E. coli* water quality based effluent limitations (WQBEL) will apply based on the appropriate dilution and upstream water quality. The shaded cells in the *E. coli* WQBEL tables 3a-3c indicate that the result is greater than the allowed maximum, and therefore the limit will be set to 2,000 CFU/100mL.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 3a-3c below, the next lower dilution ratio will be used in the selection of the limit, in order to be protective of the receiving stream at the point of discharge. Note that for dilution ratios over 20:1 (for E, U, and P classified waters) or 5:1 (for N classified waters), the selected WQBEL limit will be above the maximum allowable *E. coli* limit of 2,000 CFU/100mL, therefore additional dilution is inconsequential.

If the exact ambient concentration is not shown on Tables 3a-3c below, the next higher ambient concentration will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

The acute 7-day Geometric mean WQBEL will be based on a limit that is two times the chronic 30-day limit.

Table 3a												
E. coli Chronic WQBEL for Recreation E and U Classified Waters												
		30E3 : Design Flow Dilution Ratio										
		0	1	2	3	4	5	7	10	13	15	20
Ambient Conc (CFU/100ml)	1	126	251	376	501	626	751	1001	1376	1751	2001	2626
	2	126	250	374	498	622	746	994	1366	1738	1986	2606
	3	126	249	372	495	618	741	987	1356	1725	1971	2586
	4	126	248	370	492	614	736	980	1346	1712	1956	2566
	5	126	247	368	489	610	731	973	1336	1699	1941	2546
	10	126	242	358	474	590	706	938	1286	1634	1866	2446
	25	126	227	328	429	530	631	833	1136	1439	1641	2146
	50	126	202	278	354	430	506	658	886	1114	1266	1646
	75	126	177	228	279	330	381	483	636	789	891	1146
	100	126	152	178	204	230	256	308	386	464	516	646
	126	126	126	126	126	126	126	126	126	126	126	126

Table 3b														
E. coli Chronic WQBEL for Recreation P Classified Waters														
		30E3 : Design Flow Dilution Ratio												
		0	1	2	3	4	5	6	7	8	9	10	15	20
Ambie	1	205	409	613	817	1021	1225	1429	1633	1837	2041	2245	3265	4285
	2	205	408	611	814	1017	1220	1423	1626	1829	2032	2235	3250	4265

3	205	407	609	811	1013	1215	1417	1619	1821	2023	2225	3235	4245
4	205	406	607	808	1009	1210	1411	1612	1813	2014	2215	3220	4225
5	205	405	605	805	1005	1205	1405	1605	1805	2005	2205	3205	4205
10	205	400	595	790	985	1180	1375	1570	1765	1960	2155	3130	4105
50	205	360	515	670	825	980	1135	1290	1445	1600	1755	2530	3305
100	205	350	495	640	785	930	1075	1220	1365	1510	1655	2380	3105
150	205	310	415	520	625	730	835	940	1045	1150	1255	1780	2305
205	205	205	205	205	205	205	205	205	205	205	205	205	205

Table 3c									
E. coli Chronic WQBEL for Recreation N Classified Waters									
		30E3 : Design Flow Dilution Ratio							
		0	1	2	3	4	5	10	15
Ambient Conc (mg/l)	1	630	1259	1888	2517	3146	3775	6920	10065
	5	630	1255	1880	2505	3130	3755	6880	10005
	10	630	1250	1870	2490	3110	3730	6830	9930
	50	630	1210	1790	2370	2950	3530	6430	9330
	100	630	1160	1690	2220	2750	3280	5930	8580
	200	630	1060	1490	1920	2350	2780	4930	7080
	300	630	960	1290	1620	1950	2280	3930	5580
	400	630	860	1090	1320	1550	1780	2930	4080
	500	630	760	890	1020	1150	1280	1930	2580
	600	630	660	690	720	750	780	930	1080
	630	630	630	630	630	630	630	630	630

Where the waters are non-designated, antidegradation considerations must be taken into account. Therefore, either the following E. coli chronic 2-year average antidegradation based effluent average concentrations (ADBAC) from Tables 3d-3f will apply, or the chronic discharge requirement (effluent loading to stream) that was occurring because of this discharge as of September 30, 2000 (or other reviewable date), otherwise known as the Non-Impact Limit (NIL) will apply. Note that 0 CFU/100ml cannot be used in a geometric mean calculation, therefore 1 is used in the calculation even when the ambient is <1. BWQ is assumed to be 1.

The shaded cells in the E. Coli ADBAC tables indicate that the result is greater than the allowed maximum, and therefore the limit will be set to 2,000 CFU/100mL.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 3d-3f below, the next lower dilution ratio will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

If the exact ambient concentration is not shown on Tables 3d-3f below, the next higher ambient concentration will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

Table 3d														
E. coli ADBAC for Recreation E and U Classified Waters														
		30E3 : Design Flow Dilution Ratio												
		0	1	2	3	4	5	7	10	20	30	40	50	75
Ambient Conc (CFU/100ml)	1	20	39	57	76	95	114	151	207	395	582	770	957	1426
	3	20	37	53	70	87	104	137	187	355	522	690	857	1276
	5	20	35	49	64	79	94	123	167	315	462	610	757	1126
	7	20	33	45	58	71	84	109	147	275	402	530	657	976
	10	20	30	39	49	59	69	88	117	215	312	410	507	751
	15	20	25	29	34	39	44	53	67	115	162	210	257	376
	20	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)	20 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the E. coli in the receiving stream.

Table 3e (Part 1)									
E. coli ADBAC for Recreation P Classified Waters									
		30E3 : Design Flow Dilution Ratio							
		0	1	2	3	4	5	7	10
Ambient Conc (CFU/100ml)	1	32	62	93	123	154	185	246	338
	2	32	61	91	120	150	180	239	328
	3	32	60	89	117	146	175	232	318
	4	32	59	87	114	142	170	225	308
	5	32	58	85	111	138	165	218	298
	10	32	53	75	96	118	140	183	248
	15	32	48	65	81	98	115	148	198
	20	32	43	55	66	78	90	113	148
	25	32	38	45	51	58	65	78	98
	32	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the E. coli in the receiving stream

Table 3e (Part 2)										
E. coli ADBAC for Recreation P Classified Waters										
		30E3: Design Flow Dilution Ratio								
		15	20	30	40	50	60	70	80	90
Ambient Conc (CFU/100ml)	1	491	644	950	1256	1562	1868	2327	2480	2786
	2	476	624	920	1216	1512	1808	2252	2400	2696
	3	461	604	890	1176	1462	1748	2177	2320	2606
	4	446	584	860	1136	1412	1688	2102	2240	2516
	5	431	564	830	1096	1362	1628	2027	2160	2426
	10	356	464	680	896	1112	1328	1652	1760	1976
	15	281	364	530	696	862	1028	1277	1360	1526
	20	206	264	380	496	612	728	902	960	1076
	25	131	164	230	296	362	428	527	560	626
	32	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)	32 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the E. coli in the receiving stream

Table 3f												
E. coli ADBAC for Recreation N Classified Waters												
		30E3 : Design Flow Dilution Ratio										
		0	1	2	3	4	5	7	10	15	20	25
Ambient Conc (CFU/100ml)	1	95	190	284	378	473	567	756	1039	1511	1982	2454
	2	95	189	282	375	469	562	749	1029	1496	1962	2429
	3	95	188	280	372	465	557	742	1019	1481	1942	2404
	4	95	187	278	369	461	552	735	1009	1466	1922	2379
	5	95	186	276	366	457	547	728	999	1451	1902	2354
	10	95	181	266	351	437	522	693	949	1376	1802	2229
	20	95	171	246	321	397	472	623	849	1226	1602	1979
	95	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)	95 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the E. coli in the receiving stream.

b. Effluent limitations for Total Residual Chlorine

The following chronic 30-day average and acute 1-day average total residual chlorine WQBELs, shown in Tables 4a and 4b below, will apply based on the appropriate dilution and upstream water quality. The shaded cells in the chronic and acute TRC tables indicate that the calculated TRC limit is greater than the Regulation 62 TRC limit of 0.5 mg/l, and therefore the WQBEL will be set to 0.5 mg/l.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 4a-4b below, the next lower dilution ratio will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

If the exact ambient concentration is not shown on Tables 4a-4b below, the next higher ambient concentration will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

Table 4a															
Chronic Total Residual Chlorine WQBEL for Aquatic Life Classified Waters															
		30E3: Design Flow Dilution Ratio													
		0	1	2	3	4	5	7	10	15	20	25	30	40	50
Ambient Conc (mg/l)	0	0.011	0.022	0.033	0.044	0.055	0.066	0.088	0.121	0.176	0.231	0.286	0.341	0.451	0.561
	0.001	0.011	0.021	0.031	0.041	0.051	0.061	0.081	0.111	0.161	0.211	0.261	0.311	0.411	0.511
	0.002	0.011	0.020	0.029	0.038	0.047	0.056	0.074	0.101	0.146	0.191	0.236	0.281	0.371	0.461
	0.003	0.011	0.019	0.027	0.035	0.043	0.051	0.067	0.091	0.131	0.171	0.211	0.251	0.331	0.411
	0.004	0.011	0.018	0.025	0.032	0.039	0.046	0.060	0.081	0.116	0.151	0.186	0.221	0.291	0.361
	0.005	0.011	0.017	0.023	0.029	0.035	0.041	0.053	0.071	0.101	0.131	0.161	0.191	0.251	0.311
	0.01	0.011	0.012	0.013	0.014	0.015	0.016	0.018	0.021	0.026	0.031	0.036	0.041	0.051	0.061
	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011

Table 4b														
Acute Total Residual Chlorine WQBEL for Aquatic Life Classified Waters (mg/l)														
		1E3: Design Flow Dilution Ratio												
		0	1	2	3	4	5	7	10	15	20	25	30	50
Ambient Conc (mg/l)	0	0.019	0.038	0.057	0.076	0.095	0.11	0.15	0.21	0.30	0.40	0.49	0.59	0.97
	0.001	0.019	0.037	0.055	0.073	0.091	0.11	0.15	0.20	0.29	0.38	0.47	0.56	0.92
	0.002	0.019	0.036	0.053	0.070	0.087	0.10	0.14	0.19	0.27	0.36	0.44	0.53	0.87
	0.003	0.019	0.035	0.051	0.067	0.083	0.099	0.13	0.18	0.26	0.34	0.42	0.50	0.82
	0.004	0.019	0.034	0.049	0.064	0.079	0.094	0.12	0.17	0.24	0.32	0.39	0.47	0.77
	0.005	0.019	0.033	0.047	0.061	0.075	0.089	0.12	0.16	0.23	0.30	0.37	0.44	0.72
	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019

Where the waters are non-designated, antidegradation considerations must be taken into account. Therefore, either the following TRC chronic 2-year average antidegradation based effluent average concentrations (ADBAC) from Table 4c will apply, or the chronic discharge requirement (effluent loading to stream) that was occurring because of this discharge as of September 30, 2000 (or other reviewable date), otherwise known as the Non-Impact Limit (NIL) will apply. Note that the TRC BWQ is set to zero.

If the exact dilution ratio of a facility to stream flow is not shown on Table 4c below, the next lower dilution ratio will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge. Note that Table 4c is split into two tables.

If the exact ambient concentration is not shown on Table 4c below, the next higher ambient concentration will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

Table 4c - PART 1							
Total Residual Chlorine ADBAC for Aquatic Life Classified Waters (mg/l)							
		30E3: Design Flow Dilution Ratio					
		0	1	2	5	10	15
Ambient Conc (mg/l)	0	0.0017	0.0033	0.0050	0.0099	0.018	0.026
	0.001	0.0017	0.0023	0.0030	0.0049	0.0082	0.011
	0.0015	0.0017	0.0018	0.0020	0.0024	0.0032	0.0039
	0.0017	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the TRC in the receiving stream.

Table 4c - PART 2							
Total Residual Chlorine ADBAC for Aquatic Life Classified Waters (mg/l)							
		30E3: Design Flow Dilution Ratio					
		20	30	40	50	70	90
Ambient Conc (mg/l)	0	0.035	0.051	0.068	0.084	0.12	0.15
	0.001	0.015	0.021	0.028	0.034	0.047	0.060
	0.0015	0.0046	0.0062	0.0076	0.0091	0.012	0.015
	0.0017	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)	0.0017 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the TRC in the receiving stream.

c. Effluent limitations for Total Inorganic Nitrogen (TIN)

The following acute 1-day average total inorganic Nitrogen (TIN) WQBELs, shown in Table 5a below, will apply for receiving streams that are classified for water supply and are based on the appropriate dilution and upstream water quality.

The shaded cells in the WQBEL TIN table indicates that the calculated TIN limit is greater than the maximum TIN limit allowed by the division, and the TIN WQBEL will be set to 100 mg/l.

For facilities that discharge to streams only classified for Agriculture and not classified as Water Supply, the WQBEL will be set to 100 mg/l, regardless of ambient TIN concentration and dilution ratio.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 5a below, the next lower dilution ratio will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

If the exact ambient concentration is not shown on Table 5a below, the next higher ambient concentration will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

Table 5a																	
Acute Total Inorganic Nitrogen for Water Supply Classified Waters (mg/l)																	
		1E3: Design Flow Dilution Ratio															
		0	0.25	0.5	0.75	1	2	3	4	5	7	9	10	15	20	25	30
Ambient Conc (mg/l)	0	10	13	15	18	20	30	40	50	60	80	100	110	160	210	260	310
	0.5	10	12	15	17	20	29	39	48	58	77	96	105	153	200	248	295
	1	10	12	15	17	19	28	37	46	55	73	91	100	145	190	235	280
	2	10	12	14	16	18	26	34	42	50	66	82	90	130	170	210	250
	3	10	12	14	15	17	24	31	38	45	59	73	80	115	150	185	220
	4	10	12	13	15	16	22	28	34	40	52	64	70	100	130	160	190
	5	10	11	13	14	15	20	25	30	35	45	55	60	85	110	135	160
	7	10	11	12	12	13	16	19	22	25	31	37	40	55	70	85	100
	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Where the waters are non-designated, antidegradation considerations must be taken into account. Therefore, either the following TIN chronic 2-year average antidegradation based effluent average concentrations (ADBAC) from Table 5b will apply, or the acute discharge requirement (effluent loading to stream) that was occurring because of this discharge as of September 30, 2000 (or other reviewable date), otherwise known as the Non-Impact Limit (NIL) will apply. Note that the TIN BWQ is assumed to be zero. The shaded cells in the ADBAC TIN table indicates that the calculated TIN limit is greater than the maximum TIN limit allowed by the division, and the TIN WQBEL will be set to 100 mg/l.

If the exact dilution ratio of a facility to stream flow is not shown on Table 5b below, the next lower dilution ratio will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

If the exact ambient concentration is not shown on Table 5b (Part 1 and Part 2) below, the next higher ambient concentration will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge.

Table 5b - PART 1													
Total Inorganic Nitrogen ADBAC for Water Supply Classified Waters (mg/l)													
		1E3: Design Flow Dilution Ratio											
		0	0.5	1	2	3	4	5	6	7	8	9	10
Ambient Conc (mg/l)	0	1.5	2.3	3.0	4.5	6.0	7.5	9.0	11	12	14	15	17
	0.25	1.5	2.1	2.8	4.0	5.3	6.5	7.8	9.0	10	12	13	14
	0.5	1.5	2.0	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5	11	12
	1	1.5	1.8	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5

	1.25	1.5	1.6	1.8	2.0	2.3	2.5	2.8	3.0	3.3	3.5	3.8	4.0
	1.5	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the TIN in the receiving stream.

Table 5b - PART 2											
Total Inorganic Nitrogen ADBAC for Water Supply Classified Waters (mg/l)											
Ambient Conc (mg/l)		1E3: Design Flow Dilution Ratio									
		12	15	20	30	40	50	60	70	80	90
	0	20	24	32	47	62	77	92	107	122	137
	0.25	17	20	27	39	52	64	77	89	102	114
	0.5	14	17	22	32	42	52	62	72	82	92
	1	7.5	9.0	12	17	22	27	32	37	42	47
	1.25	4.5	5.3	6.5	9.0	12	14	17	19	22	24
	1.5	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)	1.5 ^(A)

^(A)The ADBAC is set equal to the SCT because there is no assimilative capacity for the TIN in the receiving stream.

d. Effluent Limitations for Total Ammonia

The following chronic 30-day average (Tables 6a-6d) total ammonia WQBELs will apply based on the appropriate 30E:3 dilution ratio and month. Tables are divided by Cold/Warm water and Mechanical/Non-Mechanical facilities designations. Note that the ambient ammonia concentration is set to 0.01 mg/l to reflect typical ambient ammonia concentrations.

The shaded cells in the Ammonia WQBEL tables indicate that the calculated limit is greater than the maximum Ammonia limit allowed by the division, and therefore the Ammonia WQBEL will be set to 50 mg/l.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 6a-6d below, the next lower dilution ratio will be used in the selection of the limit, in order to be protective of the receiving stream at the point of discharge.

Table 6a (Part 1)											
Ammonia Cold Water Chronic WQBELs for a Mechanical Facility (mg/l)											
	30E3: Design Flow										
	0	1	2	3	4	5	6	7	8	9	10
JAN	4.3	5.9	5.4	5.5	5.8	6.1	6.5	6.9	7.4	7.9	8.4
FEB	4.5	6.7	6.2	6.2	6.3	6.7	7.0	7.5	7.9	8.4	8.8
MAR	3.7	5.5	6.5	6.8	7.1	7.5	7.9	8.4	8.8	9.3	10
APR	3.3	5.0	6.6	8.1	9.1	10	10	11	11	12	12
MAY	3.5	5.5	7.3	9.0	10	10	10	11	11	12	13
JUNE	3.6	5.7	7.6	10	11	13	14	16	16	17	17
JULY	3	4.8	6.4	7.9	9.4	10	12	13	15	16	17
AUG	3.2	4.9	6.2	7.5	8.7	10	11	12	13	14	15

SEP	3.8	5.3	6.6	7.7	8.8	10	11	12	13	14	14
OCT	4	6.2	8.0	10	10	11	11	12	12	13	13
NOV	4.1	6.4	7.1	7.1	7.3	7.6	8.0	8.4	8.9	9.4	10
DEC	4	5.5	5.2	5.4	5.7	6.1	6.6	7.1	7.6	8.1	8.6

Table 6a (Part 2)											
Ammonia Cold Water Chronic WQBELs for a Mechanical Facility (mg/l)											
	30E3: Design Flow										
	15	20	25	30	40	50	60	70	80	90	
JAN	11	13	15	18	22	27	31	35	40	44	
FEB	11	14	16	18	23	27	32	36	40	45	
MAR	13	15	18	20	25	29	34	39	43	48	
APR	17	20	22	25	30	35	40	45	50	50	
MAY	17	20	22	25	30	35	40	46	50	50	
JUNE	23	25	28	30	36	41	46	50	50	50	
JULY	24	26	27	29	34	38	42	47	50	50	
AUG	23	24	26	28	31	35	39	43	47	50	
SEP	21	22	24	26	29	33	37	41	45	48	
OCT	17	19	22	24	30	35	40	44	50	50	
NOV	13	15	17	20	25	29	34	39	44	48	
DEC	11	13	16	18	23	28	32	37	41	46	

Table 6b (Part 1)											
Ammonia Cold Water Chronic WQBELs for a Non-Mechanical Facility											
	30E3: Design Flow										
	0	1	2	3	4	5	6	7	8	9	10
JAN	4.3	5.9	5.4	5.5	5.8	6.1	6.5	6.9	7.4	7.9	8.4
FEB	4.5	6.7	6.2	6.2	6.3	6.7	7.0	7.5	7.9	8.4	8.8
MAR	3.7	5.5	6.5	6.8	7.1	7.5	7.9	8.4	8.8	9.3	10
APR	3.3	5.0	6.6	8.1	9.1	10	10	11	11	12	12
MAY	3.5	5.5	7.3	9.0	10	10	10	11	11	12	13
JUNE	3.6	5.7	7.6	10	11	13	14	16	16	17	17
JULY	3.0	4.8	6.4	7.9	9.4	10	12	13	15	16	17
AUG	3.2	4.9	6.2	7.5	8.7	10	11	12	13	14	15
SEP	3.8	5.3	6.6	7.7	8.8	10	11	12	13	14	14
OCT	4.0	6.2	8.0	10	10	11	11	12	12	13	13
NOV	4.1	6.4	7.1	7.1	7.3	7.6	8.0	8.4	8.9	9.4	10
DEC	4.0	5.5	5.2	5.4	5.7	6.1	6.6	7.1	7.6	8.1	8.6

Table 6b (Part 2)										
Ammonia Cold Water Chronic WQBELs for a Non-Mechanical Facility (mg/l)										
	30E3: Design Flow									
	15	20	25	30	40	50	60	70	80	90
JAN	10	13	15	17	22	26	31	35	40	44
FEB	11	13	15	18	22	27	31	36	40	45
MAR	12	14	17	19	24	29	33	38	43	48
APR	15	18	21	24	29	34	39	45	50	50
MAY	15	18	21	24	29	34	40	45	50	50
JUNE	20	23	26	29	34	40	46	50	50	50
JULY	20	22	25	27	32	37	41	46	50	50
AUG	18	20	22	25	29	33	37	42	46	50
SEP	17	19	21	23	27	32	36	39	43	47
OCT	16	18	21	23	29	34	39	44	49	50
NOV	12	14	17	19	24	29	34	39	43	48
DEC	11	13	16	18	23	27	32	36	41	46

Table 6c (Part 1)											
Ammonia Warm Water Chronic WQBELs for a Mechanical Facility (mg/l)											
	30E3: Design Flow										
	0	1	2	3	4	5	6	7	8	9	10
JAN	7.2	13	12	12	12	13	13	14	15	15	16
FEB	7.7	13	15	14	14	14	15	15	16	17	18
MAR	6.7	10	13	15	15	14	15	15	15	16	16
APR	4.6	7.4	9.8	11	13	15	17	18	18	19	19
MAY	4.8	7.7	10	12	14	15	17	19	20	21	21
JUNE	4.8	6.8	8.5	10	11	12	14	15	16	18	19
JULY	4.3	5.9	7.3	8.6	10	10	11	13	14	15	16
AUG	4.5	6.2	7.5	8.7	10	10	11	12	13	14	15
SEP	4.6	6.6	8.2	10	11	12	13	15	16	17	18
OCT	5.1	8.6	11	13	16	18	20	20	21	21	21
NOV	5.6	10	14	14	14	14	14	15	15	16	16
DEC	6.7	12	12	11	11	12	12	13	14	14	15

Table 6c (Part 2)										
Ammonia Warm Water Chronic WQBELs for a Mechanical Facility (mg/l)										
	30E3: Design Flow									
	15	20	25	30	40	50	60	70	80	90
JAN	20	24	28	33	41	49	50	50	50	50
FEB	22	26	30	34	43	50	50	50	50	50
MAR	19	22	25	29	35	41	48	50	50	50
APR	22	25	28	30	36	42	48	50	50	50
MAY	23	25	28	30	35	40	44	49	50	50
JUNE	25	29	31	33	36	40	44	47	50	50
JULY	21	26	30	34	38	42	45	48	50	50
AUG	20	24	29	32	37	41	43	46	49	50
SEP	24	30	33	35	38	42	45	49	50	50
OCT	23	26	29	31	37	42	47	50	50	50
NOV	20	24	27	31	39	46	50	50	50	50
DEC	19	23	27	32	40	48	50	50	50	50

Table 6d (Part 1)											
Ammonia Warm Water Chronic WQBELs for a Non-Mechanical Facility (mg/l)											
	30E3: Design Flow										
	0	1	2	3	4	5	6	7	8	9	10
JAN	7.0	10	10	10	10	11	12	12	13	14	15
FEB	7.3	11	11	11	12	12	13	14	15	16	17
MAR	6.0	8.9	10	10	11	11	12	12	13	14	14
APR	3.3	5.3	7.2	9.1	10	12	13	14	15	16	16
MAY	3.5	5.5	7.3	9.1	10	12	14	15	16	17	18
JUNE	3.6	5.0	6.3	7.6	8.8	10	11	12	13	15	16
JULY	3.0	3.9	4.9	5.9	6.9	7.9	8.8	10	10	11	12
AUG	3.2	4.1	5.0	5.8	6.7	7.6	8.4	9.3	10	11	11
SEP	3.8	5.0	6.2	7.4	8.6	10	11	12	13	14	15
OCT	5.1	7.7	10	12	14	16	17	17	18	18	19
NOV	6.6	10	11	11	12	12	13	13	14	15	16
DEC	6.5	10	9.1	9.3	10	10	11	12	13	13	14

Table 6d (Part 2)										
Ammonia Warm Water Chronic WQBELs for a Non-Mechanical Facility (mg/l)										
	30E3: Design Flow									
	15	20	25	30	40	50	60	70	80	90
JAN	19	23	28	32	40	49	50	50	50	50
FEB	21	25	30	34	42	50	50	50	50	50
MAR	18	21	25	28	34	41	47	50	50	50
APR	20	23	26	29	35	41	47	50	50	50
MAY	21	23	26	29	34	39	44	48	50	50
JUNE	22	25	28	30	34	38	42	46	50	50
JULY	17	22	27	30	35	39	42	45	49	50
AUG	16	20	24	28	33	37	40	43	46	49
SEP	21	26	29	32	36	40	44	47	50	50
OCT	22	25	27	30	36	41	47	50	50	50
NOV	19	23	27	31	38	46	50	50	50	50
DEC	18	22	27	31	39	47	50	50	50	50

The following acute 1-day average total ammonia WQBELs in Tables 6e-6h will apply based on the appropriate 1E3 dilution ratio and month. Tables are divided by Cold/Warm water and Mechanical/Non-Mechanical facilities designations. The shaded cells in the Ammonia WQBEL tables indicate that the calculated limit is greater than the maximum Ammonia limit allowed by the division, and therefore the Ammonia WQBEL will be set to 50 mg/l. Note that the ambient ammonia concentration is set to 0.01 mg/l to reflect typical ambient ammonia concentrations.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 6e-6h below, the next lower dilution ratio will be used in the selection of the limit in order to be protective of the receiving stream at the point of discharge. Note that the acute ammonia tables do not have dilution ratios greater than 50:1 because at higher dilutions, the resulting selection is greater than the 50 mg/l division allowable limit.

Table 6e																	
Ammonia Cold Water Acute WQBELs for a Mechanical Facility (mg/l)																	
	1E3: Design Flow																
	0	1	2	3	4	5	6	7	8	9	10	15	20	25	30	40	50
JAN	16	19	15	13	13	13	14	15	15	16	17	21	26	30	35	44	50
FEB	18	22	17	15	15	15	15	16	17	17	18	22	27	31	36	45	50
MAR	15	21	21	19	19	18	19	19	20	21	21	26	30	35	39	49	50

APR	14	20	24	25	26	26	26	27	27	28	28	33	38	43	48	50	50
MAY	15	21	26	27	26	26	26	26	27	27	28	33	38	43	48	50	50
JUNE	16	23	28	32	36	39	40	41	42	43	43	47	50	50	50	50	50
JULY	17	23	28	32	36	40	43	47	50	50	50	50	50	50	50	50	50
AUG	18	25	30	34	37	41	44	47	50	50	50	50	50	50	50	50	50
SEP	17	23	27	30	33	36	39	42	44	46	48	50	50	50	50	50	50
OCT	15	21	26	28	28	27	27	27	28	28	29	33	37	42	47	50	50
NOV	15	21	19	17	17	17	17	18	18	19	20	25	29	34	39	49	50
DEC	15	18	14	13	13	13	14	15	15	16	17	22	27	31	36	45	50

Table 6f																	
Ammonia Cold Water Acute WQBELs for a Non-Mechanical Facility (mg/l)																	
	1E3: Design Flow																
	0	1	2	3	4	5	6	7	8	9	10	15	20	25	30	40	50
JAN	13	11	10	10	10	11	12	13	14	15	16	20	25	30	34	43	50
FEB	14	12	11	11	11	12	13	14	15	16	16	21	26	30	35	44	50
MAR	10	12	12	12	13	14	15	15	16	17	18	23	28	33	38	48	50
APR	8.5	12	14	16	17	18	19	20	21	22	24	29	35	40	46	50	50
MAY	9.4	13	16	17	18	19	20	21	22	23	24	30	35	41	46	50	50
JUNE	9.9	14	18	22	26	28	30	32	33	35	36	42	48	50	50	50	50
JULY	9.0	12	16	19	23	26	30	33	36	38	40	49	50	50	50	50	50
AUG	9.8	13	16	19	22	25	27	30	33	35	37	45	50	50	50	50	50
SEP	10	14	16	19	22	24	27	29	32	34	36	43	49	50	50	50	50
OCT	11	15	19	20	20	21	22	22	23	24	25	30	35	40	46	50	50
NOV	12	14	13	13	13	14	15	16	17	18	18	23	28	33	38	48	50
DEC	11	10	9.7	10	10	11	12	13	14	15	16	21	26	31	35	45	50

Table 6g																	
Ammonia Warm Water Acute WQBELs for a Mechanical Facility (mg/l)																	
	1E3: Design Flow																
	0	1	2	3	4	5	6	7	8	9	10	15	20	25	30	40	50
JAN	16	20	16	14	14	15	15	16	17	17	18	23	27	32	37	46	50
FEB	18	25	21	19	19	19	19	20	21	21	22	27	32	37	42	50	50
MAR	15	21	25	24	24	24	24	25	25	26	27	31	36	41	46	50	50
APR	14	21	25	30	32	33	34	35	35	36	37	42	48	50	50	50	50
MAY	15	21	26	31	35	39	42	44	46	47	49	50	50	50	50	50	50
JUNE	16	22	27	31	35	39	43	47	50	50	50	50	50	50	50	50	50
JULY	17	23	28	32	36	40	43	47	50	50	50	50	50	50	50	50	50
AUG	18	25	30	34	38	42	45	49	50	50	50	50	50	50	50	50	50
SEP	17	23	28	33	37	41	45	49	50	50	50	50	50	50	50	50	50
OCT	15	22	27	32	37	39	41	42	43	44	45	49	50	50	50	50	50
NOV	15	21	23	22	21	21	21	22	23	23	24	29	34	39	44	50	50
DEC	15	20	16	15	15	15	15	16	17	17	18	22	27	31	36	45	50

Table 6g																	
Ammonia Warm Water Acute WQBELs for a Non-Mechanical Facility (mg/l)																	
	1E3: Design Flow																
	0	1	2	3	4	5	6	7	8	9	10	15	20	25	30	40	50
JAN	13	11	11	11	11	12	13	14	15	16	17	22	27	31	36	46	50
FEB	14	15	14	14	15	15	16	17	18	19	20	25	31	36	41	50	50
MAR	10	13	15	16	17	17	18	19	20	21	23	28	33	39	44	50	50
APR	8.5	12	17	20	22	24	26	27	29	30	31	38	44	50	50	50	50
MAY	9.4	13	17	21	25	28	31	34	36	38	40	47	50	50	50	50	50
JUNE	9.9	14	17	21	25	28	32	36	39	43	46	50	50	50	50	50	50
JULY	9.0	12	16	19	23	26	30	33	36	40	43	50	50	50	50	50	50
AUG	9.8	13	17	20	23	26	29	32	35	39	42	50	50	50	50	50	50
SEP	10	15	18	22	26	30	33	37	41	45	48	50	50	50	50	50	50
OCT	11	16	21	25	29	31	33	35	36	37	39	45	50	50	50	50	50
NOV	12	16	16	16	17	17	18	19	20	21	22	27	32	38	43	50	50
DEC	11	11	11	11	11	12	13	14	14	15	16	21	25	30	35	44	50

Where the waters are non-designated, antidegradation considerations must be taken into account. Therefore, either the following ammonia chronic 2-year average antidegradation based effluent average concentrations (ADBAC) from Tables 6i-6l will apply, or the chronic discharge requirement (effluent loading to stream) that was occurring because of this discharge as of September 30, 2000 (or other reviewable date), otherwise known as the Non-Impact Limit (NIL) will apply. Note that the ambient ammonia concentration is set to 0.01 mg/l and the BWQ is set to be zero to reflect typical ambient ammonia concentrations.

If the exact dilution ratio of a facility to stream flow is not shown on Tables 6i-6l below, the next lower dilution ratio will be used in the selection of the limit, in order to be protective of the receiving stream at the point of discharge.

Table 6i																
Monthly Total Ammonia Cold Water ADBAC for Mechanical Facilities (mg/l)																
	30E3:Design Flow															
	0	1	2	4	7	10	15	20	25	30	40	50	60	70	80	90
JAN	0.8	1.2	1.6	1.8	2.0	2.2	2.6	3.0	3.4	3.8	4.6	5.4	6.2	6.9	7.7	8.5
FEB	0.8	1.3	1.7	2.0	2.2	2.4	2.8	3.2	3.6	4.0	4.8	5.6	6.3	7.1	7.8	8.6

MAR	0.8	1.2	1.5	2.0	2.4	2.7	3.2	3.7	4.2	4.6	5.5	6.3	7.2	8.0	8.8	9.6
APR	0.7	1.1	1.4	2.0	2.7	3.3	4.1	4.7	5.4	6.0	7.1	8.1	9.1	10	11	12
MAY	0.8	1.2	1.5	2.1	2.9	3.5	4.2	4.9	5.5	6.1	7.2	8.2	9.2	10	11	12
JUNE	0.8	1.2	1.6	2.2	3.1	3.9	5.2	6.2	7.1	7.8	9.2	10	11	12	13	14
JULY	0.7	1.1	1.5	2.0	2.8	3.5	4.6	5.7	6.6	7.4	8.8	10	11	12	13	14
AUG	0.7	1.2	1.5	2.0	2.7	3.2	4.2	5.1	5.9	6.6	7.9	9.1	10	11	12	13
SEP	0.7	1.1	1.4	1.9	2.4	3.0	3.8	4.6	5.3	6.0	7.2	8.4	9.4	10	11	12
OCT	0.8	1.2	1.5	2.1	2.8	3.3	4.1	4.7	5.3	5.9	6.9	7.9	8.9	9.8	10	11
NOV	0.7	1.2	1.5	2.0	2.3	2.7	3.2	3.6	4.1	4.5	5.4	6.3	7.2	8.0	8.8	9.7
DEC	0.7	1.2	1.5	1.7	2.0	2.3	2.7	3.1	3.6	4.0	4.9	5.7	6.5	7.3	8.1	8.9

Table 6j																
Monthly Total Ammonia Cold Water ADBAC for Non-Mechanical Facilities (mg/l)																
	30E3:Design Flow															
	0	1	2	4	7	10	15	20	25	30	40	50	60	70	80	90
JAN	0.7	1.0	1.3	1.4	1.7	2.0	2.4	2.8	3.3	3.7	4.5	5.3	6.1	6.8	7.6	8.3
FEB	0.7	1.1	1.4	1.6	1.8	2.1	2.5	3.0	3.4	3.8	4.6	5.4	6.2	7.0	7.7	8.5
MAR	0.6	0.9	1.1	1.5	1.9	2.3	2.8	3.4	3.8	4.3	5.2	6.1	6.9	7.8	8.6	9.4
APR	0.5	0.8	1.0	1.5	2.1	2.7	3.5	4.3	4.9	5.6	6.7	7.8	8.8	10	10	11
MAY	0.6	0.9	1.1	1.6	2.4	2.9	3.7	4.4	5.1	5.7	6.8	7.9	8.9	10	10	11
JUNE	0.6	0.9	1.2	1.7	2.5	3.3	4.6	5.6	6.6	7.4	8.8	10	11	12	13	14
JULY	0.5	0.8	1.0	1.5	2.1	2.8	3.9	4.9	5.9	6.7	8.2	10	10	12	13	14
AUG	0.5	0.8	1.0	1.4	1.9	2.4	3.3	4.1	5.0	5.7	7.1	8.4	10	10	11	12
SEP	0.6	0.8	1.0	1.4	1.9	2.3	3.1	3.9	4.6	5.3	6.6	7.8	8.9	10	10	11
OCT	0.6	1.0	1.2	1.7	2.4	2.9	3.7	4.3	5.0	5.6	6.7	7.7	8.6	9.6	10	11
NOV	0.7	1.0	1.3	1.7	2.1	2.4	3.0	3.4	3.9	4.4	5.3	6.2	7.1	7.9	8.8	9.6
DEC	0.6	1.0	1.2	1.4	1.8	2.1	2.5	3.0	3.5	3.9	4.8	5.6	6.4	7.2	8.0	8.8

Table 6k																
Monthly Total Ammonia Warm Water ADBAC for Mechanical Facilities (mg/l)																
	30E3:Design Flow Dilution Ratio															
	0	1	2	4	7	10	15	20	25	30	40	50	60	70	80	90
JAN	1.1	2.0	2.6	2.8	3.1	3.5	4.2	4.8	5.6	6.2	7.6	9.0	10	11	13	14
FEB	1.2	2.1	2.8	3.3	3.7	4.1	4.8	5.5	6.3	7.0	8.4	9.9	11	12	14	15
MAR	1.1	1.6	2.1	2.9	3.5	3.9	4.6	5.3	5.9	6.5	7.7	8.9	10	11	12	13
APR	0.7	1.2	1.5	2.1	3.0	3.8	5.0	5.9	6.8	7.5	9.0	10	11	12	13	14
MAY	0.8	1.2	1.5	2.2	3.0	3.8	5.1	6.1	6.9	7.7	9.2	10	11	13	14	15
JUNE	0.8	1.1	1.3	1.8	2.4	2.9	3.9	4.8	5.8	6.7	8.5	10	11	12	14	15
JULY	0.7	0.9	1.1	1.5	2.0	2.5	3.2	3.9	4.7	5.4	6.9	8	10	11	12	13
AUG	0.7	1.0	1.2	1.5	2.0	2.4	3.1	3.7	4.4	5.0	6.3	7.6	9	10	11	12
SEP	0.7	1.0	1.3	1.7	2.3	2.8	3.8	4.7	5.5	6.4	8.2	9.9	11	12	14	15
OCT	0.8	1.3	1.7	2.5	3.5	4.5	5.6	6.5	7.4	8.1	9.6	10	12	13	14	15
NOV	0.9	1.6	2.2	3.0	3.5	4.0	4.7	5.4	6.0	6.7	8.0	9.3	10	11	13	14
DEC	1.0	1.8	2.3	2.6	3.0	3.3	3.9	4.6	5.3	6.0	7.3	8.6	9.9	11	12	13

Table 6l																
Monthly Total Ammonia Warm Water ADBAC for Non-Mechanical Facilities (mg/l)																
	30E3:Design Flow Dilution Ratio															
	0	1	2	4	7	10	15	20	25	30	40	50	60	70	80	90
JAN	1.1	1.7	2.0	2.3	2.7	3.2	3.9	4.6	5.3	6.1	7.5	8.9	10	11	12	14
FEB	1.1	1.8	2.3	2.8	3.2	3.7	4.5	5.3	6.1	6.8	8.3	9.8	11	12	13	15
MAR	0.9	1.4	1.7	2.3	2.9	3.4	4.2	4.9	5.6	6.2	7.4	8.6	9.8	10	12	13
APR	0.5	0.8	1.1	1.7	2.5	3.3	4.5	5.4	6.3	7.1	8.6	10	11	12	13	14
MAY	0.6	0.9	1.1	1.7	2.4	3.2	4.5	5.5	6.4	7.3	8.8	10	11	12	13	14
JUNE	0.6	0.8	1.0	1.4	1.9	2.5	3.4	4.3	5.3	6.2	8.0	10	11	12	13	15
JULY	0.5	0.6	0.8	1.1	1.5	1.9	2.7	3.4	4.1	4.9	6.3	7.8	9.2	10	12	13
AUG	0.5	0.7	0.8	1.0	1.4	1.8	2.5	3.1	3.7	4.4	5.7	7.0	8.2	9.5	10	12
SEP	0.6	0.8	1.0	1.3	1.9	2.4	3.3	4.2	5.1	5.9	7.7	9.4	11	12	13	15
OCT	0.8	1.2	1.6	2.2	3.2	4.1	5.2	6.2	7.0	7.9	9.3	10	11	13	14	15
NOV	1.0	1.6	2.1	2.6	3.2	3.7	4.4	5.2	5.9	6.5	7.9	9.2	10	11	13	14
DEC	1.0	1.5	1.9	2.2	2.6	3.0	3.7	4.4	5.1	5.8	7.1	8.4	9.7	11	12	13

4. New Facilities With Design Flows Of Less Than 1.0 MGD

The limits that follow apply to new treatment facilities. New treatment facility means any domestic wastewater treatment facility on a new site that is not an “existing treatment facility” and commences discharge to surface water, or receives PELs, after May 31, 2012 in addition to the applicable influent and effluent limits in Parts I.B.2 and I.B.3 of this permit. Existing Treatment facility means any existing domestic wastewater treatment facility that commenced discharge or received PELs or site approval prior to May 31, 2012 for groundwater discharge, surface water discharge, or a non-discharging facility; or that applied for a Notice of Authorization for the application of reclaimed water prior to May 31, 2012.

- a. The following annual median and 95th percentile total inorganic nitrogen and total phosphorus technology-based effluent limitations will apply based on Regulation 85.

Table 7a		
Regulation 85 Technology-Based Effluent Limits for New Domestic Wastewater Treatment Works		
Parameter	Annual Median ^(A)	95th Percentile ^(B)
Total Phosphorus (mg/l)	0.7	1.75

Total Inorganic Nitrogen (mg/l)	7	14
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^(A) Reported as a running annual median, which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85

^(B) Reported as the 95th percentile of all samples taken in the most recent 12 calendar months including samples collected in accordance with Regulation 85

For discharges to classified streams, the following annual median total nitrogen WQBELs (Table 7b for Cold Water streams, and Table 7c for Warm Water streams) will apply for new facilities based on the appropriate upstream water quality and the interim nutrient water quality standards in Regulation 31.17. If the selected Total Nitrogen WQBEL is in the shaded portion of the table, the division will automatically apply the annual median technology-based effluent TIN limitations from Table 7a (Parts 1 & 2) instead. Regulation 31 Total Nitrogen limits will not apply to discharges to unclassified streams.

Table 7b - PART 1												
Total Nitrogen WQBEL ^(A) for New Facilities Discharging into Cold Water Classified Streams												
		1E5:Design Flow										
		0	1	2	3	4	5	6	7	8	9	10
Ambient Conc (mg/l)	0	1.25	2.5	3.75	5	6.25	7.5	8.75	10	11.25	12.5	13.75
	0.1	1.25	2.4	3.55	4.7	5.85	7	8.15	9.3	10.5	11.6	12.75
	0.2	1.25	2.3	3.35	4.4	5.45	6.5	7.55	8.6	9.65	10.7	11.75
	0.5	1.25	2	2.75	3.5	4.25	5	5.75	6.5	7.25	8	8.75
	1	1.25	1.5	1.75	2	2.25	2.5	2.75	3	3.25	3.5	3.75
	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25

^(A) Reported as a running annual median, which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85

Table 7b - PART 2												
Total Nitrogen WQBEL ^(A) for New Facilities Discharging into Cold Water Classified Streams												
		1E5:Design Flow										
		12	15	20	25	30	40	50	60	70	80	90
Ambient Conc (mg/l)	0	16.3	20.0	26.3	32.5	38.8	51.3	63.8	76.3	88.8	101 ^(B)	114 ^(B)
	0.1	15.1	18.5	24.3	30.0	35.8	47.3	58.8	70.3	81.8	93.3	105 ^(B)
	0.2	13.9	17.0	22.3	27.5	32.8	43.3	53.8	64.3	74.8	85.3	95.8
	0.5	10.3	12.5	16.3	20.0	23.8	31.3	38.8	46.3	53.8	61.3	68.8
	1	4.25	5.00	6.25	7.50	8.75	11.3	13.8	16.3	18.8	21.3	23.8
	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25

^(A) Reported as a running annual median, which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85

^(B) Total Nitrogen effluent limitation is capped at 100 mg/l in accordance with division practice.

Table 7c - PART 1												
Total Nitrogen WQBEL ^(A) for New Facilities Discharging into Warm Water Classified Streams												
		1E5:Design Flow										
		0	1	2	3	4	5	6	7	8	9	10
Ambient Conc (mg/l)	0	2.01	4.02	6.03	8.04	10.1	12.1	14.1	16.1	18.1	20	22

[illegible]

^(A)Reported as a running annual median, which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85.

[illegible]

(A) Reported as a running annual median, which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85.

(B) Total Nitrogen effluent limitation is capped at 100 mg/l in accordance with division practice.

For discharges to classified streams, the following annual median total phosphorus WQBELs (Table 7d for Cold Water streams, and Table 7e for Warm Water streams) will apply for new facilities based on the appropriate upstream water quality and the interim nutrient water quality standards in Regulation 31.17. If the WQBEL is shaded in grey, the division will automatically apply the technology-based effluent limitations in Table 7a. Regulation 31 Total Phosphorus limits will not apply to discharges to unclassified streams.

[illegible]

^(A) Reported as a running annual median, (in mg/l) which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85.

(A) Reported as a running annual median (in mg/l), which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85.

Table 7e - PART 2	
Total Phosphorus WQBEL (A) for New Facilities Discharging into Warm Water Classified Streams	

		1E5:Design Flow										
		12	15	18	20	30	40	50	60	70	80	90
Ambient Conc (mg/l)	0	2.2	2.7	3.2	3.6	5.3	7.0	8.7	10	12	14 ^(B)	15 ^(B)
	0.01	2.1	2.6	3.1	3.4	5.0	6.6	8.2	10	11	13 ^(B)	15 ^(B)
	0.02	2.0	2.4	2.9	3.2	4.7	6.2	7.7	9.2	11	12	14 ^(B)
	0.05	1.6	2.0	2.3	2.6	3.8	5.0	6.2	7.4	8.6	10	11
	0.1	1.0	1.2	1.4	1.6	2.3	3.0	3.7	4.4	5.1	5.8	6.5
	0.13	0.65	0.77	0.89	1.0	1.4	1.8	2.2	2.6	3.0	3.4	3.8
	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17

^(A) Reported as a running annual median (in mg/l), which is a median of all samples collected in the most recent 12 calendar months including samples collected in accordance with Regulation 85.

^(B) Total Phosphorus effluent limitation is capped at 12 mg/l in accordance with division practice. See the fact sheet for more information.

5. EPA Periodic Pollutant Monitoring

POTWs may require periodic pollutant scans of the parameters in Table 8. Therefore, the division may include these sampling requirements which shall commence within thirty (30) days of the effective date of this permit and continue at an annual frequency.

Table 8				
EPA Recommended Periodic Pollutant Monitoring				
ICIS Code	Effluent Parameter	Effluent Limitations Maximum Concentrations, Daily Max	Frequency	Sample Type
01002	Total Arsenic, µg/l	Report	Annual	Composite
01027	Total Cadmium, µg/l	Report	Annual	Composite
01034	Total Chromium, µg/l	Report	Annual	Composite
01042	Total Copper, µg/l	Report	Annual	Composite
01051	Total Lead, µg/l	Report	Annual	Composite
71900	Total Mercury, µg/l	Report	Annual	Composite
01062	Total Molybdenum, µg/l	Report	Annual	Composite
01067	Total Nickel, µg/l	Report	Annual	Composite
01147	Total Selenium, µg/l	Report	Annual	Composite
01077	Total Silver, µg/l	Report	Annual	Composite
01092	Total Zinc, µg/l	Report	Annual	Composite
00720	Total Cyanide, µg/l	Report	Annual	Grab
03604	Total Phenols, µg/l	Report	Annual	Composite

6. PFAS Monitoring

A one-time monitoring requirement for PFAS will be included in the certification to gather information on the presence of this substance in the effluent discharge.

Please note that due to reporting system limitations, the frequency listed in the certification will be “annual”, however for each year the facility does not sample for PFAS parameters, the permittee should enter “Code 9 - Conditional Monitoring - Not Required this Period” into NetDMR for these parameters. Leaving these parameters blank in NetDMR will trigger a non-compliance violation.

See section I.E.5.f below for guidance of PFAS sampling requirements.

7. Influent Parameters

Regardless of whether or not an effluent discharge occurs and in order to obtain an indication of the current influent loading as compared to the approved capacity specified in the certification and in Part I.B; the permittee shall at least monitor the following influent parameters at the required frequencies, as identified in the certification of this permit, the results to be reported on the Discharge Monitoring Report (See Part I.E).

If the permittee monitors any parameter more frequently than required by the permit, using an approved test procedure or as specified in this permit, the result of this monitoring shall be included in the calculation and reporting of data to the Division. Such increased frequency shall also be indicated.

Self-monitoring samples taken in compliance with the monitoring requirements specified below shall be taken at Monitoring point 300I (or its equivalent as noted in the certification), at a representative point prior to any biological treatment.

Table 9a						
Mechanical Plants With Design Flows Of Less Than Or Equal To 0.25 MGD						
ICIS Code	Parameter	Discharge Limitations Maximum Concentrations			Monitoring Frequency ¹	Sample Type
		30-Day Avg.	7-Day Avg.	Daily Max.		
50050G	Flow, MGD	Report		Report	Continuous ²	Recorder ²
00180P	Plant Capacity (% of Hydraulic Capacity) ³	Report			Monthly	Calculated ³
80082G	CBOD ₅ , mg/l ⁴	Report	Report		Monthly	Composite ⁵
00310G	BOD ₅ , mg/l	Report	Report		Monthly	Composite ⁵
00310G	BOD ₅ , lbs/day	Report	Report		Monthly	Calculated
00180Q	Plant Capacity (% of Organic Capacity) ³	Report			Monthly	Calculated ³
00530G	Total Suspended Solids, mg/l	Report	Report		Monthly	Composite ⁵
00978	Total Recoverable Arsenic ⁶	Report			Monthly	Composite

Table 9b						
Mechanical Plants With Design Flows Of Greater Than 0.25 MGD and Less Than 1 MGD						
ICIS Code	Parameter	Discharge Limitations Maximum Concentrations			Monitoring Frequency ¹	Sample Type
		30-Day Avg.	7-Day Avg.	Daily Max.		
50050G	Flow, MGD	Report		Report	Continuous ²	Recorder ²
00180P	Plant Capacity (% of Hydraulic Capacity) ³	Report			Monthly	Calculated ³
80082G	CBOD ₅ , mg/l ⁴	Report	Report		Weekly	Composite ⁵
00310G	BOD ₅ , mg/l	Report	Report		Weekly	Composite ⁵
00310G	BOD ₅ , lbs/day	Report	Report		Weekly	Calculated
00180Q	Plant Capacity (% of Organic Capacity) ³	Report			Monthly	Calculated ³
00530G	Total Suspended Solids, mg/l	Report	Report		Weekly	Composite ⁵

00978G	Total Recoverable Arsenic ⁶	Report			Monthly	Composite
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- Monitoring frequency reductions may be granted, in accordance with the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities (WQP-20).
- The monitoring frequency and sample type for effluent flow is specified in the certification and is fully enforceable under this permit. Mechanical type treatment facilities are typically required to have both influent and effluent flow measuring and recording devices. This requirement may be waived in cases where the division determines that either influent or effluent flow measurements are impractical. For these facilities, flow measuring and sampling type will be specified in the certification. If only one device is applicable, then that device will be used to report both influent and effluent flow. However, where these devices are not in place at the time of certification, the permittee has one year from the end of the calendar month that certification was given to install the required equipment. Where such equipment is in place, the frequency and type of flow monitoring will be "Continuous" and "Recorder", respectively. Where such equipment is not in place, the frequency and type of flow monitoring, during the interim period, will be specified in the certification. For certain facilities, the use of a metered pumping rate or potable water use or may be allowed. In these cases, the monitoring frequency and sample type will be determined and specified in the certification.
- The % capacity is to be reported against the listed capacities for the design capacity and for the organic capacities as noted in the most recent Site Approval and as listed in the certification. The percentage should be calculated using the 30-day average values divided by the corresponding capacity, times 100.
- Monitoring for CBOD5 will be added in addition to BOD5 on the influent sampling requirements when CBOD is used as a limitation on the effluent instead of BOD. This is needed to determine the percent removal of CBOD where applicable. BOD monitoring is still necessary to determine the organic loading in terms of percent capacity when Site Approvals are developed on BOD.
- See the definition of "composite" in Part I.D of this permit. If the division determines that a flow-weighted composite sample is impracticable for a facility, a time composite sample of four equal aliquots collected at two-hour intervals or sampling equal aliquots will be allowed. The monitoring frequency and sample type will be specified in the certification. See Section VI.A of the fact sheet for more information.
- Total Recoverable Arsenic will be added to influent monitoring if a special study is required. Frequency of monitoring may be modified to match effluent sampling if more frequent.

Table 9c

Lagoon or other Non-Mechanical Facilities With Design Flows Of Less Than Or Equal To 0.5 MGD

ICIS Code	Parameter	Discharge Limitations Maximum Concentrations			Monitoring Frequency ¹	Sample Type
		30-Day Average	7-Day Avg.	Daily Max.		
50050G	Flow, MGD	Report		Report	Continuous ²	Recorder ²
00180P	Plant Capacity (% of Hydraulic Capacity) ³	Report			Monthly	Calculated ³
80082G	CBOD5, mg/l ⁴	Report	Report		Monthly	Composite ⁵
00310G	BOD5, mg/l	Report	Report		Monthly	Composite ⁵
00310G	BOD5, lbs/day	Report	Report		Monthly	Calculated
00180Q	Plant Capacity (% of Organic Capacity)	Report			Monthly	Calculated ³
00978G	Total Recoverable Arsenic ⁶	Report			Monthly	Composite

Table 9d

Lagoon or other Non-Mechanical Facilities With Design Greater Than 0.5 MGD and Less Than 1 MGD

ICIS Code	Parameter	Discharge Limitations Maximum Concentrations			Monitoring Frequency ¹	Sample Type
		30-Day Avg.	7-Day Avg.	Daily Max.		

50050G	Flow, MGD	Report		Report	Continuous ²	Recorder ²
00180P	Plant Capacity (% of Hydraulic Capacity) ³	Report			Monthly	Calculated ^{3,5}
80082G	CBOD ₅ , mg/l ⁴	Report	Report		Weekly	Composite ⁵
00310G	BOD ₅ , mg/l	Report	Report		Weekly	Composite ⁵
00310G	BOD ₅ , lbs/day	Report	Report		Weekly	Calculated ⁵
00180Q	Plant Capacity (% of Organic Capacity)	Report			Monthly	Calculated ^{3,5}
00978G	Total Recoverable Arsenic ⁶	Report			Monthly	Composite

- 1 Monitoring frequency reductions may be granted, in accordance with the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities (WQP-20).
- 2 The monitoring frequency and sample type for effluent flow is specified in the certification and is fully enforceable under this permit. Lagoon type and OWTS treatment facilities are typically required to have both influent and effluent flow measuring and recording devices. This requirement may be waived in cases where the division determines that either influent or effluent flow measurements are impractical. For these facilities, flow measuring and sampling type will be specified in the certification. If only one device is applicable, then that device will be used to report both influent and effluent flow. However, where these devices are not in place at the time of certification, the permittee has one year from the end of the calendar month that certification was given to install the required equipment. Where such equipment is in place, the frequency and type of flow monitoring will be "Continuous" and "Recorder", respectively. Where such equipment is not in place, the frequency and type of flow monitoring, during the interim period, will be specified in the certification. For certain facilities, the use of a metered pumping rate or potable water use or may be allowed. In these cases, the monitoring frequency and sample type will be determined and specified in the certification.
- 3 The % capacity is to be reported against the listed capacities for the design capacity and for the organic capacities as noted in the most recent Site Approval and as listed in the certification. The percentage should be calculated using the 30-day average values divided by the corresponding capacity, times 100.
- 4 Monitoring for CBOD₅ will be added in addition to BOD₅ on the influent sampling requirements when CBOD is used as a limitation on the effluent instead of BOD. This is needed to determine the percent removal of CBOD where applicable. BOD monitoring is still necessary to determine the organic loading in terms of percent capacity when Site Approvals are developed on BOD.
- 5 See the definition of "composite" in Part I.D of this permit. If the division determines that a flow-weighted composite sample is impracticable for a facility, a time composite sample of four equal aliquots collected at two-hour intervals or sampling equal aliquots will be allowed. The monitoring frequency and sample type will be specified in the certification. If the division determines that a representative sample of influent flow is impractical (e.g. septic tank at individual buildings), the influent sample may be collected after an initial septic/primary settling tank that does not receive recycle flow. In that case, the results would be adjusted for reporting based on the following procedure: The influent concentration reported on Discharge Monitoring Reports (DMRs) shall be calculated as the sample result divided by 0.7 for BOD and 0.4 for TSS. Monitoring of influent loading and concentration for secondary treatment parameters, BOD and TSS, is specified in the certification.
- 6 Total Recoverable Arsenic will be added to influent monitoring if a special study is required. Frequency of monitoring may be modified to match effluent sampling if more frequent.

C. TERMS AND CONDITIONS

1. Service Area

All wastewater flows contributed in the service area may be accepted by the WWTFs under this permit for treatment at the permittee's wastewater treatment plant provided that such acceptance does not cause or contribute to an exceedance of the throughput or design capacity of the treatment works or the effluent limitations in Part I.B, or constitute a substantial impact to the functioning of the treatment works, degrade the quality of the receiving waters, or harm human health, or the environment.

In addition, the permittee shall enter into and maintain service agreements with any municipalities that discharge into the wastewater treatment facility. The service agreements shall contain all

provisions necessary to protect the financial, physical, and operational integrity of the wastewater treatment works.

2. Design Capacity

The design capacities of the WWTFs under this permit will be based on the levels shown in the respective Site Approvals for these WWTFs. The hydraulic design capacity of these domestic wastewater treatment works will be shown in units of million gallons per day (MGD) based on a 30-day average flow, and organic loading in units of lbs. BOD5 per day based on a 30-day average load.

3. Expansion Requirements

Pursuant to Colorado Law, C.R.S. 25-8-501 (5 d & e), the permittee is required to initiate engineering and financial planning for expansion of the domestic wastewater treatment works whenever throughput reaches eighty (80) percent of the treatment capacity. Such planning may be deemed unnecessary upon a showing that the area served by the domestic wastewater treatment works has a stable or declining population; but this provision shall not be construed as preventing periodic review by the Division should it be felt that growth is occurring or will occur in the area.

The permittee shall commence construction of such domestic wastewater treatment works expansion whenever throughput reaches ninety-five (95) percent of the treatment capacity or, in the case of a municipality, either commence construction or cease issuance of building permits within such municipality until such construction is commenced; except that building permits may continue to be issued for any construction which would not have the effect of increasing the input of wastewater to the sewage treatment works of the municipality involved.

Where unusual circumstances result in throughput exceeding 80% of treatment capacity, the permittee may, in lieu of initiating planning for expansion, submit a report to the Division that demonstrates that it is unlikely that the event will reoccur, or even if it were to reoccur, that 95% of the treatment capacity would not be exceeded.

Where unusual circumstances result in throughput exceeding 95% of the treatment capacity, the permittee may, in lieu of initiating construction of the expansion, submit a report to the Division that demonstrates that the domestic wastewater treatment works was in compliance at all times during the events and that it is extremely unlikely that the event will reoccur.

Where the permittee submits a report pursuant to unusual circumstances, and the Division, upon review of such report, determines in writing to the permittee that the report does not support the required findings, the permittee shall initiate planning and/or construction of the domestic wastewater treatment works as appropriate.

4. Facilities Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control including all portions of the collection system and lift stations owned by the permittee (and related appurtenances) which are installed or used by the permittee as necessary to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective performance, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems when installed by the permittee only when necessary to achieve compliance with the conditions of the permit.

Any sludge produced at the wastewater treatment facility shall be disposed of in accordance with State and Federal regulations. The permittee shall take all reasonable steps to minimize or prevent any discharge of sludge use or disposal in violation of this permit which has a reasonable likelihood of

adversely affecting human health or the environment. As necessary, accelerated or additional monitoring to determine the nature and impact of the noncomplying discharge is required.

5. Best Management Practices

- a. If the domestic wastewater treatment facility consists of an on-site wastewater treatment system (OWTS), (e.g., septic system), the permittee shall employ best management practices (BMPs) to effectively manage the onsite treatment system and to minimize the potential risk of any unintentional release of pollutants. Best management practices shall include, but are not limited to the following:
 - i. Properly operate and manage the wastewater treatment system at no greater than its maximum treatment capacity. Keep a logbook to demonstrate the average and maximum daily flows for each month of operation.
 - ii. Inspect the scum level and sludge level in each septic tank (as applicable) in order to know when the particular septic tank needs to be pumped. Have the septic tank pumped by a licensed pumping contractor.
 - iii. Conduct routine inspections of all facilities and systems of treatment and control. Maintain a log book on inspection results and a description of any repairs made.
 - iv. Make every effort to prevent hazardous waste, toxic waste, and/or recreational vehicle (RV) septage from entering any on-site wastewater treatment system (OWTS), as applicable.
- b. Where a Division approved Operation and Maintenance (O&M) Plan is required as a condition of the Site Application Approval, the Permittee shall operate and maintain the wastewater treatment plant in accordance with the approved O&M plan.

The certification for discharge may include a special report schedule or other permit requirement.

6. Change In Conditions

Any change to the domestic wastewater treatment plant, or to the wastewater it receives, which results in an inability to meet any condition identified in the "Certification Requirements" at Part I.A.3., above, must be reported to the Division within ten (10) working days of the date the permittee becomes aware of such change. The Division will require the permittee to apply for and obtain an individual permit if it determines that the domestic wastewater treatment plant no longer qualifies for authorization to discharge under the general permit.

7. Lagoon Liner Integrity

For those facilities that use a lagoon as treatment for meeting the permit limitations, the Division will require proof that the lagoon liner meets the allowable seepage rate of 1×10^{-6} cm/sec. The certification for discharge may include a compliance schedule or other permit requirement to show that the liner is in place and is functioning appropriately.

8. Acute WET Testing

a. General Acute WET Testing and Reporting Requirements

The permittee shall conduct an acute 48-hour WET test using *Ceriodaphnia dubia* and an acute 96-hour WET test using *Pimephales promelas*. Acute tests shall be conducted as a static replacement test using a single effluent grab sample. The permittee shall conduct each acute WET test in accordance with the 40 CFR Part 136 methods described in Methods for Measuring the Acute Toxicity of Effluents and Receiving Water to Freshwater and Marine Organisms, Fifth Edition, October 2002 (EPA-821-R-02-012) or its most current edition. The following specifications may be added to the acute WET method in the certification:

Use of the 0.01 alpha level - The permittee may request use of the 0.01 alpha level, and if

specified in the certification, this alpha level shall be used for every WET test under the certification. In this case, the permittee is responsible for determining whether an increase in replicates within each individual test is needed to assure that the test meets the minimum sensitivity requirements. Chapter 2 of the Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing, EPA 821-B-00-004, USEPA, July 2000, must be used to calculate and determine if the minimum significant difference (MSD) requirement has been met. If this requirement is not met, the test is considered invalid and retesting must be performed during the monitoring period. The permittee will be required to submit documentation showing that the appropriate number of replicates was used and that the proper MSD criterion has been met, with the WET information summary that is submitted to the Division with the WET test results.

Use of a CO₂ atmosphere to control pH drift - The use of a CO₂ atmosphere may be allowed, if specified in the certification, to control ammonia toxicity due to pH drift. The proper methodology as outlined in the Chronic Method must be followed and documented during the test. The permittee will be required to submit documentation showing that the proper methodology was used in the testing with the WET information summary that is submitted to the Division with the WET test results.

The following minimum dilution series should be used: 0% effluent (control), 20%, 40%, 60%, 80%, and 100% effluent. If the permittee uses more dilutions than prescribed, and accelerated testing is to be performed, the same dilution series shall be used in the accelerated testing as was used in the failed test.

Tests shall be done at the frequency listed in the certification. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

If a test is considered invalid, the permittee is required to perform additional testing during the monitoring period to obtain a valid test result. Failure to obtain a valid test result during the monitoring period shall result in a violation of the permit for failure to monitor.

b. Violations of the Permit Limit and Division Notification

An acute WET test is failed whenever the LC₅₀, which represents an estimate of the effluent concentration which is lethal to 50% of the test organisms in the time period prescribed by the test, is found to be less than or equal to 100% effluent. The permittee must provide written notification of the failure of a WET test to the Division, along with a statement as to whether

accelerated testing or a Toxicity Identification Evaluation (TIE) is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

c. Automatic Compliance Response

The permittee is responsible for implementing the automatic compliance response provisions of this permit when one of the following occurs:

- there is a violation of the permit limit (the LC₅₀ endpoint is less than the applicable IWC)
- during a report-only period, when the LC₅₀ endpoint is less than the applicable IWC
- the permittee is otherwise informed by the Division that a compliance response is

necessary

When one of the above listed events occurs, the following automatic compliance response shall apply. The permittee shall either:

- conduct accelerated testing using the single species found to be more sensitive
- conduct a Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE) investigation as described below.

i. Accelerated Testing

If accelerated testing is being performed, testing will be at least once every two weeks for up to five tests, at the appropriate IWC, with only one test being run at a time. Accelerated testing shall continue until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a TIE/TRE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach. The permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.

ii. Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE)

If a TIE/TRE is being performed, the results of the investigation are to be received by the Division within 180 calendar days of the demonstration of acute WET in the routine test, as defined above, or if accelerated testing was performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 60 and 120 calendar day points of the TIE/TRE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 180 calendar day deadline. Such request must include a justification and supporting data for such an extension.

Under a TIE, the permittee may use the time for investigation to conduct a preliminary TIE (PTIE) or move directly into the TIE. A PTIE consists of a brief search for possible sources of WET, where a specific parameter(s) is reasonably suspected to have caused such toxicity, and could be identified more simply and cost effectively than a formal TIE. If the PTIE allows resolution of the WET incident, the TIE need not necessarily be conducted in its entirety. If, however, WET is not identified or resolved during the PTIE, the TIE must be conducted within the allowed 180 calendar day time frame.

The Division recommends that the EPA guidance documents regarding TIEs be followed. If another method is to be used, this procedure should be submitted to the Division prior to initiating the TIE.

If the pollutant(s) causing toxicity is/are identified, and is/are controlled by a permit effluent limitation(s), this permit may be modified upon request to adjust permit requirements regarding the automatic compliance response.

If the pollutant(s) causing toxicity is/are identified, and is/are not controlled by a permit

effluent limitation(s), the Division may develop limitations the parameter(s), and the permit may be reopened to include these limitations.

If the pollutant causing toxicity is not able to be identified, or is unable to be specifically identified, or is not able to be controlled by an effluent limit, the permittee will be required to perform either item 1 or item 2 below.

1) Conduct an investigation which demonstrates actual instream aquatic life conditions upstream and downstream of the discharge, or identify, for Division approval, and conduct an alternative investigation which demonstrates the actual instream impact. This should include WET testing and chemical analyses of the ambient water. Depending on the results of the study, the permittee may also be required to identify the control program necessary to eliminate the toxicity and its cost. Data collected may be presented to the WQCC for consideration at the next appropriate triennial review of the stream standards;

2) Move to a TRE by identifying the necessary control program or activity and proceed with elimination of the toxicity so as to meet the WET effluent limit.

If toxicity spontaneously disappears in the midst of a TIE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency of WET testing for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

The control program developed during a TRE consists of the measures determined to be the most feasible to eliminate WET. This may happen through the identification of the toxicant(s) and then a control program aimed specifically at that toxicant(s) or through the identification of more general toxicant treatability processes. A control program is to be developed and submitted to the Division within 180 calendar days of beginning a TRE. Status reports on the TRE are to be provided to the Division at the 60 and 120 calendar day points of the TRE investigation.

If toxicity spontaneously disappears in the midst of a TRE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

d. **Toxicity Reopener**

This permit may be reopened and modified to include additional or modified numerical permit limitations, new or modified compliance response requirements, changes in the WET testing protocol, the addition of both acute and chronic WET requirements, or any other conditions related to the control of toxicants.

9. **Chronic WET Testing**

a. **General Chronic WET Testing and Reporting Requirements**

The permittee shall conduct the chronic WET test using *Ceriodaphnia dubia* and *Pimephales promelas*, as a static renewal 7-day test using three separate composite or grab samples, as specified in the certification. The permittee shall conduct each chronic WET test in accordance

with the 40 CFR Part 136 methods described in Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, Fourth Edition, October 2002 (EPA-821-R-02-013) or the most current edition. The following specifications may be added to the chronic WET method:

Use of the 0.01 alpha level - The permittee has requested use of the 0.01 alpha level, and therefore this alpha level shall be used for every WET test under this permit. The permittee is responsible for determining whether an increase in replicates within each individual test is needed to assure that the test meets the minimum sensitivity requirements. Chapter 2 of the Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing, EPA 821-B-00-004, USEPA, July 2000, must be used to calculate and determine if the minimum significant difference (MSD) requirement has been met. If this requirement is not met, the test is considered invalid and retesting must be performed during the monitoring period. The permittee will be required to submit documentation showing that the appropriate number of replicates was used and that the proper MSD criterion has been met, with the WET information summary that is submitted to the Division with the WET test results.

Use of a CO₂ atmosphere to control pH drift - The use of a CO₂ atmosphere will be allowed to control ammonia toxicity due to pH drift. The proper methodology as outlined in the Chronic Method must be followed and documented during the test. The permittee will be required to submit documentation showing that the proper methodology was used in the testing with the WET information summary that is submitted to the Division with the WET test results.

Ceriodaphnia reproduction percentage - For the chronic Ceriodaphnia dubia test, the termination requirement shall be where 80% or more of the surviving control females having produced their third brood. If this requirement is not met, the test is considered invalid and retesting must be performed during the monitoring period. The permittee will be required to submit documentation showing that the appropriate number of the surviving control females have had their third brood with the WET information summary that is submitted to the Division with the WET test results.

The following minimum dilution series should be used based on the IWC calculated in the certification: 0% effluent (control), IWC/4%, IWC/2%, IWC%, (IWC+100)/2%, and 100% effluent. If the permittee uses more dilutions than prescribed, and accelerated testing is to be performed, the same dilution series shall be used in the accelerated testing (if applicable) as was initially used in the failed test.

Tests shall be done at the frequency listed in the certification. Test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting period when the sample was taken. (i.e., WET testing results for the calendar quarter ending March 31 shall be reported with the DMR due April 28, etc.) The permittee shall submit all laboratory statistical summary sheets, summaries of the determination of a valid, invalid or inconclusive test, and copies of the chain of custody forms, along with the DMR for the reporting period.

If a test is considered invalid, the permittee is required to perform additional testing during the monitoring period to obtain a valid test result. Failure to obtain a valid test result during the monitoring period shall result in a violation of the permit for failure to monitor.

b. Violations of the Permit Limit, Failure of One Test Statistical Endpoint and Division Notification

A chronic WET test is considered a violation of a permit limitation when both the NOEC and the IC₂₅, for the same sub-lethal endpoint are at any effluent concentration less than the IWC. This determination is made independently for each test species. **The IWC for each facility covered by this general permit will be outlined in the certification.**

A chronic WET test is considered to have failed one of the two statistical endpoints when either the NOEC or the IC25 are at any effluent concentration less than the IWC. Simultaneous failure of both the NOEC and IC25 for both sub-lethal endpoints, when tests are performed on identical split samples, constitutes only a single violation of the Daily Maximum Effluent Limitation for Chronic WET specified in the certification. **The IWC for each facility covered by this general permit will be outlined in the certification.**

In the event of a permit violation, or during a report only period when both the NOEC and the IC25 are at any effluent concentration less than the IWC, or when two consecutive reporting periods have resulted in failure of one of the two statistical endpoints (regardless of which statistical endpoints are failed), the permittee must provide written notification to the Division. Such notification should explain whether it was a violation or two consecutive failures of a single endpoint, and must indicate whether accelerated testing or a Toxicity Identification Evaluation or Toxicity Reduction Evaluation (TIE or TRE) is being performed, unless otherwise exempted, in writing, by the Division. **Notification must be received by the Division within 14 calendar days of the permittee receiving notice of the WET testing results.**

c. Automatic Compliance Response

The permittee is responsible for implementing the automatic compliance response provisions of this permit when one of the following occurs:

- there is a violation of the permit limit (both the NOEC and the IC25 endpoints are less than the applicable IWC)
- during a report only period when both the NOEC and the IC25 are at any effluent concentration less than the IWC
- two consecutive monitoring periods have resulted in failure of one of the two statistical endpoints (either the IC25 or the NOEC) , including during a report-only period. This determination is made independently for each test species.
- the permittee is otherwise informed by the Division that a compliance response is necessary

When one of the above listed events occurs, the following automatic compliance response shall apply. The permittee shall either:

- conduct accelerated testing using the single species found to be more sensitive
- conduct a Toxicity Identification Evaluation (TIE) or a Toxicity Reduction Evaluation (TRE) investigation as described below.

i. Accelerated Testing

If accelerated testing is being performed, testing will be at least once every two weeks for up to five tests with only one test being run at a time, using only the IC25 statistical endpoint to determine if the test passed or failed at the appropriate IWC. Accelerated testing shall continue until; 1) two consecutive tests fail or three of five tests fail, in which case a pattern of toxicity has been demonstrated or 2) two consecutive tests pass or three of five tests pass, in which case no pattern of toxicity has been found. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If accelerated testing is required due to failure of one statistical endpoint in two consecutive monitoring periods, and in both of those failures it was the NOEC endpoint that was failed, then

the NOEC shall be the only statistical endpoint used to determine whether the accelerated testing passed or failed at the appropriate IWC. Note that the same dilution series should be used in the accelerated testing as was used in the initial test(s) that result in the accelerated testing requirement.

If no pattern of toxicity is found the toxicity episode is considered to be ended and routine testing is to resume. If a pattern of toxicity is found, a TIE/TRE investigation is to be performed. If a pattern of toxicity is not demonstrated but a significant level of erratic toxicity is found, the Division may require an increased frequency of routine monitoring or some other modified approach. The permittee shall provide written notification of the results within 14 calendar days of completion of the Pattern of Toxicity/No Toxicity demonstration.

ii. Toxicity Identification Evaluation (TIE) or Toxicity Reduction Evaluation (TRE)

If a TIE or a TRE is being performed, the results of the investigation are to be received by the Division within 180 calendar days of the demonstration chronic WET in the routine test, as defined above, or if accelerated testing was performed, the date the pattern of toxicity is demonstrated. A status report is to be provided to the Division at the 60 and 120 calendar day points of the TIE or TRE investigation. The Division may extend the time frame for investigation where reasonable justification exists. A request for an extension must be made in writing and received prior to the 180 calendar day deadline. Such request must include a justification and supporting data for such an extension.

Under a TIE, the permittee may use the time for investigation to conduct a preliminary TIE (PTIE) or move directly into the TIE. A PTIE consists of a brief search for possible sources of WET, where a specific parameter(s) is reasonably suspected to have caused such toxicity, and could be identified more simply and cost effectively than a formal TIE. If the PTIE allows resolution of the WET incident, the TIE need not necessarily be conducted in its entirety. If, however, WET is not identified or resolved during the PTIE, the TIE must be conducted within the allowed 180 calendar day time frame.

The Division recommends that the EPA guidance documents regarding TIEs be followed. If another method is to be used, this procedure should be submitted to the Division prior to initiating the TIE.

If the pollutant(s) causing toxicity is/are identified, and is/are controlled by a permit effluent limitation(s), this permit may be modified upon request to adjust permit requirements regarding the automatic compliance response.

If the pollutant(s) causing toxicity is/are identified, and is/are not controlled by a permit effluent limitation(s), the Division may develop limitations on the parameter(s), and the permit may be reopened to include these limitations.

If the pollutant causing toxicity is not able to be identified, or is unable to be specifically identified, or is not able to be controlled by an effluent limit, the permittee will be required to perform either item 1 or item 2 below.

- 1) Conduct an investigation which demonstrates actual instream aquatic life conditions upstream and downstream of the discharge, or identify, for Division approval, and conduct an alternative investigation which demonstrates the actual instream impact. This should include WET testing and chemical analyses of the ambient water. Depending on the results of the study, the permittee may also be required to identify the control program necessary to eliminate the toxicity and its

cost. Data collected may be presented to the WQCC for consideration at the next appropriate triennial review of the stream standards;

2) Move to a TRE by identifying the necessary control program or activity and proceed with elimination of the toxicity so as to meet the WET effluent limit.

If toxicity spontaneously disappears in the midst of a TIE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency of WET testing for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

The control program developed during a TRE consists of the measures determined to be the most feasible to eliminate WET. This may happen through the identification of the toxicant(s) and then a control program aimed specifically at that toxicant(s) or through the identification of more general toxicant treatability processes. A control program is to be developed and submitted to the Division within 180 calendar days of beginning a TRE. Status reports on the TRE are to be provided to the Division at the 60 and 120 calendar day points of the TRE investigation.

If toxicity spontaneously disappears in the midst of a TRE, the permittee shall notify the Division within 10 calendar days of such disappearance. The Division may require the permittee to conduct accelerated testing to demonstrate that no pattern of toxicity exists, or may amend the permit to require an increased frequency for some period of time. If no pattern of toxicity is demonstrated through the accelerated testing or the increased monitoring frequency, the toxicity incident response will be closed and normal WET testing shall resume.

d. Toxicity Reopener

This permit may be reopened and modified to include additional or modified numerical permit limitations, new or modified compliance response requirements, changes in the WET testing protocol, the addition of both acute and chronic WET requirements, or any other conditions related to the control of toxicants.

10. Compliance Schedule(s)

Pursuant to Regulations 61.8(3)(n) and 61.9(2)(f), this general permit authorizes the inclusion of compliance schedules in specific certifications when consistent with the Division's Compliance Schedule Policy CW3 and federal requirements. For instance, a certification for an existing discharger under this general permit may contain a compliance schedule if there is a new water quality based effluent limitation or if a water quality based effluent limitation becomes more stringent. The terms and conditions of the compliance schedule will be modeled after the examples in the fact sheet and will include dates for submitting specific reports or the completion of various activities needed to meet the final permit limitations. Compliance schedules will include enforceable milestones at least once a year.

Regulation 61.8(3)(n)(i) states that a report shall be submitted to the Division no later than 14 calendar days following each date identified in the schedule of compliance. The 14 days have already been incorporated into the due date. The specific report or action item is due by the date listed in the compliance schedule.

11. Special Studies and Additional Monitoring

Pursuant to Regulation 61.9(2)(f), this general permit authorizes the inclusion in certifications of additional reporting requirements based on site specific considerations including but not limited to a Salinity Study; Groundwater Protection Study; Infiltration/Inflow study; Onsite-Wastewater Treatment System Annual Report; or Installing Flow Measurement Devices. These requirements will vary depending on site-specific considerations and will be fully enforceable under this permit.

12. Industrial Waste Management

- a. The Permittee has the responsibility to protect the Domestic Wastewater Treatment Works (DWTW), as defined at section 25.8.103(5) of the Colorado Water Quality Control Act, or the Publicly-Owned Treatment Works (POTW), as defined at 40 CFR section 403.3(q) of the federal pretreatment regulations, from pollutants which would cause pass through or interference, as defined at 40 CFR 403.3(p) and (k), or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.
- b. Pretreatment Standards (40 CFR Section 403.5) developed pursuant to Section 307 of the Federal Clean Water Act (the Act) require that the Permittee shall not allow, under any circumstances, the introduction of the following pollutants to the DWTW from any source of non-domestic discharge:
 - i. Pollutants which create a fire or explosion hazard in the DWTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than sixty (60) degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR Section 261.21;
 - ii. Pollutants which will cause corrosive structural damage to the DWTW, but in no case discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such discharges;
 - iii. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the DWTW, or otherwise interfere with the operation of the DWTW;
 - iv. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with any treatment process at the DWTW;
 - v. Heat in amounts which will inhibit biological activity in the DWTW resulting in Interference, but in no case heat in such quantities that the temperature at the DWTW treatment plant exceeds forty (40) degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the DWTW, approves alternate temperature limits;
 - vi. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
 - vii. Pollutants which result in the presence of toxic gases, vapors, or fumes within the DWTW in a quantity that may cause acute worker health and safety problems;
 - viii. Any trucked or hauled pollutants, except at discharge points designated by the DWTW; and
 - ix. Any specific pollutant that exceeds a local limitation established by the Permittee in accordance with the requirements of 40 CFR Section 403.5(c) and (d).

- x. Any other pollutant which may cause Pass Through or Interference.
- c. EPA shall be the Approval Authority and the mailing address for all reporting and notifications to the Approval Authority shall be: USEPA 1595 Wynkoop St. 8ENF-W-NP, Denver, CO 80202-1129. Should the State be delegated authority to implement and enforce the Pretreatment Program in the future, the Permittee shall be notified of the delegation and the state permitting authority shall become the Approval Authority.
- d. In addition to the general limitations expressed above, more specific Pretreatment Standards have been and will be promulgated for specific industrial categories under Section 307 of the Act (40 CFR Part 405 et. seq.).
- e. The Permittee must notify the state permitting authority and the Approval Authority, of any new introductions by new or existing industrial users or any substantial change in pollutants from any industrial user within sixty (60) calendar days following the introduction or change. Such notice must identify:
 - i. Any new introduction of pollutants into the DWTW from an industrial user which would be subject to Sections 301, 306, or 307 of the Act if it were directly discharging those pollutants; or
 - ii. Any substantial change in the volume or character of pollutants being introduced into the DWTW by any industrial user;
 - iii. For the purposes of this section, adequate notice shall include information on:
 - (A) The identity of the industrial user;
 - (B) The nature and concentration of pollutants in the discharge and the average and maximum flow of the discharge to be introduced into the DWTW; and
 - (C) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from or biosolids or sludge produced at such DWTW.
 - iv. For the purposes of this section, an industrial user shall include:
 - (A) Any discharger subject to Categorical Pretreatment Standards under Section 307 of the Act and 40 CFR chapter I and subchapter N;
 - (B) Any discharger which has a process wastewater flow of 25,000 gallons or more per day;
 - (C) Any discharger contributing five percent or more of the average dry weather hydraulic or organic capacity of the DWTW treatment plant;
 - (D) Any discharger who is designated by the Approval Authority as having a reasonable potential for adversely affecting the DWTWs operation or for violating any Pretreatment Standard or requirements;
- f. At such time as a specific Pretreatment Standard or requirement becomes applicable to an industrial user of the Permittee, the state permitting authority and/or Approval Authority may, as appropriate:

- i. Amend the Permittee's NPDES discharge permit to require the Permittee to develop and submit an approvable Pretreatment program under a compliance schedule, in accordance with procedures in 40 CFR 403.8(e). The modification of a POTW's NPDES Permit for the purposes of incorporating a POTW Pretreatment Program approved in accordance with the procedure in §403.11 shall be deemed a minor Permit modification subject to the procedures in 40 CFR 122.63(g); or,;
- ii. Require the Permittee to specify, by ordinance, order, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the Permittee's DWTW for treatment. Such requirement shall be imposed in a manner consistent with the program development requirements of the General Pretreatment Regulations at 40 CFR Part 403; and/or,
- iii. Require the Permittee to monitor its discharge for any pollutant which may likely be discharged from the Permittee's DWTW, should the industrial user fail to properly pretreat its waste.

The state permitting authority and the Approval Authority retains, at all times, the right to take legal action against any source of nondomestic discharge, whether directly or indirectly controlled by the Permittee, for violations of a permit, order or similar enforceable mechanism issued by the Permittee, violations of any Pretreatment Standard or requirement, or for failure to discharge at an acceptable level under national standards issued by EPA under 40 CFR, chapter I, subchapter N. In those cases where a CDPS permit violation has occurred because of the failure of the Permittee to properly develop and enforce Pretreatment Standards and requirements as necessary to protect the DWTW, the state permitting authority and/or Approval Authority shall hold the Permittee and/or industrial user responsible and may take legal action against the Permittee as well as the Industrial user(s) contributing to the permit violation.

D. DEFINITIONS OF TERMS

1. "Acute Toxicity" - The acute toxicity limitation is exceeded if the LC50 is at any effluent concentration less than or equal to the IWC indicated in this permit.
2. "Antidegradation limits" - See "Two (2) - Year Rolling Average".
3. "Applicable water quality criterion (AWQC)" is the quantitation target level or goal. The AWQC may be one of the following:

Where an effluent limit has been established,

- i. The AWQC is the effluent limit.

Where an effluent limit has not been established, the AWQC may be

- i. An applicable technology based effluent limit (TBEL);
- ii. Half of a water quality standard;
- iii. Half of a water quality standard as assessed in the receiving water, or potential WQBEL; or
- iv. Half of a potential antidegradation based effluent limitation, which can be an antidegradation based average concentration or a potential non-impact limit.

4. "Chronic toxicity", which includes lethality and growth or reproduction, occurs when the NOEC and IC25 are at an effluent concentration less than the IWC indicated in this permit.
5. "Composite" sample is a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow. For a SBR type treatment system, a composite sample

is defined as sampling equal aliquots during the beginning, middle and end of a decant period, for two consecutive periods during a day (if possible).

6. "Continuous" measurement, is a measurement obtained from an automatic recording device which continually measures the effluent for the parameter in question, or that provides measurements at specified intervals.
7. "Daily Maximum limitation" for all parameters (except temperature, pH, dissolved oxygen, and WET) means the limitation for this parameter shall be applied as an average of all samples collected in one calendar day. For these parameters the DMR shall include the highest of the daily averages. For pH and dissolved oxygen, this means an instantaneous maximum (and/or instantaneous minimum) value. For WET, this means an instantaneous minimum value. The instantaneous value is defined as the analytical result of any individual sample. For pH and dissolved oxygen, DMRs shall include the maximum (and/or minimum) of all instantaneous values within the calendar month. For WET, DMRs shall include the minimum of all instantaneous values within the reporting period. For pH and dissolved oxygen, the value beyond the noted daily maximum limitation for the indicated parameter shall be considered a violation of this permit. For temperature, see Daily Maximum Temperature. For WET violation and failure descriptions, see Part I.B.5.
8. "Daily Maximum Temperature (DM)" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as the highest two-hour average water temperature recorded during a given 24-hour period. This will be determined using a rolling 2-hour maximum temperature. If data is collected every 15 minutes, a 2 hour maximum can be determined on every data point after the initial 2 hours of collection. Note that the time periods that overlap days (Wednesday night to Thursday morning) do not matter as the reported value on the DMR is the greatest of all the 2-hour averages.

This would continue throughout the course of a calendar day. The highest of these 2 hour averages over a month would be reported on the DMR as the daily maximum temperature. At the end/beginning of a month, the collected data should be used for the month that contains the greatest number of minutes in the 2-hour maximum.

9. "Dissolved (D) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a water and suspended sediment sample which passed through a 0.40 or 0.45 UM (micron) membrane filter. Determinations of "dissolved" constituents are made using the filtrate. This may include some very small (colloidal) suspended particles which passed through the membrane filter as well as the amount of substance present in true chemical solution.
10. "Geometric mean" for *E. coli* bacteria concentrations, the thirty (30) day and seven (7) day averages shall be determined as the geometric mean of all samples collected in a thirty (30) day period and the geometric mean of all samples taken in a seven (7) consecutive day period respectively. The geometric mean may be calculated using two different methods. For the methods shown, a, b, c, d, etc. are individual sample results, and n is the total number of samples.

Method 1:

Geometric Mean = $(a*b*c*d*...)^{(1/n)}$ - means multiply

Method 2:

Geometric Mean = $\text{antilog} ([\log(a)+\log(b)+\log(c)+\log(d)+...] / n)$

Graphical methods, even though they may also employ the use of logarithms, may introduce significant error and may not be used.

In calculating the geometric mean, for those individual sample results that are reported by the analytical laboratory to be "less than" a numeric value, a value of 1 should be used in the calculations. If all individual analytical results for the month are reported to be less than numeric values, then report "less than" the largest of those numeric values on the monthly DMR. Otherwise, report the calculated value.

For any individual analytical result of "too numerous to count" (TNTC), that analysis shall be considered to be invalid and another sample shall be promptly collected for analysis. If another sample cannot be collected within the same sampling period for which the invalid sample was collected (during the same month if monthly sampling is required, during the same week if weekly sampling is required, etc.), then the following procedures apply:

- i. A minimum of two samples shall be collected for coliform analysis within the next sampling period.
- ii. If the sampling frequency is monthly or less frequent: For the period with the invalid sample results, leave the spaces on the corresponding DMR for reporting coliform results empty and attach to the DMR a letter noting that a result of TNTC was obtained for that period, and explain why another sample for that period had not been collected.

If the sampling frequency is more frequent than monthly: Eliminate the result of TNTC from any further calculations, and use all the other results obtained within that month for reporting purposes. Attach a letter noting that a result of TNTC was obtained, and list all individual analytical results and corresponding sampling dates for that month.

11. "Grab" sample, is a single "dip and take" sample so as to be representative of the parameter being monitored.
12. "IC25" or "Inhibition Concentration" is a point estimate of the toxicant concentration that would cause a given percent reduction in a non-lethal biological measurement (e.g. growth or reproduction) calculated from a continuous model (i.e. interpolation method). IC25 is a point estimate of the toxic concentration that would cause a 25-percent reduction in a non-lethal biological measurement.
13. "In-situ" measurement is defined as a single reading, observation or measurement taken in the field at the point of discharge.
14. "Instantaneous" measurement is a single reading, observation, or measurement performed on site using existing monitoring facilities.
15. "LC50" or "Lethal Concentration" is the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.
16. "Maximum Weekly Average Temperature (MWAT)" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as an implementation statistic that is calculated from field monitoring data. The MWAT is calculated as the largest mathematical mean of multiple, equally spaced, daily temperatures over a seven-day consecutive period, with a minimum of three data points spaced equally through the day. For lakes and reservoirs, the MWAT is assumed to be equivalent to the maximum WAT from at least three profiles distributed throughout the growing season (generally July-September).

The MWAT is calculated by averaging all temperature data points collected during a calendar day, and then averaging the daily average temperatures for 7 consecutive days. This 7 day averaging period is a rolling average, i.e. on the 8th day, the MWAT will be the averages of the daily averages of days 2-8. The value to be reported on the DMR is the highest of all the rolling 7-day averages

throughout the month. For those days that are at the end/beginning of the month, the data shall be reported for the month that contains 4 of the 7 days.

Day 1: Average of all temperature data collected during the calendar day.

Day 2: Average of all temperature data collected during the calendar day.

Day 3: Average of all temperature data collected during the calendar day.

Day 4: Average of all temperature data collected during the calendar day.

Day 5: Average of all temperature data collected during the calendar day.

Day 6: Average of all temperature data collected during the calendar day.

Day 7: Average of all temperature data collected during the calendar day.

1st MWAT Calculation as average of previous 7 days

Day 8: Average of all temperature data collected during the calendar day.

2nd MWAT Calculation as average of previous 7 days

Day 9: Average of all temperature data collected during the calendar day.

3rd MWAT Calculation as average of previous 7 days

17. "Minimum level (ML)" means the lowest concentration of an analyte that can be accurately and precisely quantified using a given method, as determined by the laboratory.
18. "NOEC" or "No-Observed-Effect-Concentration" is the highest concentration of toxicant to which organisms are exposed in a full life cycle or partial life cycle (short term) test, that causes no observable adverse effects on the test organisms (i.e. the highest concentration of toxicant in which the values for the observed responses are not statistically different from the controls). This value is used, along with other factors, to determine toxicity limits in permits.
19. "Potentially dissolved (PD) metals fraction" is defined in the Basic Standards and Methodologies for Surface Water 1002-31, as that portion of a constituent measured from the filtrate of a water and suspended sediment sample that was first treated with nitric acid to a pH of 2 or less and let stand for 8 to 96 hours prior to sample filtration using a 0.40 or 0.45-UM (micron) membrane filter. Note the "potentially dissolved" method cannot be used where nitric acid will interfere with the analytical procedure used for the constituent measured.
20. "Practical Quantitation Limit (PQL)" means the minimum concentration of an analyte (substance) that can be measured with a high degree of confidence that the analyte is present at or above that concentration. The use of PQL in this document may refer to those PQLs shown in Part I.D of this permit or the PQLs of an individual laboratory.
21. "Quarterly measurement frequency" means samples may be collected at any time during the calendar quarter if a continual discharge occurs. If the discharge is intermittent, then samples shall be collected during the period that discharge occurs.
22. "Recorder" requires the continuous operation of an automatic data retention device for providing required records such as a data logger, a chart and/or totalizer (or drinking water rotor meters or pump hour meters where previously approved.)
23. SAR and Adjusted SAR - The equation for calculation of SAR-adj is:

$$SAR-adj = \frac{Na^+}{\sqrt{\frac{Ca_x + Mg^{++}}{2}}}$$

Where:

Na+ = Sodium in the effluent reported in meq/l

Mg++ = Magnesium in the effluent reported in meq/l

Cax = calcium (in meq/l) in the effluent modified due to the ratio of bicarbonate to calcium

The values for sodium (Na+), calcium (Ca++), bicarbonate (HCO3-) and magnesium (Mg++) in this equation are expressed in units of milliequivalents per liter (meq/l). Generally, data for these parameters are reported in terms of mg/l, which must then be converted to calculate the SAR. The conversions are:

$$\text{meq/l} = \frac{\text{Concentration in mg/l}}{\text{Equivalent weight in mg/meq}}$$

Where the equivalent weights are determined based on the atomic weight of the element divided by the ion's charge:

Na+ = 23.0 mg/meq (atomic weight of 23, charge of 1)

Ca++ = 20.0 mg/meq (atomic weight of 40.078, charge of 2)

Mg++ = 12.15 mg/meq (atomic weight of 24.3, charge of 2)

HCO3- = 61 mg/mep (atomic weight of 61, charge of 1)

The EC and the HCO3-/Ca++ ratio in the effluent (calculated by dividing the HCO3- in meq/l by the Ca++ in meq/l) are used to determine the Cax using the following table.

Table - Modified Calcium Determination for Adjusted Sodium Adsorption Ratio

HCO3/Ca Ratio And EC 1, 2, 3													
Salinity of Effluent (EC)(dS/m)													
		0.1	0.2	0.3	0.5	0.7	1.0	1.5	2.0	3.0	4.0	6.0	8.0
Ratio of HCO3/Ca	.05	13.20	13.61	13.92	14.40	14.79	15.26	15.91	16.43	17.28	17.97	19.07	19.94
	.10	8.31	8.57	8.77	9.07	9.31	9.62	10.02	10.35	10.89	11.32	12.01	12.56
	.15	6.34	6.54	6.69	6.92	7.11	7.34	7.65	7.90	8.31	8.64	9.17	9.58
	.20	5.24	5.40	5.52	5.71	5.87	6.06	6.31	6.52	6.86	7.13	7.57	7.91
	.25	4.51	4.65	4.76	4.92	5.06	5.22	5.44	5.62	5.91	6.15	6.52	6.82
	.30	4.00	4.12	4.21	4.36	4.48	4.62	4.82	4.98	5.24	5.44	5.77	6.04
	.35	3.61	3.72	3.80	3.94	4.04	4.17	4.35	4.49	4.72	4.91	5.21	5.45
	.40	3.30	3.40	3.48	3.60	3.70	3.82	3.98	4.11	4.32	4.49	4.77	4.98
	.45	3.05	3.14	3.22	3.33	3.42	3.53	3.68	3.80	4.00	4.15	4.41	4.61
	.50	2.84	2.93	3.00	3.10	3.19	3.29	3.43	3.54	3.72	3.87	4.11	4.30
	.75	2.17	2.24	2.29	2.37	2.43	2.51	2.62	2.70	2.84	2.95	3.14	3.28
	1.00	1.79	1.85	1.89	1.96	2.01	2.09	2.16	2.23	2.35	2.44	2.59	2.71
	1.25	1.54	1.59	1.63	1.68	1.73	1.78	1.86	1.92	2.02	2.10	2.23	2.33
	1.50	1.37	1.41	1.44	1.49	1.53	1.58	1.65	1.70	1.79	1.86	1.97	2.07
	1.75	1.23	1.27	1.30	1.35	1.38	1.43	1.49	1.54	1.62	1.68	1.78	1.86
	2.00	1.13	1.16	1.19	1.23	1.26	1.31	1.36	1.40	1.48	1.54	1.63	1.70
	2.25	1.04	1.08	1.10	1.14	1.17	1.21	1.26	1.30	1.37	1.42	1.51	1.58
	2.50	0.97	1.00	1.02	1.06	1.09	1.12	1.17	1.21	1.27	1.32	1.40	1.47
	3.00	0.85	0.89	0.91	0.94	0.96	1.00	1.04	1.07	1.13	1.17	1.24	1.30

	3.50	0.78	0.80	0.82	0.85	0.87	0.90	0.94	0.97	1.02	1.06	1.12	1.17
	4.00	0.71	0.73	0.75	0.78	0.80	0.82	0.86	0.88	0.93	0.97	1.03	1.07
	4.50	0.66	0.68	0.69	0.72	0.74	0.76	0.79	0.82	0.86	0.90	0.95	0.99
	5.00	0.61	0.63	0.65	0.67	0.69	0.71	0.74	0.76	0.80	0.83	0.88	0.93
	7.00	0.49	0.50	0.52	0.53	0.55	0.57	0.59	0.61	0.64	0.67	0.71	0.74
	10.00	0.39	0.40	0.41	0.42	0.43	0.45	0.47	0.48	0.51	0.53	0.56	0.58
	20.00	0.24	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.32	0.33	0.35	0.37
	30.00	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.27	0.28

- 1 Adapted from Suarez (1981).
- 2 Assumes a soil source of calcium from lime (CaCO₃) or silicates; no precipitation of magnesium, and partial pressure of CO₂ near the soil surface (PCO₂) is 0.0007 atmospheres.
- 3 Cax, HCO₃⁻, Ca are reported in meq/l; EC is in dS/m (deciSiemens per meter).

Because values will not always be quantified at the exact EC or HCO₃⁻ /Ca⁺⁺ ratio in the table, the resulting Cax must be determined based on the closest value to the calculated value. For example, for a calculated EC of 2.45 dS/m, the column for the EC of 2.0 would be used. However, for a calculated EC of 5.1, the corresponding column for the EC of 6.0 would be used. Similarly, for a HCO₃⁻ /Ca⁺⁺ ratio of 25.1, the row for the 30 ratio would be used.

The Division acknowledges that some effluents may have electrical conductivity levels that fall outside of this table, and others have bicarbonate to calcium ratios that fall outside this table. For example, some data reflect HCO₃⁻ /Ca⁺⁺ ratios greater than 30 due to bicarbonate concentrations reported greater than 1000 mg/l versus calcium concentrations generally less than 10 mg/l (i.e., corresponding to HCO₃⁻ /Ca⁺⁺ ratios greater than 100). Despite these high values exceeding the chart's boundaries, it is noted that the higher the HCO₃⁻ /Ca⁺⁺ ratio, the greater the SAR-adj. Thus, using the Cax values corresponding to the final row containing bicarbonate/calcium ratios of 30, the permittee will actually calculate an SAR-adj that is less than the value calculated if additional rows reflecting HCO₃⁻ /Ca⁺⁺ ratios of greater than 100 were added.

24. "Seven (7) day average" means, with the exception of fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected in a seven (7) consecutive day period. Such seven (7) day averages shall be calculated for all calendar weeks, which are defined as beginning on Sunday and ending on Saturday. If the calendar week overlaps two months (i.e. the Sunday is in one month and the Saturday in the following month), the seven (7) day average calculated for that calendar week shall be associated with the month that contains the Saturday. Samples may not be used for more than one (1) reporting period. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.5 for guidance on calculating averages and reporting analytical results that are less than the PQL).**
25. "Sufficiently sensitive test procedures":
 - i. An analytical method is "sufficiently sensitive" when the method detects and accurately and precisely quantifies the amount of the analyte. In other words there is a valid positive result; or
 - ii. An analytical method is "sufficiently sensitive" when the method accurately and precisely quantifies the result to the AWQC, as demonstrated by the ML is less than or equal to the AWQC. In other words, the level of precision is adequate to inform decision making; or
 - iii. An analytical method is "sufficiently sensitive" when the method achieves the required level of accuracy and precision, as demonstrated by the ML is less than or equal to the PQL. In other words, the most sensitive method is being used and properly followed.

26. "Thirty (30) day average" means, except for fecal coliform or *E. coli* bacteria (see geometric mean), the arithmetic mean of all samples collected during a thirty (30) consecutive-day period, which represents a calendar month. The permittee shall report the appropriate mean of all self-monitoring sample data collected during the calendar month on the Discharge Monitoring Reports. Samples shall not be used for more than one (1) reporting period. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.5 for guidance on calculating averages and reporting analytical results that are less than the PQL).**
27. Toxicity Identification Evaluation (TIE) is a set of site-specific procedures used to identify the specific chemical(s) causing effluent toxicity.
28. "Total Inorganic Nitrogen (T.I.N.)" is an aggregate parameter determined based on ammonia, nitrate and nitrite concentrations. To determine T.I.N. concentrations, the facility must monitor for total ammonia and total nitrate plus nitrite (or nitrate and nitrite individually) on the same days. The calculated T.I.N. concentrations in mg/L shall then be determined as the sum of the analytical results of same-day sampling for total ammonia (as N) in mg/L, and total nitrate plus nitrite (as N) in mg/L (or nitrate as N and nitrite as N individually). From these calculated T.I.N. concentrations, the daily maximum and thirty (30) day average concentrations for T.I.N. shall be determined in the same manner as set out in the definitions for the daily maximum and thirty (30) day average. **(See the "Analytical and Sampling Methods for Monitoring and Reporting Section in Part I.D.5 for guidance on calculating averages and reporting analytical results that are less than the PQL).**
29. "Total Metals" means the concentration of metals determined on an unfiltered sample following vigorous digestion (Section 4.1.3), or the sum of the concentrations of metals in both the dissolved and suspended fractions, as described in Manual of Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979, or its equivalent.
30. "Total Recoverable Metals" means that portion of a water and suspended sediment sample measured by the total recoverable analytical procedure described in Methods for Chemical Analysis of Water and Wastes, U.S. Environmental Protection Agency, March 1979 or its equivalent.
31. Toxicity Reduction Evaluation (TRE) is a site-specific study conducted in a step-wise process to identify the causative agents of effluent toxicity, isolate the source of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in effluent toxicity after the control measures are put in place.
32. "Twenty four (24) hour composite" sample is a combination of at least eight (8) sample aliquots of at least 100 milliliters, collected at equally spaced intervals during the operating hours of a facility over a twenty-four (24) hour period. For volatile pollutants, aliquots must be combined in the laboratory immediately before analysis. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the wastewater or effluent flow at the time of sampling or the total wastewater or effluent flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically.
33. "Twice Monthly" monitoring frequency means that two samples shall be collected each calendar month on separate weeks with at least one full week between the two sample dates. Also, there shall be at least one full week between the second sample of a month and the first sample of the following month.
34. "Two (2) -Year Rolling Average" (Antidegradation limits)- the average of all monthly average data collected in a two year period. Reporting of two-year rolling average results should begin in the first DMR due once the reporting requirements has been in place for a two year period. To calculate a two-year rolling average, add the current monthly average to the previous 23 monthly averages and divide the total by 24. This methodology continues on a rolling basis as long as the two year rolling

average reporting and/or effluent limit applies (i.e., in the first reporting period use data from month 1 to month 24, in the second reporting period use data from month 2 to month 25, then month 3 to month 26, etc). Ongoing reporting is required across permit terms when data is available for a two year period.

35. "Visual" observation is observing the discharge to check for the presence of a visible sheen or floating oil.
36. "Water Quality Control Division" or "Division" means the state Water Quality Control Division as established in 25-8-101 et al.)

Additional relevant definitions are found in the Colorado Water Quality Control Act, CRS §§ 25-8-101 et seq., the Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61) and other applicable regulations.

E. PERMIT SPECIFIC MONITORING, SAMPLING AND REPORTING REQUIREMENTS

1. Routine Reporting of Data

Reporting of the data gathered in compliance with Part I.B or Part I.C shall be on a **monthly** basis. Reporting of all data gathered shall comply with the requirements of Part I.E (General Requirements).

Monitoring results shall be summarized for each calendar month via the division's NetDMR service unless a waiver is granted in compliance with 40 CFR 127. If a waiver is granted, monitoring results shall be reported on division approved discharge monitoring report (DMR) forms (EPA form 3320-1).

Reporting No Discharge:

If no discharge occurs during the reporting period, a DMR must still be submitted. However, "No Discharge" shall be reported on the paper DMR and if reporting electronically please use the No Data Code (NODI) "C" for No Discharge in NetDMR.

When submitting monitoring results via NetDMR, the Copy of Record shall reflect that the DMR was signed and submitted no later than the 28th day of the month following the reporting period. If submitting DMRs by mail, which is only allowed if a waiver has been granted, one copy of the DMR form shall be mailed to the division at the address provided below, so that the DMR is received no later than the 28th day of the month following the reporting period.

If mailing, the original signed copy of each DMR shall be submitted to the division at the following address:

Colorado Department of Public Health and Environment
Water Quality Control Division
WQCD-P-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

The Discharge Monitoring Report paper and electronic forms shall be filled out accurately and completely in accordance with the requirements of this permit and the instructions on the forms; and signed by an authorized person as identified in Part II.K.1.

2. Annual Biosolids Report

State Biosolids Annual Report

The permittee shall provide a biosolids annual report to the Division no later **February 19th** of each year. The Self-Monitoring Report shall include the items identified in **Regulation 64.17.B**. Reports shall be submitted addressing all such activities that occurred in the previous calendar year. Biosolids monitoring results shall be reported using appropriate division-provided forms, currently the Biosolids Annual Report form. Biosolids Annual Reports required herein, shall be signed and certified in accordance with the Signatory Requirements, Part II.K and submitted as follows:

The original copy of each form, plus copies of all required documentation, shall be submitted to the following address:

BIOSOLIDS PROGRAM
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT,
WATER QUALITY CONTROL DIVISION
WQCD-PERMITS-B2
4300 CHERRY CREEK DRIVE SOUTH
DENVER, COLORADO 80246-1530

EPA Biosolids Annual Report

EPA biosolids reporting is now done electronically. It is the responsibility of the permittee to check with the EPA on whether or not the EPA requires a biosolids annual report for the facility.

3. Representative Sampling

Samples and measurements taken for the respective identified monitoring points as required herein shall be representative of the volume and nature of: 1) all influent wastes received at the facility, including septage, biosolids, etc.; 2) the monitored effluent discharged from the facility; and 3) biosolids produced at the facility. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the influent, effluent, or biosolids wastestream joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and prior approval by the Division.

4. Influent and Effluent Sampling Points

Influent and effluent sampling points shall be so designed or modified so that: 1) a sample of the influent can be obtained after preliminary treatment and prior to primary or biological treatment and 2) a sample of the effluent can be obtained at a point after the final treatment process and prior to discharge to state waters, unless otherwise specified in the certification. Any discharge to the waters of the State from a point source other than specifically authorized by this permit is prohibited. The permittee shall provide access to the Division to sample at these points.

5. Analytical and Sampling Methods for Monitoring and Reporting

The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. All sampling shall be performed by the permittee according to specified methods in 40 C.F.R. Part 136; methods approved by EPA pursuant to 40 C.F.R. Part 136; or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.

The permittee may use an equivalent and acceptable alternative to an EPA-approved method without EPA review where the requirements of 40 CFR Part 136.6 are met and documented. The permittee may use an Alternative Test Procedure (ATP). An ATP is defined as a way in which an analyte is identified and quantified that is reviewed and approved by EPA in accordance with 40 CFR Part 136.4 for nationwide use, or a modification to a 40 CFR 136 approved method that is reviewed and approved by EPA in accordance with 40 CFR Part 136.5 for limited use.

- a. The permittee must select a test procedure that is “sufficiently sensitive” for all monitoring conducted in accordance with this permit.
- b. The PQLs for specific parameters are listed in the table below. PQLs for other parameters may be included in a certification under this general permit.
- c. If the permit contains an interim effluent limitation (a limit is report until such time as a numeric effluent limit becomes effective) for a parameter, the final numeric effluent limit shall be considered the AWQC for the purpose of determining whether a test method is sufficiently sensitive.
- d. When the analytical method which complies with the above requirements has an ML greater than the permit limit, and the permittee’s analytical result is less than the ML, the permittee shall report “BDL” on the DMR. Such reports will not be considered as violations of the permit limit, as long as the method is sufficiently sensitive. For parameters that have a report only limitation, and the permittee’s analytical result is less than the ML, (where X = the ML) “< X” shall be reported on the DMR.
- e. In the calculation of average concentrations (i.e. 7- day, 30-day average, 2-year rolling average) any individual analytical result that is less than the ML shall be considered to be zero for the calculation purposes. When reporting:

If all individual analytical results are less than the ML, the permittee shall report either “BDL” or “<X” (where X = the ML), following the guidance above.

If one or more individual results is greater than the ML, an average shall be calculated and reported. Note that it does not matter if the final calculated average is greater or less than the ML, it must be reported as a value.

Table Practical quantitation limits - Metals, inorganics, nutrients, radiological parameters, and nonylphenol

Parameter	Reporting Units	PQL	Parameter	Reporting Units	PQL
Aluminum	µg/L ¹	15	Ammonia Nitrogen	mg/L ² N	0.2
Antimony	µg/L	2	Nitrate+Nitrite Nitrogen	mg/L N	0.1
Arsenic	µg/L	1	Nitrate Nitrogen	mg/L N	0.1
Barium	µg/L	1	Nitrite Nitrogen	mg/L N	0.05
Beryllium	µg/L	2	Total Kjeldahl Nitrogen	mg/L N	0.5
Boron	µg/L	20	Total Nitrogen	mg/L N	0.5
Cadmium	µg/L	0.5	Total Inorganic Nitrogen	mg/L N	0.2
Calcium	µg/L	120	Phosphorus	mg/L P	0.05 ³

Parameter	Reporting Units	PQL	Parameter	Reporting Units	PQL
Chromium	µg/L	20	BOD/CBOD	mg/L	2
Chromium, Trivalent	µg/L	---	Chloride	mg/L	2
Chromium, Hexavalent	µg/L	20 ^{3, 4}	Total Residual Chlorine, DPD	mg/L	0.5
Copper	µg/L	2	Total Residual Chlorine, Amperimetric	mg/L	0.05
Iron	µg/L	20 ³	Cyanide	µg/L	10 ³
Lead	µg/L	0.5	Fluoride	mg/L	0.5
Magnesium	µg/L	35	Phenols	µg/L	30
Manganese	µg/L	2	Sulfate	mg/L	2
Mercury	µg/L	0.2 ³	Sulfide	mg/L H ₂ S	0.1
Mercury, Low Level	µg/L	0.002	Total Dissolved Solids (TDS)	mg/L	10
Molybdenum	µg/L	0.5	Total Suspended Solids (TSS)	mg/L	5
Nickel	µg/L	1	Radium-226	pCi/L	1
Selenium	µg/L	1 ³	Radium-228	pCi/L	1
Silver	µg/L	0.5	Uranium	µg/L	1
Sodium	µg/L	150	Nonylphenol, ASTM D7065	µg/L	10
Thallium	µg/L	0.5			
Zinc	µg/L	10			

¹ µg/L = micrograms per liter

² mg/L = milligrams per liter

³ PQL established based on parameter specific evaluation

⁴ For hexavalent chromium, samples must be unacidified so dissolved concentrations will be measured rather than potentially dissolved concentrations.

- f. PFAS Analysis - At the time of permit issuance, there is no EPA-approved analytical method for analyzing PFAS in wastewaters (non-potable) that are approved for Clean Water Act monitoring in accordance with 40 CFR Part 136 (Appendix B). The analytical method for the PFAS parameters shall be compliant with the requirements set forth in the Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories, currently DoD QSM 5.4. DoD QSM 5.4 in turn includes the EPA Draft Method 1633.

At a minimum, the laboratory selected shall be able to analyze and quantify the PFAS parameters at or below the associated PFAS quantification limits (PFAS QL). If the laboratory selected is capable of achieving a quantification limit for a specific PFAS that is lower than the PFAS QL, analytical results should be reported to the department relative to the lower laboratory quantification limit, and not reported as “less than” the PFAS QL.

Any 40 CFR Part 136 (Appendix B) approved method for analyzing PFAS in wastewater that becomes available in the future would replace this current analytical method requirement.

6. Flow Measuring Devices

Unless exempted in the permit certification, flow metering at the headworks shall be provided to give representative values of throughput and treatment of the wastewater system. The metering device shall be equipped with a local flow indication instrument and a flow indication-recording-totalization device suitable for providing permanent flow records, which should be in the plant control building.

An instantaneous or continuous effluent flow measuring device shall be required in addition to the above described influent flow measuring device. Where influent/effluent flow metering is not practical and the same results may be obtained from metering at the influent/effluent end of the treatment facility or flow metering by some other means, this type of flow metering arrangement will be considered, and if approved, noted in the certification. In these cases, the monitoring frequency and sample type will be determined and specified in the certification.

At the request of the Division, the permittee must be able to show proof of the accuracy of any flow-measuring device used in obtaining data submitted in the monitoring report. The flow-measuring device must indicate values within ten (10) percent of the actual flow being measured.

PART II

Part II contains standard conditions required by federal regulation to be included in all NPDES permits (see 40 C.F.R. 122.41). Part I contains permit specific requirements. To the extent that Part I conflicts with the standard terms and conditions of Part II, the requirements of Part I shall control.

A. DUTY TO COMPLY

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Colorado Water Quality Control Act and is grounds for: 1) enforcement action; 2) permit termination, revocation and reissuance, or modification; or 3) denial of a permit renewal application.
2. Federal Enforcement:
 - a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal (see 40 CFR 122.2) established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
 - b. The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Clean Water Act provides that any person who *negligently* violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
 - c. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for

Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

B. DUTY TO REAPPLY

If the permittee plans to continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a permit application at least 180 days before this permit expires as required by Regulations 61.4 and 61.10.

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. DUTY TO MITIGATE

The permittee must take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. PROPER OPERATION AND MAINTENANCE

The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit. See 40 C.F.R. §122.41(e).

F. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. Any request for modification, revocation, reissuance, or termination under this permit must comply with all terms and conditions of Regulation 61.8(8). See also 40 C.F.R. § 122.41(f).

G. PROPERTY RIGHTS

In accordance with 40 CFR §122.41(g) and Regulation 61.8(9):

1. The issuance of a permit does not convey any property or water rights in either real or personal property, or stream flows or any exclusive privilege.
2. The issuance of a permit does not authorize any injury to person or property or any invasion of personal rights, nor does it authorize the infringement of federal, state, or local laws or regulations.
3. Except for any toxic effluent standard or prohibition imposed under Section 307 of the Clean Water Act or any standard for sewage sludge use or disposal under Section 405(d) of the Federal act, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with

Sections 301, 302, 306, 318, 403, and 405(a) and (b) of the Clean Water Act. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in Section 61.8(8) of the Colorado Discharge Permit System Regulations. See 61.8(9)(c).

H. DUTY TO PROVIDE INFORMATION

The permittee shall furnish to the Division, within a reasonable time, any information which the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Division, upon request, copies of records required to be kept by this permit in accordance with 40 C.F.R. §122.41(h) and/or Regulation 61.8(3)(q).

I. INSPECTION AND ENTRY

The permittee shall allow the Division and the authorized representative, including U.S. EPA, and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials as required by law, to conduct inspections in accordance with 40 C.F.R. §122.41(i), Regulation 61.8(3), and Regulation 61.8(4):

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted in which any records are required to be kept under the terms and conditions of this permit;
2. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit and to inspect any facilities, equipment (including monitoring and control equipment), practices, operations or monitoring method regulated or required in the permit;
3. To enter upon the permittee's premises in a reasonable manner and at a reasonable time to inspect or investigate, any actual, suspected, or potential source of water pollution, or to ascertain compliance or noncompliance with the Colorado Water Quality Control Act or any other applicable state or federal statute or regulation or any order promulgated by the Division, and;
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

J. MONITORING AND RECORDS

1. Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity. See 40 C.F.R. § 122.41(j)(1).
2. Monitoring must be conducted according to test procedures approved under 40 C.F.R. part 136 for the analyses of pollutants unless another method is required under 40 C.F.R. subchapters N or O. In the case of pollutants for which there are no approved methods under 40 C.F.R. part 136 or otherwise required under 40 C.F.R. subchapters N or O, monitoring must be conducted according to a test procedure specified in this permit for such pollutants. See 40 C.F.R. § 122.41(j)(4); 122.44(i)(1)(iv)(A).
3. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or when requested by the Division or Regional Administrator.

4. Records of monitoring information must include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
5. The permittee shall install, calibrate, use and maintain monitoring methods and equipment, including biological and indicated pollutant monitoring methods. See Regulation 61.8(4)(b)(iii). All sampling shall be performed by the permittee according to sufficiently sensitive test procedures required by 40 C.F.R. 122.44(i)(1)(iv) or methods approved by the Division, in the absence of a method specified in or approved pursuant to 40 C.F.R. Part 136.
6. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

K. SIGNATORY REQUIREMENTS

1. Authorization to Sign: All documents required to be submitted to the Division by the permittee must be signed in accordance with 40 CFR §122.22, Regulation 61.4, and the following criteria:
 - a. For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - b. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive officer of a federal agency includes (i) the chief or principal executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency. (e.g., Regional Administrator of EPA). For purposes of this section, a principal executive officer has responsibility for the overall operation of the facility from which the discharge originates.
 - d. By a duly authorized representative in accordance with 40 C.F.R. 122.22(b), only if:
 - i. the authorization is made in writing by a person described in Part II.K.1.a, b, or c above;

- ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and,
 - iii. The written authorization is submitted to the Division.
2. Any person(s) signing documents required for submittal to the Division must make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”
3. The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. See 40 C.F.R. §122.41(k)(2).

L. REPORTING REQUIREMENTS

1. **Planned Changes:** The permittee shall give advance notice to the Division, in writing, of any planned physical alterations or additions to the permitted facility in accordance with 40 CFR §122.41(l) and Regulation 61.8(5)(a) and Part II.O. of this permit. Notice is required only when:
 - a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b); or
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR §122.41(a)(1).
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. See 40 C.F.R. §122.41(l)(1)(iii).
2. **Anticipated Non-Compliance:** The permittee shall give advance notice to the Division, in writing, of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements. The timing of notification requirements differs based on the type of non-compliance as described below.

3. **Transfer of Ownership or Control:** The permittee shall notify the Division, in writing, thirty (30) calendar days in advance of a proposed transfer of the permit. This permit is not transferable to any person except after notice to the Division. The Division may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. See Regulation 61.8(6); 40 C.F.R. §§ 122.41(l)(iii) and 122.61.
4. **Monitoring reports:** Monitoring results must be reported at the intervals specified in this permit.
 - a. If the permittee monitors any pollutant at the approved monitoring locations listed in Part I more frequently than that required by this permit using test procedures approved under 40 CFR Part 136, or another method required for an industry-specific waste stream under 40 CFR subchapters N or O, the results of such monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Division. See 40 CFR 122.41(l)(4).
 - b. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Division in the permit.
5. **Submission of Discharge Monitoring Reports (DMRs):** DMRs shall be submitted electronically through NetDMR system unless the permittee requests and is granted a waiver of the electronic reporting requirement by the Division pursuant to Regulation 61.8(4)(d).
6. **Compliance Schedules:** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule in the permit, shall be submitted on the date listed in the compliance schedule section. The fourteen (14) calendar day provision in Regulation 61.8(4)(n)(i) has been incorporated into the due date.
7. **Twenty-four hour reporting:**
 - a. In addition to the reports required elsewhere in this permit, the permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the Division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances:
 - i. Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident;
 - ii. Circumstances leading to any unanticipated bypass which exceeds any effluent limitations in the permit;
 - iii. Circumstances leading to any upset which causes an exceedance of any effluent limitation in the permit; or
 - iv. Daily maximum violations for any of the pollutants limited by Part I.B of this permit as specified in Part III of this permit. This includes any toxic pollutant or hazardous substance or any pollutant specifically identified as the method to control any toxic pollutant or hazardous substance.
 - b. The report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
 - c. For noncompliance events related to combined sewer overflows, sanitary sewer overflows, or bypass events, these reports must include the data described above (with the exception of time of discovery) as well as the type of event (combined sewer overflows, sanitary sewer overflows, or bypass events), type of sewer overflow structure (e.g., manhole, combine sewer overflow outfall), discharge volumes untreated by the treatment works treating domestic

sewage, types of human health and environmental impacts of the sewer overflow event, and whether the noncompliance was related to wet weather. See 40 CFR 122.41(l)(6)(i).

- i. As of December 21, 2020 all reports related to combined sewer overflows, sanitary sewer overflows, or bypass events submitted in compliance with this section must be submitted electronically by the permittee to the division.
8. Other non-compliance: A permittee must report all instances of noncompliance at the time monitoring reports are due. These reports may be submitted annually in accordance with Regulation 61.8(4)(p) and/or 61.8(5)(f), but may be submitted at a more frequent interval.

M. BYPASS

1. Definitions:
 - a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility in accordance with 40 CFR §122.41(m)(1)(i) and/or Regulation 61.2(12).
 - b. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 CFR §122.41(m)(1)(ii).
2. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of 40 CFR 122.41(m)(3) and (m)(4). See 40 CFR §122.41(m)(2).
3. Notice of bypass:
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, the permittee shall submit prior notice, if possible, at least ten (10) days before the date of the bypass. See 40 CFR §122.41(m)(3)(i) and/or Regulation 61.9(5)(c).
 - b. Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Part II.L.7. See also 40 CFR §122.41(m)(3)(ii).
4. Prohibition of Bypass: Bypasses are prohibited and the Division may take enforcement action against the permittee for bypass, unless:
 - a. the bypass is unavoidable to prevent loss of life, personal injury, or severe property damage;
 - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - c. Proper notices were submitted to the Division.
 - i. The Division may approve an anticipated bypass, after considering its adverse effects, if the Division determines that it will meet the three conditions listed.

N. UPSET

1. Definition: "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack

of preventative maintenance, or careless or improper operation. See 40 CFR §122.41(n) and Regulation 61.2(113).

2. Effect of an upset: An upset constitutes an affirmative defense to an action brought for noncompliance with permit effluent limitations if the requirements of section 3 are met. A determination made during administrative review of claims that noncompliance was caused by upset is final administrative action subject to judicial review in accordance with Regulation 61.8(3)(j).

***special note:** this provision is consistent with the definition of “Upset” as codified in Regulation 61.2(113). However, the Colorado regulatory definition of upset is less stringent than the federal code of regulations, which restricts the use of an upset defense to noncompliance with technology-based permit effluent limitations only.*

3. Conditions necessary for demonstration of an Upset: A permittee who wishes to establish the affirmative defense of upset shall demonstrate through properly signed contemporaneous operating logs, or other relevant evidence that:
 - a. an upset occurred and the permittee can identify the cause(s) of the upset;
 - b. the permitted facility was at the time being properly maintained; and
 - c. the permittee submitted notice of the upset as required in Part II.L.7 (24-hour notice); and
 - d. The permittee complied with any remedial measure necessary to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. See also 40 C.F.R. 122.41(n)(3)(i)-(iv).

***special note:** this provision is consistent with the definition of “Conditions necessary for demonstration of upset” as codified in Regulation 61.8(3)(j)(ii). However, the Colorado regulatory definition of upset is less stringent than the federal code of regulations, which restricts the use of an upset defense to demonstrate that a facility was properly operated and maintained. Colorado’s regulatory definition of “Conditions necessary for demonstration of upset” is less stringent than the requirements of the federal Clean Water Act.*

4. In addition to the demonstration required above, a permittee who wishes to establish the affirmative defense of upset for a violation of effluent limitations based upon water quality standards shall also demonstrate through monitoring, modeling or other methods that the relevant standards were achieved in the receiving water.
5. Burden of Proof: In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

O. REOPENER CLAUSE

Procedures for modification or revocation. Permit modification or revocation of this permit or coverage under this permit will be conducted according to Regulation 61.8(8). This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one of the following events occurs, including but not limited to:

1. **Water Quality Standards:** The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
2. **Wasteload Allocation:** A wasteload allocation is developed and approved by the State of Colorado and/or EPA for incorporation in this permit.
3. **Discharger-specific variance:** A variance is adopted by the Water Quality Control Commission.

P. OTHER INFORMATION

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Division or U.S. EPA, the Discharger shall promptly submit such facts or information. See 40 C.F.R. § 122.41(l)(8).

Q. SEVERABILITY

The provisions of this permit are severable. If any provisions or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances and the application of the remainder of this permit shall not be affected.

R. NOTIFICATION REQUIREMENTS

1. **Notification to Parties:** All notification requirements shall be directed as follows:
 - a. Oral Notifications, during normal business hours shall be to:

CDPHE-Emergency Reporting Line: 1-877-518-5608; or

Water Quality Protection Section - Compliance Program
Water Quality Control Division
Telephone: (303) 692-3500

After hours notifications should be made to the CDPHE-Emergency Reporting Line: 1-877-518-5608.

- b. Written notification shall be to:
Water Quality Protection Section - Compliance Program
Water Quality Control Division
Colorado Department of Public Health and Environment
WQCD-WQP-B2
4300 Cherry Creek Drive South
Denver, CO 80246-1530

S. RESPONSIBILITIES

Reduction, Loss, or Failure of Treatment Facility: The permittee has the duty to halt or reduce any activity if necessary to maintain compliance with the effluent limitations of the permit. It shall not be a defense for a permittee in an enforcement action that it would be necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

T. OIL AND HAZARDOUS SUBSTANCE LIABILITY

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under Section 311 (Oil and Hazardous Substance Liability) of the Clean Water Act.

U. EMERGENCY POWERS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority granted by Section 510 of the Clean Water Act. Nothing in this permit shall be construed to prevent or limit application of any emergency power of the Division.

V. CONFIDENTIALITY

Any information relating to any secret process, method of manufacture or production, or sales or marketing data which has been declared confidential by the permittee, and which may be acquired, ascertained, or discovered, whether in any sampling investigation, emergency investigation, Colorado Open Records Act (CORA) request, or otherwise, shall not be publicly disclosed by any member, officer, or employee of the Water Quality Control Commission or the Division, but shall be kept confidential. Any person seeking to invoke the protection of this section shall bear the burden of proving its applicability. This section shall never be interpreted as preventing full disclosure of effluent data.

W. FEES

The permittee is required to submit payment of an annual fee as set forth in the 2016 amendments to the Water Quality Control Act. Section 25-8-502 (1.1) (e), and the Regulation 61.15 as amended. Failure to submit the required fee when due and payable is a violation of the permit and will result in enforcement action pursuant to Section 25-8-601 et. seq., C.R.S.1973 as amended.

X. DURATION OF PERMIT

The duration of a permit shall be for a fixed term and shall not exceed five (5) years. If the permittee desires to continue to discharge, a permit renewal application shall be submitted at least one hundred eighty (180) calendar days before this permit expires. Filing of a timely and complete application shall cause the expired permit to continue in force to the effective date of the new permit. The permit's duration may be extended only through administrative extensions and not through interim modifications. If the permittee anticipates there will be no discharge after the expiration date of this permit, the Division should be promptly notified so that it can terminate the permit in accordance with Regulation 61.

Y. SECTION 307 TOXICS

If a toxic effluent standard or prohibition, including any applicable schedule of compliance specified, is established by regulation pursuant to Section 307 of the Clean Water Act for a toxic pollutant which is present in the permittee's discharge and such standard or prohibition is more stringent than any limitation upon such pollutant in the discharge permit, the Division shall institute proceedings to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

PART III

Table I—Testing Requirements for Organic Toxic Pollutants by Industrial Category for Existing Dischargers

	<u>Industry Category</u>
Adhesives and sealants	Ore mining
Aluminum forming	Organic chemicals manufacturing
Auto and other laundries	Paint and ink formulation
Battery manufacturing	Pesticides
Coal mining	Petroleum refining
Coil coating	Pharmaceutical preparations
Copper forming	Photographic equipment and supplies
Electrical and electronic components	Plastics processing
Electroplating	Plastic and synthetic materials manufacturing
Explosives manufacturing	Porcelain enameling
Foundries	Printing and publishing
Gum and wood chemicals	Pulp and paper mills
Inorganic chemicals manufacturing	Rubber processing
Iron and steel manufacturing	Soap and detergent manufacturing
Leather tanning and finishing	Steam electric power plants
Mechanical products manufacturing	Textile mills
Nonferrous metals manufacturing	Timber products processing

Table II—Organic Toxic Pollutants in Each of Four Fractions in Analysis by Gas Chromatography/Mass

Volatiles	Acid Compounds	Base/Neutral	Pesticides
1V acrolein	1A 2-chlorophenol	1B acenaphthene	1P aldrin
2V acrylonitrile	2A 2,4-dichlorophenol	2B acenaphthylene	2P alpha-B
3V benzene	3A 2,4-dimethylphenol	3B anthracene	3P beta-BHC
5V bromoform	4A 4,6-dinitro-o-cresol	4B benzidine	4P gamma-BHC
6V carbon tetrachloride	5A 2,4-dinitrophenol	5B benzo(a)anthracene	5P delta-BHC
7V chlorobenzene	6A 2-nitrophenol	6B benzo(a)pyrene	6P chlordane
8V chlorodibromomethane	7A 4-nitrophenol	7B 3,4-benzofluoranthene	7P 4,4'-DDT
9V chloroethane	8A p-chloro-m-cresol	8B benzo(ghi)perylene	8P 4,4'-DDE
10V 2-chloroethylvinyl ether	9A pentachlorophenol	9B benzo(k)fluoranthene	9P 4,4'-DDD
11V chloroform	10A phenol	10B bis(2-chloroethoxy)methane	10P dieldrin
12V dichlorobromomethane	11A 2,4,6-trichlorophenol	11B bis(2-chloroethyl)ether	11P alpha-endosulfan
14V 1,1-dichloroethane		12B bis(2-chloroisopropyl)ether	12P beta-endosulfan
15V 1,2-dichloroethane		13B bis (2-ethylhexyl)phthalate	13P endosulfan sulfate
16V 1,1-dichloroethylene		14B 4-bromophenyl phenyl ether	14P endrin
17V 1,2-dichloropropane		15B butylbenzyl phthalate	15P endrin aldehyde
18V 1,3-dichloropropylene		16B 2-chloronaphthalene	16P heptachlor
19V ethylbenzene		17B 4-chlorophenyl phenyl ether	17P heptachlor epoxide
20V methyl bromide		18B chrysene	18P PCB-1242
21V methyl chloride		19B dibenzo(a,h)anthracene	19P PCB-1254
22V methylene chloride		20B 1,2-dichlorobenzene	20P PCB-1221
23V 1,1,2,2-tetrachloroethane		21B 1,3-dichlorobenzene	21P PCB-1232
24V tetrachloroethylene		22B 1,4-dichlorobenzene	22P PCB-1248
25V toluene		23B 3,3'-dichlorobenzidine	23P PCB-1260
26V 1,2-trans-dichloroethylene		24B diethyl phthalate	24P PCB-1016
27V 1,1,1-trichloroethane		25B dimethyl phthalate	25P toxaphene
28V 1,1,2-trichloroethane		26B di-n-butyl phthalate	
29V trichloroethylene		27B 2,4-dinitrotoluene	
31V vinyl chloride		28B 2,6-dinitrotoluene	
		29B di-n-octyl phthalate	
		30B 1,2-diphenylhydrazine (as azobenzene)	
		31B fluoranthene	
		32B fluorene	
		33B hexachlorobenzene	
		34B hexachlorobutadiene	
		35B hexachlorocyclopentadiene	
		36B hexachloroethane	
		37B indeno(1,2,3-cd)pyrene	
		38B isophorone	
		39B naphthalene	
		40B nitrobenzene	
		41B N-nitrosodimethylamine	
		42B N-nitrosodi-n-propylamine	
		43B N-nitrosodiphenylamine	
		44B phenanthrene	
		45B pyrene	
		46B 1,2,4-trichlorobenzene	

Table III—Other Toxic Pollutants (Metals and Cyanide) and Total Phenols

Antimony, Total
Arsenic, Total
Beryllium, Total
Cadmium, Total
Chromium, Total
Copper, Total
Lead, Total
Mercury, Total
Nickel, Total
Selenium, Total
Silver, Total
Thallium, Total
Zinc, Total
Cyanide, Total
Phenols, Total

Table IV—Conventional and Nonconventional Pollutants Required To Be Tested by Existing Dischargers if Expected to be Present

Bromide
Chlorine, Total Residual
Color
Fecal Coliform
Fluoride
Nitrate-Nitrite
Nitrogen, Total Organic
Oil and Grease
Phosphorus, Total
Radioactivity
Sulfate
Sulfide
Sulfite
Surfactants
Aluminum, Total
Barium, Total
Boron, Total
Cobalt, Total
Iron, Total
Magnesium, Total
Molybdenum, Total
Manganese, Total
Tin, Total
Titanium, Total

Table V—Toxic Pollutants and Hazardous Substances Required To Be Identified by Existing Dischargers if Expected To Be Present

Toxic Pollutants

Asbestos

Hazardous Substances

11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid [11CL-PF3OUDS]*

2,2-Dichloropropionic acid

2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)

2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]

2,4-D (2,4-Dichlorophenoxy acetic acid)

2-[N-ethylperfluorooctanesulfonamido] acetic acid*

2-[N-methylperfluorooctanesulfonamido] acetic acid*

2H,2H,3H,3H-Perfluorooctanoic acid [5:3 FTCA]*

3-Perfluoroheptyl propanoic acid [7:3 FTCA]*

3-Perfluoropropyl propanoic acid [3:3 FTCA]*

4,8-Dioxa-3H-perfluorononanoic acid [ADONA]*

4:2 Fluorotelomer sulfonic acid*

6:2 Fluorotelomer sulfonic acid*

8:2 Fluorotelomer sulfonic acid*

9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid [9CL-PF3ONS]*

Acetaldehyde

Allyl alcohol

Allyl chloride

Amyl acetate

Aniline

Benzonitrile

Benzyl chloride

Butyl acetate

Butylamine

Captan

Carbaryl

Carbofuran

Carbon disulfide

Chlorpyrifos

Coumaphos

Cresol

Crotonaldehyde

Cyclohexane

Diazinon

Dicamba

Dichlobenil

Dichlone

Dichlorvos

Diethyl amine

Dimethyl amine

Methyl mercaptan

Methyl methacrylate

Methyl parathion

Mevinphos

Mexacarbate

Monoethyl amine

Monomethyl amine

Naled

Napthenic acid

N-ethyl perfluorooctanesulfonamide [NEtFOSA]*

N-ethyl perfluorooctanesulfonamidoethanol*

Nitrotoluene

N-methyl perfluorooctanesulfonamide [NMeFOSA]*

N-methyl perfluorooctanesulfonamidoethanol*

Nonafluoro-3,6-dioxaheptanoic acid [NFDHA]*

Parathion

Perfluoro(2-ethoxyethane)sulfonic acid [PFEESA]*

Perfluoro-3-methoxypropanoic acid [PFMPA]*

Perfluoro-4-methoxybutanoic acid [PFMBA]*

Perfluorobutanesulfonic acid*

Perfluorobutanoic Acid*

Perfluorobutanoic Acid*

Perfluorodecanesulfonic acid*

Perfluorodecanoic acid*

Perfluorododecanesulfonic acid [PFDoS]*

Perfluorododecanoic acid*

Perfluoroheptanesulfonic acid*

Perfluoroheptanoic acid*

Perfluorohexanesulfonic acid*

Perfluorohexanoic acid*

Perfluorononanoic acid*

Perfluorooctanesulfonamide*

Perfluorooctanesulfonic acid*

Perfluorooctanoic Acid*

Perfluorooctanoic Acid*

Perfluoropentanoic acid*

Perfluorotetradecanoic acid*

Perfluorotridecanoic acid*

Perfluoroundecanoic acid*

Phenolsulfanate

Dinitrobenzene	Phosgene
Diquat	Propargite
Disulfoton	Propylene oxide
Diuron	Pyrethrins
Epichlorohydrin	Quinoline
Ethion	Resorcinol
Ethylene diamine	Strontium
Ethylene dibromide	Strychnine
Formaldehyde	Styrene
Furfural	TDE (Tetrachlorodiphenylethane)
Guthion	Trichlorofan
Hexafluoropropylene oxide dimer acid*	Triethanolamine dodecylbenzenesulfonate
Isoprene	Triethylamine
Isopropanolamine Dodecylbenzenesulfonate	Trimethylamine
Kelthane	Uranium
Kepone	Vanadium
Malathion	Vinyl acetate
Mercaptodimethur	Xylene
Methoxychlor	Xylenol
	Zirconium

* Parameter applicable to wastewater discharge only; it does not apply to biosolids.