NPDES Permit No. IL0055620
Notice No. MEL:13041502.bah

Public Notice Beginning Date: **August 15, 2013**

Public Notice Ending Date: **September 16, 2013**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois Environmental Protection Agency
Bureau of Water
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Permittee:

Ameren Energy Resources Company, LLC
P.O. Box 66149, MC-602
1901 Chouteau Avenue
St. Louis, Missouri 63166

Name and Address of Facility:

Duck Creek Power Plant
17751 North CILCO Road
Canton, Illinois 61520
(Fulton County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES permit to discharge into the waters of the state and has prepared a draft permit and associated fact sheet for the above named Permittee. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Mark E. Liska at 217/782-0610.

The applicant is engaged in the operation of a stream electric generating station, powered by fossil fuels (SIC 4911). Waste water is generated from boiler condensate, condenser cooling water, turbine and auxiliary hydrogen cooling water, ash sluicing wastewater, air emission scrubbing wastewater, filter backwash, reverse osmosis brine, demineralizer brine, demineralizer brine, chemical metal cleaning rinses, and stormwater runoff (including coal pile runoff). Plant operation results in an average discharge of 0.038 MGD of dam seepage wastewater from outfall 001, an intermittent discharge of up to 18 MGD of cooling pond overflow (at EL.565.0) from outfall 002, an intermittent discharge of intake structure backwash water from outfall 003, and an intermittent discharge of up to 7.5 MGD of cooling pond overflow (at EL 562.5) from outfall 004.

The following modification is proposed:

The permittee will discharge chemical metal cleaning rinses on their coal pile, which has an ultimate discharge to outfalls 002 and 004.

Application is made for the new discharge(s) which is (are) located in Fulton County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Outfall	Receiving Stream	Latitude	Longitude	Stream Classification	Integrity Rating
001	Duck Creek	40° 27′ 15″ North	89° 58′ 20″ West	General Use	Not Rated
002	Duck Creek	40° 27′ 10″ North	89° 58′ 20″ West	General Use	Not Rated
003	Illinois River	40° 25′ 25″ North	89° 57’ 15″ West	General Use	Not Rated
004	Illinois River	40° 25′ 25″ North	89° 57’ 15″ West	General Use	Not Rated

To assist you further in identifying the location of the discharge please see the attached map.

The unlisted stream segment receiving the discharge from outfall(s) 001 and 002 is not on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

The stream segment D-31 receiving the discharge from outfall(s) 003 and 004 is on the 2012 303(d) list of impaired waters and is not a biologically significant stream on the 2008 Illinois Department of Natural Resources Publication – *Integrating Multiple Taxa in a Biological Stream Rating System*.

The following parameters have been identified as the pollutants causing impairment:

Designated Use	Potential Cause
Mercury, PCBs	Fish Consumption
Fecal Coliform	Primary Contact

The discharge(s) from the facility shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)			CONCENTRATION LIMITS mg/L		
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 001 – Dam Seepage Collection System						
Flow (MGD)						35 IAC 309.146
Outfall 002– Cooling Pond Overflow (at EL 565.0)						
Flow (MGD)						
pH					6.0-9.0	35 IAC 304.125
Temperature					Standard	35 IAC 302.211
Total Suspended Solids				15	30	35 IAC 304.124
Oil & Grease				15	20	40 CFR 423.12
Iron (Total)				2	4	35 IAC 304.124
Boron				See Special Conditon 9		PCB-AS 96-8 40 CFR 122.44(l)
Mercury					Monitor Only	35 IAC 309.146

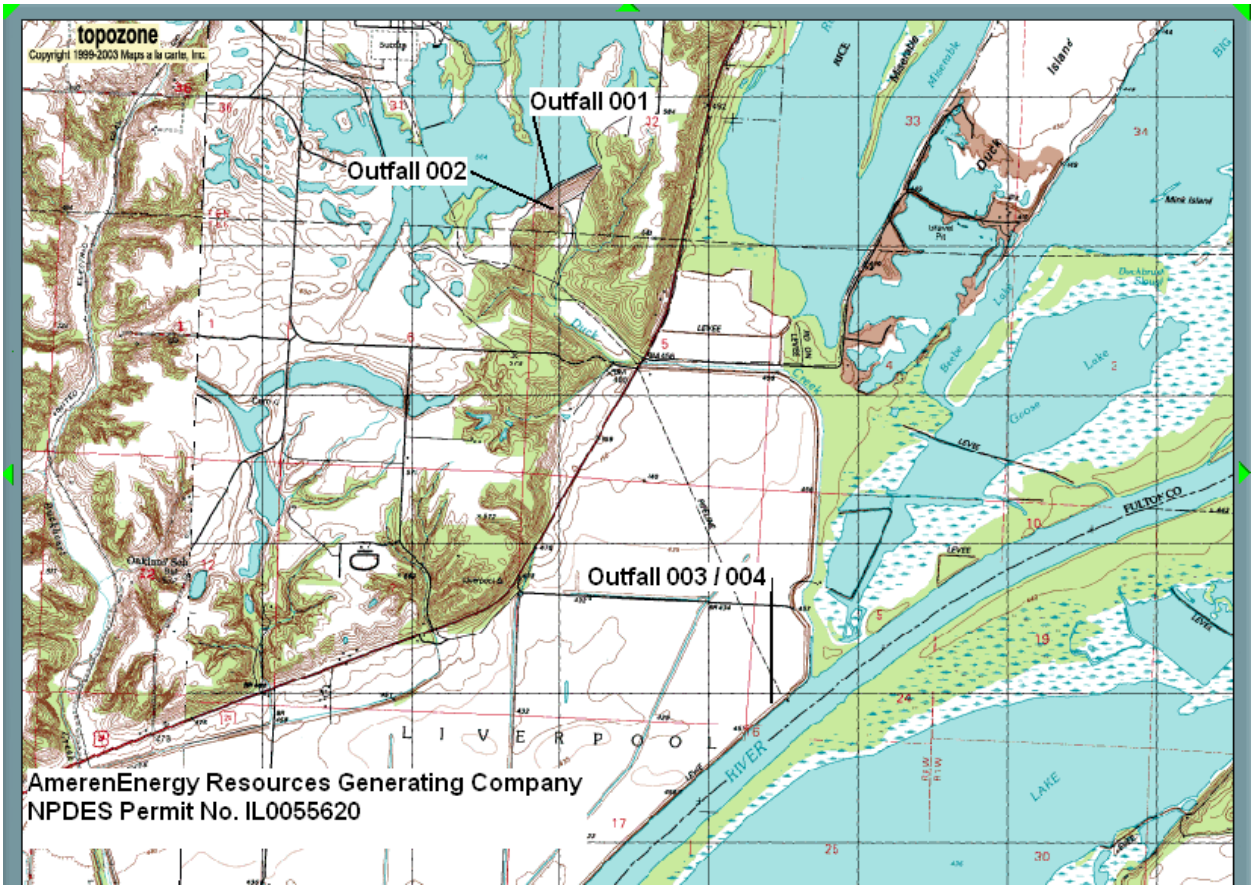
	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION	30 DAY AVERAGE	DAILY MAXIMUM	REGULATION
Outfall 003 – River intake screen backwash						
Flow (MGD)						35 IAC 309.146
Outfall 004 – Cooling Pond Overflow (at EL 562.5)						
Flow (MGD)						
pH					6.0-9.0	35 IAC 304.125
Temperature					Standard	35 IAC 302.211
Total Suspended Solids				15	30	35 IAC 304.124
Oil & Grease				15	20	40 CFR 423.12
Iron (Total)				2	4	35 IAC 304.124
Boron					Monitor Only	35 IAC 309.146
Mercury					Monitor Only	35 IAC 309.146

The following explain the conditions of the proposed permit:

Special Conditions will require monthly DMR submission, outline temperature requirements, explain the BAT/BCT stormwater regulations, and explain the boron adjusted standard as well as discharge limits with respect to boron.

The facility intake structure consists of two pumps rated at 10,000 GPM and a 36-inch pipe which discharges to the cooling reservoir. The Duck Creek cooling reservoir is a closed cycle cooling system and is considered BAT for both sections 316(a) and 316(b) of the Clean Water Act.

The permittee has requested adding chemical metal cleaning rinses to their coal pile whose stormwater ultimately discharges to outfalls 002 and 004. Up to 305,000 gallons of the wastewater would be put on the coal pile once every 5 years. The coal would be immediately burned during a non-rain event which would allow no wastewater to discharge by way of runoff to outfall 002 or 004. Because there is no potential for metals or any other parameters to discharge, there is no increased loading. Because there is no increased loading, an antidegradation assessment is not required pursuant to 35 Ill. Adm. Code 302.105. Testing for metals around the coal pile has been added to make sure no wastewater discharges to outfall 002 or 004.


topozone
Copyright 1999-2003 Maps a la carte, Inc.
Outfall 001
Outfall 002
Outfall 003 / 004
LIVERPOOL
AmerenEnergy Resources Generating Company
NPDES Permit No. IL0055620

NPDES Permit No. IL0055620

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:
Effective Date:

Name and Address of Permittee:

Ameren Energy Resources Company, LLC
P.O. Box 66149, MC-602
1901 Chouteau Avenue
St. Louis, Missouri 63166

Facility Name and Address:

Duck Creek Power Plant
17751 North CILCO Road
Canton, Illinois 61520
(Fulton County)

Discharge Number and Name:	Receiving Waters:
001 Dam Seepage Collection System	Duck Creek tributary to Illinois River
002 Cooling Pond Overflow (at EL 565.0)	Duck Creek tributary to Illinois River
003 River Intake Screen Backwash	Illinois River
004 Cooling Pond Overflow (at EL 562.5)	Illinois River

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

SAK: MEL:13041502.bah

Effluent Limitations and Monitoring

1. From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 001 – Dam Seepage Collection System* (DAF = 0.038 MGD)						
Flow (MGD)	See Special Condition 1.				Measure When Discharging	
* - See Special Condition 14.						
Outfall 002 – Cooling Pond Overflow (at EL. 565.0) (Intermittent Discharge – See Special Conditions 16 and 18) The discharge consists of : Condenser Cooling Water, Turbine and Auxiliary Hydrogen Cooling Water, and Service Water Make up Water Pumped into the Cooling Pond from the Illinois River Coal Pile and Limestone Storage Area Runoff Boiler Blowdown Station Yard Drainage, Roof Drainage, and Area Runoff Bottom Sluicing and Ash Hopper Overflow Chemical Metal Cleaning Rinses*** Miscellaneous Low Volume Waste Steams						
Flow (MGD)	See Special Condition 1.				Measure When Discharging	
pH	See Special Condition 2.				2/Month	Grab
Temperature	See Special Condition 6.				2/Month	Single Reading
Total Suspended Solids			15	30	2/Month	Grab
Oil & Grease			15	20	2/Month	Grab
Iron (Total)			2	4	2/Month	Grab
Boron*					2/Month	Grab
Mercury**				Monitor Only	1/Month	Grab
* See Special Condition 9. ** See Special Condition 14. *** See Special Condition 15.						
Outfall 003 – River Intake Screen Backwash**** (Intermittent Discharge)						
Flow (MGD)	See Special Condition 1.				1/Quarter	
**** During the operation and maintenance of trash racks, the collected debris shall be disposed of properly in a manner acceptable to the Agency.						

Effluent Limitations and Monitoring

	LOAD LIMITS lbs/day DAF (DMF)		CONCENTRATION LIMITS mg/L			
PARAMETER	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM	SAMPLE FREQUENCY	SAMPLE TYPE
Outfall 004 – Cooling Pond Overflow (at EL. 562.5) (Intermittent Discharge – See Special Conditions 16 and 18) The discharge consists of: Condenser Cooling Water, Turbine and Auxiliary Hydrogen Cooling Water, and Service Water Make Up Water Pumped into the Cooling Pond from the Illinois River Coal Pile and Limestone Storage Area Runoff Boiler Blowdown Station Yard Drainage, Roof Drainage and Area Runoff Bottom Sluicing and Ash Hopper Overflow Chemical Metal Cleaning Rinses*** Miscellaneous Low volume Waste Systems						
Flow (MGD)	See Special Condition 1.				Measure When Discharging	
pH	See Special Condition 2.				2/Month	Grab
Temperature	See Special Condition 6.				2/Month	Single-Reading
Total Suspended Solids			15	30	2/Month	Grab
Oil & Grease			15	20	2/Month	Grab
Iron (Total)			2	4	2/Month	Grab
Boron*				Monitor Only	1/Month	Grab
Mercury**				Monitor Only	1/Month	Grab

*See Special Condition 17.
** See Special Condition 14.
*** See Special Condition 15.

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum on the monthly Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 4. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 5. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (eDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/edmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using eDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Attention: Compliance Assurance Section, Mail Code # 19

SPECIAL CONDITION 6. This facility is not allowed any mixing with the receiving stream in order to meet applicable water quality thermal limitations. Therefore, discharge of wastewater from this facility must meet the following thermal limitations prior to discharge into the receiving stream.

A. The discharge must not exceed the maximum limits in the following table during more than one percent of the hours in the 12 month period ending with any month. Moreover, at no time shall the water temperature of the discharge exceed the maximum limits in the following table by more the 1.7° C (3° F).

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
°F	60	60	60	90	90	90	90	90	90	90	90	60
°C	16	16	16	32	32	32	32	32	32	32	32	16

B. In addition, the discharge shall not cause abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.

C. The discharge shall not cause the maximum temperature rise above natural temperatures to exceed 2.8° C (5° F).

D. The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 7. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

Special Conditions

SPECIAL CONDITION 8. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

SPECIAL CONDITION 9. The discharge from Outfall 002 shall not cause an exceedance of the Illinois Pollution Control Board Adjusted Standard of 4.5 mg/l for Duck Creek downstream of the Duck Creek dam.

SPECIAL CONDITION 10. This permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws, regulations, or judicial orders. The Agency will public notice the permit modification. Should the permittee wish to discharge chemical metal cleaning wastes to waters of the state, the permittee shall submit to the Agency an application indicating such intention. The Agency may then issue a modified permit, following public notice and opportunity for public comment.

SPECIAL CONDITION 11. Discharge from the cooling reservoir to Duck Creek for maintenance operations of the dam dewatering system pursuant to the Illinois Department of Transportation "Rules for Construction and Maintenance of Dams" Section 804.04(e)1 is not subject to the effluent limitations designated for Outfall 002.

SPECIAL CONDITION 12 . Proper operation and maintenance - the permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate operator staffing and training, 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 which are installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

SPECIAL CONDITION 13. Planned Changes - the permittee shall give advance notice to the Agency of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition requires notification under 35 Ill. Adm. Code, Chapter I, Subtitle C, Section 309.

2. 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

3. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification does not apply to pollutants which are subject neither to effluent limitations in the permit and /or notification requirements under 40 CFR 122.42(a)(1).

SPECIAL CONDITION 14. All samples for mercury must be analyzed by EPA Method 1631E using the digestion procedure described in Section 11.1.1.2 of 1631E, which dictates that samples must be heated at 50^{o}C for 6 hours in a bromine chloride (BrCl) solution in closed vessels.

SPECIAL CONDITION 15. In order for the Agency to evaluate the potential impacts of cooling water intake structure operations pursuant to 40 CFR 125.90(b), the permittee shall prepare and submit information to the Agency outlining current intake structure conditions at this facility, including a detailed description of the current intake structure operation and design, description of any operational or structural modifications from original design parameters, source waterbody flow information, or other information as necessary.

The information shall also include a summary of historical 316(b) related intake impingement and / or entrainment studies, if any, as well as current impingement mortality and / or entrainment characterization data; and shall be submitted to the Agency within six (6) months of the permit's effective date.

Upon the receipt and review of this information, the permit may be modified to require the submittal of additional information based on a Best Professional Judgment review by the Agency. This permit may also be revised or modified in accordance with any laws, regulations, or judicial orders pursuant to Section 316(b) of the Clean Water Act.

SPECIAL CONDITION 16. The Permittee shall monitor coal pile runoff for concentrations of copper (total) and iron (total) a minimum of 4 times prior to placing chemical metal cleaning wastewater rinses on the coal pile. The Permittee shall monitor the coal pile for coal pile runoff following placement of chemical cleaning wastewater rinses on the coal pile. Upon placement of the wastewater rinses on the coal pile, for each placement which causes an effluent from the coal pile and each rainfall event which produces coal pile runoff during 30 days following placement on the coal pile, a representative grab sample shall be taken daily of the discharge and analyzed for iron (total) and copper (total). The analysis report shall include the frequency, duration and amounts of the month's precipitation events.

If the Permittee after monitoring twice the above practice for incineration of chemical metal cleaning wastewater rinses can demonstrate to the satisfaction of the permitting authority that there is no significant discharg3e of the designated parameters caused by this practice, upon written request by the Permittee, the permitting authority shall review the monitoring requirements and may, at their discretion revise or waive these monitoring requirements following Public Notice and opportunity for hearing.

SPECIAL CONDITION 17. Allowed mixing is recognized for boron at outfall 004 extending 84 feet downstream. Within the allowed mixing, 20.9:1 dilution is afforded.

SPECIAL CONDITION 18. The Permittee shall monitor the effluent from Outfalls 002 for the following parameters on a 2/year basis. This Permit may be modified with public notice to establish effluent limitations if appropriate, based on information obtained through sampling.

NPDES Permit No. IL0055620

Special Conditions

The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on the DMR's to IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STORET CODE	PARAMETER	Minimum reporting limit
10197	Antimony	5.0 ug/L
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L
01042	Copper	0.005 mg/L
00718	Cyanide (weak acid dissociable) (grab)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
01067	Nickel	0.005 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
10159	Thallium	5.0 ug/L
01092	Zinc	0.025 mg/L

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.