DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WATER QUALITY

FACT SHEET

GENERAL PERMIT NCG050000
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
PERMIT TO DISCHARGE STORMWATER

Permit No. NCG**05**0000 Date: March 1, 2013

1. TYPES OF DISCHARGES COVERED

a. Industrial Activities Covered by this General Permit

Coverage under this general permit is applicable to all owners or operators of stormwater point source discharges associated with activities classified as establishments primarily engaged in activities classified as **Apparel and Other Finished Products Made from Fabrics and Similar Materials** [Standard Industrial Classification (SIC) 23], **Printing Publishing and Allied Industries** [SIC 27], **Converted Paper and Paperboard Products** [SIC 267], **Paperboard Containers and Boxes** [SIC 265], **Miscellaneous Manufacturing Industries** [SIC 39], **Leather and Leather Products** [SIC 31], and **Rubber and Miscellaneous Products** [SIC 30]. Coverage is also applicable to point source discharges **from like industrial activities** deemed by the Division of Water Quality (DWQ) to be similar to these operations in the process, or the discharges, or the exposure of raw materials, intermediate products, by-products, products, or waste products.

Except when DWQ deems activities or discharges to be similar as described above, the following activities are **excluded from coverage** under this General Permit: establishments primarily engaged in **Leather Tanning and Finishing** [SIC 311] or **Tires and Inner Tubes** [SIC 301].

b. Types of Operations Covered

Apparel and Other Finished Products (SIC 23) includes industries primarily involved in manufacturing sewn products from purchased textile fabrics and related materials.

Printing, Publishing, and Allied Industries (SIC 27) includes facilities involved in printing by letterpress, lithography, gravure, or screen. It also includes establishments which perform services for the printing trade, such as bookbinding and platemaking, and facilities which publish newspapers, books, and periodicals.

Paperboard Containers and Boxes (SIC 265), and **Converted Paper and Paperboard Products** (SIC 267) produce a wide variety of paper products from purchased materials. There are two basic groups of manufacturing operation used to produce the final product: "wet" and "dry." The first group of operations modifies and

improves the purchased paper feedstock by operations like coating, impregnating or laminating, and various combinations of those. Because water is typically used in these operations, they are referred to as "wet." The second group of operations produce finished products such as paper bags and boxes by various shaping, cutting, and assembly operations. These are "dry" operations because waster is not used as part of the process.

Miscellaneous Manufacturing Industries (SIC 39) includes a variety of facilities that manufacture miscellaneous products. The major group includes jewelry, musical instruments, toy, and sporting goods manufacturers.

Leather and Leather Products (SIC 31, excluding Leather Tanning and Finishing [SIC 311]) establishments are involved in the manufacture of leather products from purchased leather that has already been treated in the leather tanning and finishing processes. Manufacturing of shoes, luggage, and other leather products are in this group.

Rubber and Miscellaneous Plastics Products (SIC 30) industries make products from manufactured plastic and natural, synthetic, and reclaimed rubber. Plastic molding and forming facilities consist of plants that blend, mold, form, or otherwise process a wide variety of plastic materials into intermediate or final plastic products (SIC 302, 305, 308). Rubber products manufacturing can be divided into molded, extruded, and fabricated products (SIC 302, 305, 308) and tires and inner tubes (SIC 301). Industries engaged in manufacturing tires and inner tubes are excluded from coverage under this general permit.

The majority of industries in these groups generally conduct manufacturing indoors as they are primarily engaged in producing finished goods and products. When viewed as a whole, facilities engaged in producing the above manufactured products will not store raw materials, intermediate products, final products, by-products, waste products, or chemicals outside. Production of significant emissions from stacks or air exhaust systems will not be a factor in the production process. Loading or unloading of chemicals or hazardous substances outside will not normally be an aspect of these facilities, either. The use of un-housed manufacturing and heavy industrial equipment will generally not occur. Also, significant dust or particulate generation will be atypical in the manufacture of these products. However, facilities with significantly more stormwater pollution risk than described by the above characterizations of limited exposure will be required to have an individual stormwater permit, rather than the General Permit, regardless of SIC classification.

c. Characteristics of Discharged Stormwater

The draft renewal permit maintains the requirement for qualitative monitoring of all stormwater discharges associated with industrial activity. No additional analytical monitoring is proposed for this industrial sector.

The draft renewal permit proposes the same parameters be regularly monitored in stormwater discharges from *on-site vehicle and equipment maintenance activities*, except that **Oil and Grease (O&G) has been replaced by** "**Non-polar Oil and Grease by EPA Method 1664 (SGT-HEM)**." This action is consistent with other recently renewed general permits for discharges associated with vehicle maintenance activities (VMA). These parameters continue to be useful as stormwater pollution indicators for VMA from this industrial sector.

DWQ is replacing standard O&G from the previous permit with "Non-polar O&G" by EPA Method 1664 (SGT-HEM). The draft permit specifies EPA Method 1664 <u>with the silica gel treatment (SGT) step</u>, in addition to hexane extraction (not <u>just</u> HEM, which can be used for standard O&G analysis). This gravimetric test method is an alternative **way of estimating Total Petroleum Hydrocarbons (TPH)**, without using the more expensive gas chromatographic analysis. The permit does not require the more elaborate and typically more expensive analysis with gas chromatography. However, DWQ is removing the term "TPH" from the parameter table in favor of "Non-polar O&G" to prevent confusion about which lab tests to run.

The basis of this change is that O&G is composed of fatty matter from animal and vegetable sources <u>and</u> hydrocarbons of petroleum origin. TPH targets the family of chemical compounds that originally come from crude oil such as gasoline, diesel, kerosene, etc., and is better suited to vehicle maintenance activities. A lower benchmark also applies. Instead of the 30 mg/l O&G benchmark, the benchmark is 15 mg/l, which is consistent with other States' benchmarks and/or limits for TPH (see **Appendix A**). We would only expect in discharges associated with significant oil contamination to exceed this benchmark. DWQ also found lab costs for 1664 (SGT-HEM) to be comparable to standard O&G analysis and reasoned the change would not pose a significant burden on permittees (see **Appendix B)**. While the specified analysis is one way of estimating TPH, the draft permit refers to "non-polar O&G" because it is tied to the O&G standard test method.

DWQ reviewed data from these industrial permittees that submitted monitoring data during the previous cycle of NCG050000 (see **Appendix C**). Ten facilities submitted 43 samples to DWQ during the past permit cycle between years 2008-2012 (not many sites have VMA monitoring requirements). See **Appendix C** for reported data information, as well as **Sections 3 and 6** of this fact sheet for discussion and rationale in support of proposed monitoring.

d. Geographic Area(s) Covered by this General Permit

Discharges covered by this general permit are located at any place within the political boundary of the State of North Carolina. Discharges located on the Cherokee Indian Tribal Reservation are subject to permitting by the U.S. Environmental Protection Agency and are not covered by this general permit.

e. Receiving Waters

Receiving waters include all surface waters of North Carolina or municipal separate storm sewer systems conveying stormwater to surface waters.

2. PROPOSED DISCHARGE CONTROLS AND LIMITATIONS

Stormwater Discharges

The renewal permit maintains benchmark concentrations for stormwater discharges from VMA to provide facilities with a tool with which to assess the effectiveness of best management practices (BMPs). These benchmark concentrations are not effluent limits, but provide guidelines for the facility's Stormwater Pollution Prevention Plan (SPPP).

Exceedences of benchmark values require the permittee to increase monitoring, increase management actions, increase record keeping, and/or install stormwater BMPs in a tiered program. Four (4) benchmark exceedences trigger notification to the Regional Office and may prompt additional requirements (Tier Three). This general permit first incorporated stormwater benchmarks and tiered responses in the 2008 renewal.

As discussed in 1.*c.* above, The "Non-polar O&G" benchmark of 15 mg/l replaces the previous O&G benchmark of 30 mg/l (see **Appendix A**).

Some parts of the **Stormwater Pollution Prevention Plan** (SPPP) have been expanded or modified. Please refer to the proposed draft General Permit NCG050000 for those requirements.

3. MONITORING AND REPORTING REQUIREMENTS

This permit specifies monitoring and reporting requirements for both quantitative and qualitative assessment of the stormwater discharges and operational inspections of the entire facility. Specific pollutant parameters and the frequency of the sampling are based on the types of materials used, stored, and transferred at vehicle and equipment maintenance areas (VMA) of these sites, and on the potential for contamination of the stormwater runoff from these facilities. Qualitative parameters are consistent with other general permits in the NPDES stormwater program.

The draft renewal permit proposes specific monitoring requirements for the following parameters for stormwater discharges from vehicle/equipment maintenance areas: **Total Rainfall**, **pH**, **Non-polar Oil and Grease ("Non-polar O&G")** [by EPA Method 1664 (SGT-HEM)], and **Total Suspended Solids (TSS)**, based on the amount of average motor oil usage (more than 55 gallons of new motor oil and/or hydraulic oil per month when averaged over the calendar year). The only change in the suite of parameters is that "Non-polar O&G" replaces standard O&G from the previous permit (see earlier discussion in 1. *c.* of this factsheet). The rationale for retaining these parameters in the renewal permit is

based primarily on their utility as stormwater pollution indicators for vehicle maintenance areas.

The draft permit incorporates a modified definition of what storm event should be sampled. Previous permits required sampling during a "representative storm event." The proposed NCG050000 permit renewal now requires permittees to sample the "**measurable storm event**," a new term for North Carolina stormwater permits. The "measurable storm event" is an event that results in an actual discharge, rather than an event with a rainfall measuring 0.1 inches or more. To qualify as a measurable storm event, the previous storm event must have been at least 72 hours prior. In 2011, the NCG140000 Ready-Mixed Concrete General Permit was the first permit to implement this new storm event definition, and other general permits have since followed suit.

The proposed general permit allows the permittee to forgo sampling if *adverse weather* conditions prevent sample collection (see the **Definitions** section of the draft permit). Inability to sample because of adverse weather conditions must be documented in the SPPP and recorded on the data monitoring forms (DMRs). The proposed draft maintains the requirement to separate semi-annual sampling events by a minimum of 60 days.

As before, the renewal permit specifies qualitative (visual) monitoring of each stormwater outfall for the purpose of evaluating the effectiveness of the Stormwater Pollution Prevention Plan and assessing new sources of stormwater pollution. In cases where vehicle maintenance activities do not trigger analytical monitoring, facilities will only be required to perform semi-annual qualitative monitoring under the proposed renewal permit. Qualitative monitoring parameters include color, odor, clarity, floating and suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. Qualitative monitoring should be performed during any analytic sampling event, if applicable (vehicle or equipment maintenance only).

The draft permit maintains specific direction to the permittee about how to respond to qualitative monitoring. If qualitative monitoring indicates that existing stormwater BMPs are ineffective, or that significant stormwater contamination is present, the permittee must investigate potential causes, evaluate the feasibility of corrective actions, and implement those corrective actions within 60 days. A written record of the permittee's investigation, evaluation, and response actions must be kept in the SPPP. The **Qualitative Monitoring Response** establishes actions for when a permittee repeatedly fails to respond effectively to correct problems, or if the discharge causes or contributes to a water quality standard violation.

4. COMPLIANCE SCHEDULE

The proposed compliance schedule in Part III, Section A was modified to address facilities that are renewing coverage under this new permit. The permittee shall comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

Existing Facilities already operating but applying for permit coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the **Certificate of Coverage** and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this general permit, shall be accomplished within 12 months of the effective date of the issuance of the **Certificate of Coverage**.

New Facilities applying for coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this general permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

Existing facilities previously permitted and applying for renewal under this General Permit: All requirements, conditions, limitations, and controls contained in this permit (except new SPPP elements in this permit renewal) shall become effective immediately upon issuance of the **Certificate of Coverage**. New elements of the Stormwater Pollution Prevention Plan for this permit renewal shall be developed and implemented within 6 months of the effective date of this general permit and updated thereafter on an annual basis. Secondary containment, as specified in Part III, Paragraph 2(b) of this general permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

5. SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE

This draft general permit does not propose any special conditions.

6. BASIS FOR CONTROLS AND LIMITATIONS

Stormwater Discharges

The conditions of this general permit have been designed using best professional judgment to achieve water quality protection through compliance with the technology-based standards of the Clean Water Act (Best Available Technology [BAT] and Best Conventional Pollutant Control Technology [BCT]). Where the Director determines that a water quality violation is occurring and water quality-based controls or effluent limitations are required to protect the receiving waters, coverage under the general permit shall be terminated and an individual permit will be required. Based on a consideration of the appropriate factors for BAT and BCT requirements, and a consideration of the factors discussed below in this fact sheet for controlling pollutants in stormwater discharges associated with the activities as described in Item 1 (Types of Discharge Covered), this permit retains a set of requirements for developing and implementing stormwater pollution prevention plans, and specific requirements for monitoring and reporting on stormwater discharges.

The permit conditions reflect the Environmental Protection Agency's (EPA) and North Carolina's pollution prevention approach to stormwater permitting. The quality of the stormwater discharge associated with an industrial activity will depend on the availability

of pollutant sources. This renewal permit still reflects the Division's position that implementation of Best Management Practices (BMPs) and traditional stormwater management practices which control the source of pollutants meets the definition of BAT and BCT. The permit conditions are not numeric effluent limitations, but rather are designed to be flexible requirements for developing and implementing site specific plans to minimize and control pollutants in the stormwater discharges associated with the industrial activity.

Title 40 Code of Federal Regulations (CFR) Part 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 of the renewal permit are retained under the authority of both of these regulatory provisions. The pollution prevention requirements (BMP requirements) in this permit operate as limitations on effluent discharges that reflect the application of BAT/BCT. The basis is that the BMPs identified require the use of source control technologies which, in the context of these general permits, are the best available of the technologies economically achievable (or the equivalent BCT finding).

All facilities covered by this General Permit must prepare, retain, implement, and (at a minimum of annually) update a Stormwater Pollution Prevention Plan (SPPP). The term "pollution prevention" distinguishes this source reduction approach from traditional pollution control measures that typically rely on end-of-pipe treatment to remove pollutants in the discharges. The plan requirements are based primarily on traditional stormwater management, pollution prevention and BMP concepts, providing a flexible basis for developing site-specific measures to minimize and control the amounts of pollutants that would otherwise contaminate the stormwater runoff.

The pollution prevention approach adopted in the SPPP in this renewal permit still focuses on two major objectives: 1) to identify sources of pollution potentially affecting the quality of stormwater discharges associated with industrial activity from the facility; and 2) to describe and ensure that practices are implemented to minimize and control pollutants in stormwater discharges associated with industrial activity from the facility and to ensure compliance with the terms and conditions of the permit.

The Division believes that it is not appropriate, at this time, to require a single set of effluent limitations or a single design or operational standard for all facilities which discharge stormwater associated with industrial activity. This permit instead establishes a framework for the development and implementation of site-specific stormwater pollution prevention plans. This framework provides the necessary flexibility to address the variable risk for pollutants in stormwater discharges associated with the industrial activities that are addressed by this permit, while ensuring procedures to prevent stormwater pollution at a given facility are appropriate given the processes employed, engineering aspects, functions, costs of controls, location, and age of facility (as discussed in 40 CFR 125.3). This approach allows flexibility to establish controls which can appropriately address different sources of pollutants at different facilities.

The EPA and NPDES States have, on a case-by-case basis, imposed BMP requirements in NPDES permits. The EPA has also continued to review and evaluate case studies involving the use of BMPs and the use of pollution prevention measures associated with spill prevention and containment measures for oil. The development of the NPDES permit application requirements for stormwater discharges associated with industrial activity resulted from the evaluation and identification of the potential contaminants and the resultant water quality impacts of stormwater discharges from industrial sites. Public comments received during the rule making provided additional insight regarding stormwater risk assessment, as well as appropriate pollution prevention and control measures and strategies. During that time EPA again reviewed stormwater control practices and measures. These experiences have shown the Division that pollution prevention measures such as BMPs can be appropriately used and that permits containing BMP requirements can effectively reduce pollutant discharges in a cost-effective manner. BMP requirements are imposed in general permits in lieu of numeric effluent limitations pursuant to 40 CFR 122.44(k)(2).

There has been no significant change to this rationale since the previous General Permit NCG050000.

Stormwater Benchmarks

The proposed **pH benchmark** range is based on N.C. Water Quality Standards in 15A NCAC 02B .0211 and is consistent with other renewed general stormwater permits.

The **"Non-polar O&G" [by EPA Method 1664 (SGT-HEM)] benchmark** of 15.0 mg/l is consistent with other States' benchmarks and/or limits for total petroleum hydrocarbons (TPH) and reflects a value normally only associated with significant oil contamination. Specifying the EPA Method 1664 <u>with the silica gel treatment step</u> (SGT-HEM) in the permit ensures a cost effective way to estimate TPH (as opposed to gas chromatographic analysis) and is discussed earlier in Section 1 *c.* of this fact sheet. See **Appendices A and B** for more information on TPH.

The standard **total suspended solids (TSS) benchmark** of 100 mg/l is based on the median concentration derived from the National Urban Runoff Program (NURP) study in 1983 and serves as a benchmark in most other industrial stormwater permits with TSS monitoring. The lower TSS benchmark for ORW, HQW, trout, and primary nursery area (PNA) waters of 50 mg/l reflects half that standard value and was set to flag potential problems in discharges to waters with much lower water quality standards for TSS concentrations (20 mg/l for HQW and ORW; 10 mg/l for trout and PNA waters).

7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

There are no requested variances or alternatives to required standards. Facilities requesting variances to required standards will not be covered under this General Permit but will instead be required to seek coverage under an individual permit.

8. THE ADMINISTRATIVE RECORD

The administrative record, including application, draft permits, fact sheet, public notice, comments received, and additional information is available by writing to:

Stormwater Permitting Unit
Division of Water Quality
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

The above documents are available for review and copying at:

Archdale Building, 9th Floor
Surface Water Protection Section
Stormwater Permitting Unit
512 N. Salisbury Street
Raleigh, North Carolina

between the hours of 8:00 AM and 5:00 PM Monday through Friday. Copies will be provided at a charge of 10 cents per page.

9. STATE CONTACT

Additional information about the draft permit may be obtained at the above address between the hours of 8:00 AM and 5:00 PM Monday through Friday by contacting: **Bethany Georgoulias** at (919) 807-6372.

10. SCHEDULE OF PERMIT ISSUANCE

Draft Permit Public Notice – **Statewide Notice to publish April 2, 2013;**
Draft available on-line by April 2, 2013;
Comment Period Ends May 2, 2013

Permit Scheduled to Issue – **May 17, 2013;**
Effective June 1, 2013

11. PROCEDURE FOR THE FORMULATION OF FINAL DETERMINATIONS

a. Comment Period

The Division of Water Quality proposes to issue an NPDES General Permit for the above described stormwater discharges subject to the outlined effluent limitations, management practices, and special conditions. These determinations are open to comment from the public.

Interested persons are invited to submit written comments on the permit applications or on the Division of Water Quality's proposed determinations to the following address:

Stormwater Permitting Unit
Division of Water Quality
1617 Mail Service Center
Raleigh, North Carolina 27699-1617
Attn: **Bethany Georgoulias**

All comments received within thirty days following the date of public notice are considered in the formulation of final determinations.

b. Public Meeting

The Director of the Division of Water Quality may hold a public meeting if there is a significant degree of public interest in a proposed permit or group of permits. Public notice of such a meeting will be circulated in newspapers in the geographical area of the discharge and to those on the Division of Water Quality mailing list at least thirty days prior to the meeting.

c. Appeal Hearing

An applicant whose permit is denied, or is granted subject to conditions he deems unacceptable, shall have the right to a hearing before the Commission upon making written demand to the Office of Administrative Hearing within 30 days following issuance or denial of the permit.

d. Issuance of a Permit When no Hearing is Held

If no public meeting or appeal hearing is held, after review of the comments received, and if the Division of Water Quality determinations are substantially unchanged, the permit will be issued and become effective on the first day of the month following the issuance date. This will be the final action of the Division of Water Quality.

If a public meeting or appeal hearing is not held, but there have been substantial changes, public notice of the Division of Water Quality revised determinations will be made. Following a 30-day comment period, the permit will be issued and will become

effective on the first day of the month following the issuance date. This will be the final action of the Division of Water Quality unless a public meeting or appeal hearing is granted.

APPENDIX A

Comparison of Other States' Total Petroleum Hydrocarbon (TPH) Stormwater Benchmarks and/or Limits:

Agency	Media	Benchmark, Limit, Criteria, etc	Value (mg/L)	Notes
CT	groundwater	protection criteria	0.5	EPA Method 418.1
NV	groundwater	discharge limit	1.0	Technology-based limit
VA	groundwater	reporting limit	1.0	Virginia Petroleum Storage Tank Program
KS	groundwater	cleanup standard	0.5	Risk-based standard
TX	groundwater	MCL	1.1	Maximum Contaminant Level
OK	groundwater	MCL	3.0	May require cleanup down to 0.1 mg/L if near well
Tacoma, WA	stormwater	performance goal	10.0	24-hr average
Tacoma, WA	stormwater	performance goal	15.0	Grab sample
WA	stormwater	max daily limit	5.0	Port of Seattle NPDES permit technology-based limit for construction areas; 5.0 mg/L typically used for all construction sites in state; plus no visible sheen non-numerical limit.
WA	stormwater	max daily limit	8.0	Port of Seattle NPDES permit for deicing areas
WA	stormwater	max daily limit	15.0	Port of Seattle NPDES permit for roadways
NJ	stormwater	mo. Ave. limit	10.0	24-hr average, EPA Method 1664A, NJPDES NJ0132721 (hot-mix asphalt plants)
NJ	stormwater	max daily limit	15.0	Grab sample, EPA Method 1664A, NJPDES NJ0132721 (hot-mix asphalt plants)
TX	stormwater	max daily limit	15.0	Grab sample, TPDES permit TXG340000 (petroleum bulk stations and terminals)

APPENDIX B

Comparison of Costs for
O&G/HEM Analysis vs. TPH Analysis Options:

LABORATORY	O&G/HEM	TPH as SGT-HEM	TPH-GRO	TPH-DRO	
	EPA 1664A		SW-846 EPA 8015B		
Environmental Chemists Inc.	$50	$50	$50	$50	
Pace Analytical Services, Inc.	$50	$60	$40	$40	
Microbac Laboratories, Inc.	$55	$55	na	na	
Cameron Testing Services	$45	$60	$43	$43	
Environmental Conservation Laboratories, Inc.	$75	$75	$40	$45	
Water Tech Labs, Inc.	$50	na	$60	$60	
DWQ Lab	$34	na	$87	$87	
Meritech, Inc.	$45	$68	$50	$50	
Charlotte-Mecklenburg Utilities Laboratory	$30	$43	na	na	
					Avg (TPH-GRO + TPH-DRO) cost to capture full range of TPH
Average Cost	**$48**	**$59**	**$53**	**$54**	**$106**
Notes:					
HEM = n-hexane extractable material					
SGT-HEM = silica gel treated n-hexane extractable material					
GRO = gasoline range organics					
DRO = diesel range organics					

APPENDIX C

NCG050000 Reported Data Review

Table 1: Data Reporting Summary 2008-2012

Data Summary for NCG050000, Sample Dates 2008-2012

Total Samples with any reported data: *43* *(fewer O&G and TSS results reported)*

Total Permittees Reporting: *10*

	Values Average Oil & Grease (mg/l)	Maximum Oil & Grease (mg/l)	Average TSS* (mg/l)	Maximum TSS (mg/l)	Minimum pH	Maximum pH	No. O&G Samples	No. TSS Samples	No. pH samples
	6	21.6	97	1500	5	8.88	26	31	43
Current Benchmark	*30*	*30*	*100*	*100*	*6*	*9*	*-*	*-*	*-*

*If outlier max. 1500 mg/l excluded, average TSS was 51 mg/l)