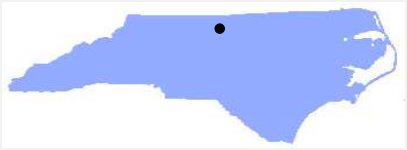
NC Division of Energy, Mineral, and Land Resources
FACT SHEET FOR NPDES STORMWATER PERMIT DEVELOPMENT
NPDES Stormwater Permit NCS000572

Facility Information			
Applicant/Facility Name:	Duke Energy Carolinas, LLC/Dan River Combined Cycle Station		
Applicant Address:	P.O. Box 1006, Mail Code EC13K; Charlotte, North Carolina 28201		
Facility Address:	864 South Edgewood Drive, Eden, North Carolina 27288		
Permitted Flow:	Not applicable (stormwater discharges only)		
Industrial Activities:	Primary SIC Code: 4911 – Electric Services		
Permit Status:	New NPDES stormwater permit		
County:	Rockingham County		
Miscellaneous			
Receiving Stream:	Dan River	Regional Office:	Winston-Salem
Stream Classification:	C	State Grid / USGS Quad:	Southeast Eden
303(d) List/ TMDL?	No/Hg, fecal colif.	Permit Writer:	K. Pickle
Subbasin, Stream Index #:	03-02-03, 22-(39)a	Date:	May 4, 2015



Facility Location: Lat. 36° 29' 18" N Long. 79° 43' 17" W

BACKGROUND

Duke Energy's Dan River Combined Cycle Station is a 620-megawatt natural gas electricity generating plant in Rockingham County. The Combined Cycle Station came on line in 2012. Beginning in 1949 the site previously generated electricity with a coal-fired steam electric plant and a combustion turbine installation.

In addition to NPDES wastewater discharge permit NC0003468, the facility also holds air permit #03455T30 and hazardous wastes permit NCD024668535. The facility is subject to federal NPDES stormwater discharge permit requirements per 40 CFR §122.26 (b)(14)(vii).

The company applied to the NC Division of Energy, Mineral, and Land Resources Stormwater Permitting Program (SPP) for a separate NPDES stormwater discharge permit for this facility in August 2014, with additional amended information in September and December 2014.

This facility discharges to the Dan River, a class C water in the Roanoke River Basin. Stormwater discharges will enter the Dan River in a stretch that is subject to a TMDL for fecal coliform and to the statewide TMDL for mercury. No specific reductions or Hg limits are required for NPDES stormwater permittees at this time.

WHY THIS FACILITY IS SUBJECT TO A PERMIT

Federal NPDES regulations define **stormwater discharge associated with industrial activity** in 40 CFR §122.26 (b)(14) as:

> "…the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under this part 122. For the categories of industries identified in this section, the term includes, but

is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas."

As a result of the significant exposed materials and industrial activities at the Dan River facility, all stormwater-only discharges from the above named areas at the facility meet the definition of stormwater discharge associated with industrial activity.

PROPOSED MONITORING FOR STORMWATER DISCHARGES

The Division considered potential pollutants from the regulated industrial activities as well as analytical data submitted as part of the permit application in August 2014. Single samples at ten on-site locations included measurements of O&G, COD, Cl, Fl, SO_4, Hg, Al, As, Ba, B, Ca, Cd, Cr, Cu, Fe, Mg, Mn, Mo, Ni, Pb, Se, Sb, Tl, Zn, TDS, TSS, conductivity, hardness, temperature, and pH. *See attached information for sampling results.*

Unlike most stormwater permits in its program, the Division is proposing a permit structure with outfall-specific monitoring for discharges. The Division considered including parameters based on anticipated potential pollutants in the drainage area and on the sampling results. The Division is proposing the monitoring parameters for each outfall as shown in the table below. All outfalls discharge to the Dan River directly, or to the Service Water Settling Pond, which is tributary to the Dan River.

Proposed Stormwater Discharge Outfall (SDO) Monitoring	
SW001 *Draining the combined cycle station and substation.* *Plant roads with potential for ash-hauling traffic cross the drainage area.*	
Polychlorinated Biphenyls (PCBs)	Semi-annual monitoring; **may be discontinued after the first year (two samples) if not detected**. **BASIS:** Permit application reports the past potential for PCBs in the drainage area. PCBs persist in the environment if ever released. If all PCBs have been removed and past releases cleaned up, these compounds should not be detected.
Total Suspended Solids (TSS)	Semi-annual monitoring. **BASIS:** Potential pollutant from all areas and BMP effectiveness indicator.
Non-polar Oil & Grease (EPA 1664 SGT-HEM)	Semi-annual monitoring. **BASIS:** Potential pollutant from lubricants; Method 1664 SGT-HEM targets petroleum-based O&G.
Total Nitrogen	Semi-annual monitoring. **BASIS:** Aqueous ammonia storage in the drainage area, with containment draining to the stormwater system.
pH	Semi-annual monitoring. **BASIS:** Pollutant indicator and important to interpreting toxicity potential of metals.
Priority Pollutant Metals Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, and Zn.	Semi-annual monitoring *only if coal or coal ash is transported through this drainage area*. **BASIS:** Coal combustion waste (CCW) constituents may be transported on roads crossing the drainage area.
Boron	Semi-annual monitoring *only if coal or coal ash is transported through this drainage area*. **BASIS:** CCW constituent / coal tracer.

Proposed Stormwater Discharge Outfall (SDO) Monitoring	
SW002 *Previously identified by Duke as a stormwater outfall. Draining a portion of the combined cycle station. Now discharging to the ash basins. No longer a regulated stormwater-only outfall.*	
The permit application reports that runoff from this drainage area will eventually enter new outfall SW009 once CCW are no longer present in the drainage area.	
SW003, SW003A, SW003B(3 adjacent 12" culverts), SW004, SW005, SW006, and SW011 *Draining the laydown area west of the Powerhouse, currently used in support of its on-going demolition.*	
Polychlorinated Biphenyls (PCBs)	Semi-annual monitoring; **may be discontinued after demolition is complete, the area is stabilized, and two subsequent consecutive tests are below detection. BASIS:** Electrical equipment in the adjacent Powerhouse, or these areas, may have contained PCBs, which persist in the environment if ever released. If all PCBs have been removed and past releases cleaned up, these compounds should not be detected.
Total Suspended Solids (TSS)	Semi-annual monitoring. **BASIS:** Potential pollutant from drainage area and BMP effectiveness indicator.
pH	Semi-annual monitoring. **BASIS:** Pollutant indicator and important to interpreting toxicity potential of metals.
Non-polar Oil & Grease (EPA 1664 SGT-HEM)	Semi-annual monitoring. **BASIS:** Potential pollutant from lubricants; Method 1664 SGT-HEM targets petroleum-based O&G.
Priority Pollutant Metals Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, and Zn.	Semi-annual monitoring. **BASIS:** Coal and CCW constituents are present in the drainage areas, and may also be exposed during demolition of the adjacent powerhouse.
Boron	Semi-annual monitoring. **BASIS:** CCW constituent / coal tracer.
SW007 *Draining a portion of the plant construction staging area north of the combined cycle station. Plant roads with potential for ash-hauling traffic cross the drainage area.*	
Total Suspended Solids (TSS)	Semi-annual monitoring. **BASIS:** Potential pollutant from drainage area and BMP effectiveness indicator.
pH	Semi-annual monitoring. **BASIS:** Pollutant indicator and important to interpreting toxicity potential of metals.
Priority Pollutant Metals Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, and Zn.	Semi-annual monitoring *only if coal or coal ash is transported through this drainage area*. **BASIS:** Coal combustion waste (CCW) constituents may be transported on roads crossing the drainage area.
Boron	Semi-annual monitoring *only if coal or coal ash is transported through this drainage area*. **BASIS:** CCW constituent / coal tracer.
SW008 *Draining a portion of the plant construction staging area north of the combined cycle station.*	
Total Suspended Solids (TSS)	Semi-annual monitoring. **BASIS:** Potential pollutant from drainage area and BMP effectiveness indicator.
pH	Semi-annual monitoring. **BASIS:** Pollutant indicator.
SW009 *Draining the powerhouse, coal yard, switchyard, combustion turbine area, and a portion of the combined cycle plant. Additionally, this large drainage area has the potential for ash-hauling traffic. Re-grading portions of the drainage area is likely. Prior to the initial discharge via new SW009 the permittee must obtain the Division's release to discharge based on the Division's inspection of the outfall structures and contributing drainage areas.*	
Polychlorinated Biphenyls (PCBs)	Semi-annual monitoring; **may be discontinued after all demolition and grading is complete, the areas are stabilized, and two subsequent tests are below detection for the entire new contributing drainage area directed to SW009. BASIS:** Switchyard and powerhouse equipment contained PCBs, which persist in the environment if ever released. Other areas of this large drainage area may be re-graded, potentially exposing contaminated soils. If all PCBs have been removed and past releases cleaned up, these compounds should not be detected. Applicant reports the potential for past PCB discharges from SW002, eventually to be discharged via new outfall SW009.

Proposed Stormwater Discharge Outfall (SDO) Monitoring	
Total Suspended Solids (TSS)	Semi-annual monitoring. **BASIS:** Potential pollutant from drainage area and BMP effectiveness indicator.
pH	Semi-annual monitoring. **BASIS:** Pollutant indicator.
Non-polar Oil & Grease (EPA 1664 SGT-HEM)	Semi-annual monitoring. **BASIS:** Potential pollutant from lubricants; Method 1664 SGT-HEM targets petroleum-based O&G. Applicant reports oil/water separators in the contributing drainage areas.
Priority Pollutant Metals Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, and Zn.	Semi-annual monitoring. **BASIS:** Coal and CCW constituents are present in the drainage areas, and may also be exposed during Powerhouse demolition.
Boron	Semi-annual monitoring. **BASIS:** CCW constituent/ coal tracer
SW010 *Draining the dry ash stacks, the gravel construction staging area, and a substation via a new outfall. Currently runoff from these areas enters the ash basins. This large drainage area will see significant ash removal activities. Permittee may not begin discharging via new SW010 except upon the Division's written release after inspection of the new outfall structures and contributing drainage areas.*	
Polychlorinated Biphenyls (PCBs)	Semi-annual monitoring; **may be discontinued after the first year (two samples) if not detected**. **BASIS:** PCBs persist in the environment if ever released. If all PCBs have been removed and past releases cleaned up, these compounds should not be detected.
Total Suspended Solids (TSS)	Semi-annual monitoring. **BASIS:** Potential pollutant from drainage area and BMP effectiveness indicator.
pH	Semi-annual monitoring. **BASIS:** Pollutant indicator and important to interpreting toxicity potential of metals.
Priority Pollutant Metals Ag, As, Be, Cd, Cr, Cu, Hg, Ni, Pb, Sb, Se, Tl, and Zn.	Semi-annual monitoring. **BASIS:** CCW constituents are present in the drainage area.
Boron	Semi-annual monitoring. **BASIS:** CCW constituent / coal tracer.

STORMWATER BENCHMARKS AND TIERED RESPONSE

Rather than limits, North Carolina NPDES Stormwater permits contain benchmark concentrations. Stormwater benchmarks are numerical action levels for stormwater monitoring. **Benchmarks are not effluent limits, and benchmark exceedances are not permit violations.** Benchmarks provide facilities a tool for assessing the significance of pollutants in stormwater discharges and the effectiveness of best management practices (BMPs). Benchmark concentrations are intended as guidelines for the facility's development and implementation of the Stormwater Pollution Prevention Plan (SPPP).

Benchmark exceedances require the permittee to increase monitoring, increase management actions, increase record keeping, and/or install stormwater BMPs in a tiered program. The permit establishes a tiered approach to specify actions the permittee must take in response to analytical results above benchmark concentrations (Part II, Section B., following Table 11 in the permit). The tiered structure of the permit provides the permittee and NCDEMLR wide flexibility to address issues that may arise with one or more parameters and/or outfalls.

Metals benchmarks are calculated to mimic acute water quality standards and with the guidance of NC's Division of Water Resources (DWR). NC DWR follows established federal procedures for calculating acute standards when developing the benchmarks. Just like the acute standards, metals benchmarks normally reflect one half of the calculated Final Acute Value (the "½ FAV"). In most cases, translation into total recoverable values is based on an assumed hardness of 25 mg/l and a total suspended solids (TSS) concentration of 10 mg/L. Acute standards protect aquatic life from negative impacts of short-term exposure to higher levels of chemicals where the discharge enters a

waterbody. The Stormwater Permitting Program applies this approach because of the ephemeral nature of rainfall events and the associated discharges.

The Division may evaluate results to determine if a smaller suite of parameters for some outfalls is adequate to characterize potential pollution or BMP effectiveness. For example, one or more metals or other parameters may serve as an adequate tracer for the presence of ash pollution during disturbance or ash removal in specific drainage areas at this site. For parameters that do not have a stormwater benchmark, the Division may develop a benchmark value if appropriate toxicity data become available or if rising trends in concentrations suggest a persistent source.

A summary of the benchmarks in the draft permit, and their basis, is below:

Parameter	Benchmark	Basis
Antimony (Sb), mg/L (Total)	0.09	Acute Aquatic Criterion, ½ FAV
Arsenic (As), mg/L (Total)	0.34	Acute Aquatic Criterion, ½ FAV
Beryllium (Be), mg/L (Total)	0.065	Acute Aquatic Criterion, ½ FAV
Cadmium (Cd), mg/L (Total)	0.003	Acute Aquatic Criterion, ½ FAV
Chromium (Cr), mg/L (Total)	0.9	½ FAV, based on (Cr III + Cr VI) acute thresholds and assumption that industrial activities here are not a source of hexavalent chromium.
Copper (Cu), mg/L (Total)	0.010	Acute Aquatic Criterion, ½ FAV
Lead (Pb), mg/L (Total)	0.075	Acute Aquatic Criterion, ½ FAV
Mercury (Hg), ng/L (Total)	N/A	Monitoring only, CCW/Coal Constituent. Hg influenced by regional transport and wet deposition. Values above 12 ng/L (NC WQ standard) should be noted on the DMR but do not trigger Tier Responses.
Nickel (Ni), mg/L (Total)	0.335	Acute Aquatic Criterion, ½ FAV
Polychlorinated biphenyl compounds (PCBs), µg/L	Detected	NC Water Quality Standards vs. present Arochlors quantitation levels (higher than standard)
Selenium (Se), mg/L (Total)	0.056	½ FAV, NC-specific, based on 1986 Study on Se impacts in North Carolina
Silver (Ag), mg/L (Total)	0.0003	Acute Aquatic Criterion, ½ FAV. (The Division notes this value is below the practical quantitation level (PQL) of 1 µg/L of EPA Method 200.8)
Boron (B), mg/L	N/A	Monitoring only, CCW/Coal Constituent. Narrative National Recommended Water Quality Criterion.
Thallium (Tl), mg/L (Total)	N/A	Monitoring Only, CCW/Coal constituent. National Recommended Human Health Criterion.
Zinc (Zn), mg/L (Total)	0.126	Acute Aquatic Criterion, ½ FAV
Total Suspended Solids (TSS), mg/L	100	National Urban Runoff Program (NURP) Study, 1983
Non-Polar Oil & Grease, *EPA Method 1664 (SGT-HEM)*, mg/L	15	Review of other state's daily maximum benchmark concentration for this more targeted O&G; NC WQ Standard that does not allow oil sheen in waters.
pH	6-9	NC Water Quality Standard (Range)

STORMWATER POLLUTION PREVENTION PLAN

The proposed permit conditions reflect the Environmental Protection Agency's (EPA) and North Carolina's pollution prevention approach to stormwater permitting. The Division's maintains that implementation of Best Management Practices (BMPs) and traditional stormwater management practices that control the source of pollutants meets the definition of Best Available Technology (BAT) and Best Conventional Pollutant Control Technology (BCT). The permit conditions are not numeric effluent limitations but are designed to be flexible requirements for implementing site-specific plans to minimize and control pollutants in stormwater discharges associated with the industrial activity. Title 40 Code of Federal Regulations (CFR) §122.44(k)(2) **authorizes the use of BMPs in lieu of numeric effluent limitations in NPDES permits when the agency finds numeric effluent limitations to be infeasible.** The agency may also impose BMP requirements which are "reasonably necessary" to carry out the purposes of the Act under the authority of 40 CFR 122.44(k)(3). The conditions proposed in this draft permit are included under the authority of both of these regulatory provisions. In essence, the pollution prevention and BMP requirements operate as limitations on effluent discharges that reflect the application of BAT/BCT.

Determining specific BMPs that are appropriate for the site and activities are the permittee's responsibility and the permit strives not to limit what BMPs can be used. The permittee should also refer to the BMPs described in both EPA's Multi-Sector Permit (MSGP) and Industrial Stormwater Fact Sheet for Steam Electric Power Generating Facilities (Sector O) for guidance on pollution prevention measures.

MERCURY MONITORING REQUIREMENTS

The proposed permit requires mercury to be measured in stormwater samples by EPA Method 1631E, which can detect levels as low as 0.5 ng/L. This requirement is consistent with recent federal rule-making that requires NPDES permittees to monitor discharges with sufficiently sensitive test procedures approved under 40 CFR §136. Modifications to 40 CFR §122.44(i) require a method that has a minimum level (ML) at or below the effluent limit (not applicable here), or the lowest minimum level (ML) of EPA approved analytical methods for the measured parameter. Based on results, Method 1631E will be required to quantify levels in these discharges. NC DEMLR understands that this method is more costly and requires a more intensive sampling protocol than most other parameters, and that fish tissue sampling will be provided during the permit cycle. Therefore, no benchmark applies that would trigger tiered response actions. Proposed permit provisions also allow the permittee to use field blank and/or method blank concentrations to adjust reported mercury levels as long as documentation is submitted with the Discharge Monitoring Report (DMR).

FLEXIBILITY IN TIER RESPONSES

Tier Two actions (upon two consecutive benchmark exceedances at an outfall) proposed in this draft permit differ slightly from the Program's standard template and includes **step 5**. That step provides an opportunity for the permittee to propose an **alternative monitoring plan for approval** by the Region:

4. *Alternatively,* in lieu of steps 2 and 3, the permittee may, after two consecutive exceedances, exercise the option of contacting the DEMLR Regional Engineer as provided below in Tier Three. The Regional Engineer may direct the response actions on the part of the permittee as provided in Tier Three, including reduced or additional sampling parameters or frequency.

5. If pursuing the alternative above after two consecutive exceedances, the permittee may propose an **alternative monitoring plan** for approval by the Regional Engineer.

The permit therefore allows the permittee to petition the Regional Office for monitoring changes *sooner than* **Tier Three** (upon any four benchmark exceedances) and gives guidance on one option to take. For example, the permitttee may request that mercury only be monitored semi-annually under the tiers, or that only parameters over the benchmark be monitored more frequently. In this way, changes to the monitoring scheme for any outfall could be handled outside of a permit modification.

OTHER PROPOSED REQUIREMENTS

- It is standard for Stormwater Pollution Prevention Plan (SPPP) requirements to include an annual certification that stormwater outfalls have been evaluated for the presence of *non-stormwater* discharges, and if any are identified, how those discharges are permitted or otherwise authorized. The draft permit requires this **facility to submit the first certification to DEMLR no later than 90 days after the effective date of the permit** (Part II, Section A.).
- Requirement to submit a request for permit modification if the facility identifies or creates any new outfalls, removes outfalls, or alters any drainage area that changes potential pollutants.
- Proposed federal regulations will require electronic submittal of all discharge monitoring reports (DMRs). If a state does not establish a system to receive such submittals, then permittees must submit DMRs electronically to the Environmental Protection Agency (EPA). The Division anticipates that these regulations will be adopted and is beginning implementation. Permit provisions addressing this impending requirement is included in Part III, Section B. (General Conditions), 3.e.
- **Quarterly** Qualitative/Visual Monitoring to assure regular observation of outfalls throughout year.

FISH TISSUE MONITORING

Proposed wastewater permit NC0003468 requires fish tissue monitoring for As, Se, and Hg near the ash pond discharge once every five years. The proposed stormwater permit requires the permittee to **submit a copy of monitoring results to the DEMLR Stormwater Permitting Program** (Central Office) within 30 days of receiving results and indicate the location of sampling in relation to stormwater discharge outfalls. *DEMLR is requiring the fish tissue analysis results be submitted separately because the proposed NC0003468 permit does not require submittal to DWR until application for permit renewal.*

PROPOSED SCHEDULE FOR PERMIT ISSUANCE:

Draft Permit to Public Notice: August 3, 2015
Permit Scheduled to Issue: October 1, 2015

STATE CONTACT:

If you have any questions about any of the above information or the attached permit, please contact Ken Pickle at (919) 807-6376 or ken.pickle@ncdenr.gov.

STORMWATER SAMPLING RESULTS FROM DAN RIVER (SUBMITTED AUGUST 2014):

Parameter	Units	SW007	SW008	Not in Supplemental Information[1]	SW004[2]	SW003[2]	SW005	Former NPDES Outfall 009	SW001/ SW002	SW006	Drains to Future Outfall SW010
Oil & Grease	mg/l	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
COD	mg/l	< 20	< 20	23	< 20	< 20	< 20	25	< 20	< 20	23
Cl - Chloride (00940)	mg/l	3.7	< 1	< 1	1.4	3.1	1.5	8.7	14	2.8	12
Fluoride	mg/l	< 1	< 1	< 1	< 1	1	< 1	< 1	< 1	< 1	< 1
SO4 - Sulfate (00945)	mg/l	64	82	2	13	13	13	42	37	49	47
Hg - Mercury (71900)	µg/l	< 0.05	< 0.05	< 0.05	0.16	0.21	0.06	< 0.05	< 0.05	0.25	< 0.05
Al - Aluminum (01105)	mg/l	14.6	8.01	0.275	105	92.9	0.491	0.775	0.541	97.7	2.31
Ba - Barium (01007)	mg/l	0.168	0.115	0.007	0.587	0.563	0.019	0.047	0.074	0.686	0.085
B - Boron (01022)	mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.198	< 0.05	< 0.05	< 0.05
Ca-Calcium	mg/l	13	37.2	1.55	14	17.7	9.19	24.3	22.1	36.3	28.9
Hardness	mg/l ($CaCO_3$)	77.8	125	4.4	141	144	25.7	82.4	69.4	201	93.2
Fe - Iron (01045)	mg/l	25	13.2	0.319	188	162	0.733	3.83	3.86	182	4.32
Mg-Magnesium	mg/l	11	7.8	0.129	25.8	24.3	0.668	5.28	3.44	26.8	5.11
Mn - Manganese (01055)	mg/l	0.71	0.323	0.014	2.37	2.52	0.035	0.541	1.73	2.37	0.618
Zn - Zinc (01092)	mg/l	0.105	0.056	0.301	0.539	0.702	0.691	0.332	0.04	0.652	0.036
Sb - Antimony (01097)	µg/l	< 1	< 1	< 1	< 1	< 1	1.53	< 1	< 1	< 1	< 1
As - Arsenic (01002)	µg/l	1.31	< 1	1.41	3.72	4.99	1.35	32.5	< 1	4.29	< 1
Cd - Cadmium (01027)	µg/l	< 1	< 1	< 1	< 1	< 1	1.85	< 1	< 1	< 1	< 1
Cr - Chromium (01034)	µg/l	41.5	22.7	< 1	130	111	6	154	1.36	127	5.41
Cu - Copper (01042)	µg/l	18.2	15.2	8.26	103	104	75	33.6	2.17	116	5.89
Pb - Lead (01051)	µg/l	11.8	2.74	18.3	66.2	81.8	21.9	4.2	< 1	79.4	1.55
Molybdenum (Mo)	µg/l	< 1	4.23	< 1	< 1	< 1	4.1	14.2	1.72	< 1	2.14
Ni - Nickel (01067)	µg/l	22.4	11.2	< 1	77.4	76.2	2.39	2.61	2.69	74.8	4.26
Se - Selenium (01147)	µg/l	< 1	< 1	6.91	1.99	4.72	10.6	2.96	< 1	6.41	< 1
Tl - Thallium (01059)	µg/l	0.344	< 0.2	< 0.2	0.81	0.892	< 0.2	< 0.2	< 0.2	0.992	< 0.2
TDS - Total Diss. Solids (70300)	mg/l	100	240	< 25	530	810	76	170	140	600	190
TSS-Total Suspended Solids	mg/l	440	310	7	2700	1700	23	31	28	2600	62
pH	s.u.	6.5	6.44	6.77	7.27	7.08	7.35	7.47	7.82	7.37	7.55
Temperature	°C	27.7	27.8	26.7	27.9	29.3	25.8	23.1	27	24.1	25.9
Specific conductance	µS/cm	169	197	18.7	58.5	77.9	78.3	253	193.3	179.7	244

Notes: [1] Roof drain from the retired powerhouse building
[2] SW003, SW004 were obtained from areas undergoing temporary construction