Comment 1. For ease of compliance, the Savannah River Site (SRS) suggests that a flowchart be included in the permit to facilitate compliance decisions. The permit requires navigating between several different sections and is sometimes confusing as to what is actually required. The flowchart could start by determining eligibility for coverage, then determine any appropriate numeric limits, then determine specific benchmarks and other criteria for an industrial sector, and lastly develop a list of submittals required and dates for such.

Response: The Department sees value in a flowchart and may develop one in the future.

Comment 2. SIC codes are referenced throughout. The source of these codes is not referenced until you get to Table D-1 where it is footnoted as, “1 A complete list of SIC Codes (and conversions from the newer North American Industry Classification System” (NAICS)) can be obtained from the Internet at [www.census.gov/epcd/www/naics.html](http://www.census.gov/epcd/www/naics.html).”

The web site enables a user to look up the codes to better determine exactly what activities are covered, the only search that can be performed is on the 2007 and 2002 NAICS codes, not SIC codes. This does not allow a search on the codes listed in this draft permit. Selecting “Concordances” on the left side of the web page enables a download of various conversion tables to convert from NAICS to SIC and vice versa. It appears that the SIC codes date back to 1987. If SCDHEC (and EPA) are going to generate new permits, it is suggested that the SIC codes in the permit be updated to 2007 NAICS codes.

Response: To make potential applicants aware earlier in the permit, a link to an OSHA website listing all of the SIC codes is given in 1.3.1.d.viii. A keyword search is also present on the site if the potential applicant has difficulty in finding their SIC code(s).

The suggested website is given for transition from SIC to NAICS codes and back in the footnote of Table D-1. Most of the regulations pre-date the NAICS code system and, by virtue of this, EPA’s Multi-Sector General Permit (upon which this permit is based) reflects the SIC code system. The Department is following EPA’s format. It is the potential applicant’s responsibility to use the tools provided to give correct SIC code(s).

Comment 3. It is difficult to actually classify outfalls and determine which sectors are applicable and what monitoring will be required. It appears that each outfall must be monitored for not only the parameters of the primary industry but also parameters associated with any co-located industries in the outfall drainage area. It is suggested that SCDHEC provide additional language to allow the correct sectors to be applied to outfalls and determine required sampling and monitoring requirements.

Response: The introductory language for each Sector has been altered to clearly state all industrial activities covered by a Sector that drain to any given outfall shall be monitored per the requirements of those Sectors, regardless of primary or co-located activity status. (e.g. language in 8.A.6) Also the following sentence that is in the introduction of every Sector should help for clarity:
“The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur.”

as well as the following language excerpted from 6.2.1:

“More that one sector may apply to a discharge and all must be addressed in the sampling.”

**Comment 4.** Prothro Adjusted Benchmarks (Generic) - The permit requires hardness adjusted benchmarks. NPDES wastewater protocol also utilizes hardness adjusted limits but also allows for the limits to be further adjusted for dissolved metals criteria. Benchmarks and limits should be adjusted to allow for dissolved metals criteria.

Suggested benchmark language for dissolved metals criteria

“On a case-by-case basis, based upon a minimum of four (4) samples collected from the point-source storm water discharge, the Department may adjust hardness-dependent benchmarks established for a permittee using dissolved metals criteria. Benchmarks will be adjusted using the same methodology established for determining individual NPDES permit limits for hardness-dependent metals.”

**Response:** Fundamentally stormwater and wastewater are different; stormwater is neither consistent in its makeup or persistent in flow unlike typical wastewater discharges. The Prothro memos talk exclusively in terms of wastewater, not stormwater. The metal partitioning concept in sample analysis is the main topic covered by both memos. However SC Reg. 61-9.122.45(c) specifies “All permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of “total recoverable metal” …” Clearly a benchmark is not an effluent limit. The Department, with EPA, Region IV concurrence, is of the opinion a benchmark is a standard or prohibition and all sampling results must be reported as total recoverable.

**Comment 5.** Safety Concerns (Generic) - Safety is of concern during the inspection of outfalls and drainage areas during storm events. Consideration for these concerns should be addressed in the permit allowing for flexibility in the inspection process so as not to jeopardize worker safety.

**Response:** Per EPA’s Fact Sheet for the Multi-Sector General Permit (MSGP), there are several places where safety is expressly mentioned as a concern (i.e. bottom of p. 71) and is reflected in the permit. The Department has continued along that path and fully recognizes the issues and supports EPA’s approach. For example in the introductory language for 6. (Monitoring), the Department has added language to minimize sampling being done at “odd hours” in hopes of eliminating nighttime or similar low light conditions and to avoid only individuals taking samples due to minimal staff on site.

**Comment 6.** Benchmark language for blending with receiving streams

“When choosing the appropriate hardness-dependent benchmarks based upon receiving stream hardness, permittees may petition the Department for additional adjustments to
benchmarks based upon blending with the receiving stream. Such adjustments will be allowed based upon the assimilative capacity of the receiving stream, as determined from background sampling.”

**Response:** See 4. above. SC Reg. 61-68, Sec. C. 10. does allow for the Department’s discretion in applying mixing zones to surface waters. As long as an acutely toxic environment is prevented and other prohibitions are met as specified in SC Reg. 61-68, Sec. C. 10. a. through d., the Department will consider their implementation. Written approval is required before execution.

**Comment 7.** Part 1.1.3 - This part allows for uncontaminated ground water and uncontaminated air conditioner condensate to be discharged from a storm water outfall. There is no definition in Appendix A for uncontaminated ground water or uncontaminated air conditioner condensate. SCDHEC should provide a definition in Appendix A to provide specific guidance as to what constitutes “uncontaminated”.

**Response:** A definition for “uncontaminated” has been added to Appendix A.

**Comment 8.** Part 1.1.4.3.a - The previous permit had language (1.3.A.3) that allowed certain non storm water discharges to occur at a storm water outfall that were covered under another NPDES permit (for example a utility water discharge or vehicle washing general permits). This language has been removed from the IGP. It appears from the text in Part 1.1.4.3.a that written permission from SCDHEC will be required for discharges of non storm water components regardless of other permits being in effect. The language in 1.1.4.3.a should be removed, thus allowing the language in 1.1.2.6 to define the requirement about ‘different NPDES permit’.

**Response:** The allowable non-stormwater discharges under this permit are listed in 1.1.3. The text in 1.1.4.3 specifically references stormwater, either as standalone or as a component of other discharges covered by other NPDES permits. Non-stormwater discharges are not referenced therefore no “written permission” is necessary.

Also language in 2.1.2.10. precludes any non-stormwater discharges that are not covered by an NPDES permit. Again no “written permission” is involved.

**Comment 9.** Part 1.3.1.a.iii - This part states that BMPs must be in place before you can obtain authorization to discharge under this permit. This implies that corrective actions to meet permit requirements must be in place before authorization to discharge will occur. This requirement would make authorization to discharge extremely difficult to obtain. SRS suggests the following language to clarify:

‘Select, design, install, and implement control measures with a reasonable expectation to comply in accordance with Part 2.1 to meet numeric and non-numeric effluent limits’

**Response:** 2.1.4 ii. and 5.1.5.1.b.i.B. states that BMP must be designed and implemented as soon as possible and within one year of this permit’s effective date. It also says these timeframes
may be extended as long as there are valid circumstances and the Department gives written permission to do so. Communication is key.

**Comment 10.** Part 1.3.1.a.v - These parts require that the SWPPP be revised prior to submitting the NOI. Although the permit allows 90 days for submission of the NOI, this requirement still presents a huge undertaking for a very large facility, especially when combined with the other new permit requirements. SRS suggests that additional language be included in the permit to allow for a time extension for this task. Providing a schedule for SWPPP revisions and/or NOI submission based on the number of outfalls would be a great help. This comment is relative to Part 5 also.

**Response:** The Department has extended numerous outreach opportunities including presentations and meetings of various scope with stakeholders. We have also been counseling for a number of months to date to start updating any SWPPP that will still be valid when this permit goes into effect. As of the drafting of this document, the Department plans to issue the IGP in advance of the effective date of January 1, 2011, thereby adding additional days to the 90 allowed by the permit. The language in 1.3.1.a.v. will remain unchanged. Refer to a related comment below in 77.

**Comment 11.** Part 1.5 - The SRS is considered a single entity as far as permitting goes, but it actually consists of approximately 20 individual facilities that are functionally and geographically separate. Clarification should be provided as to whether or not a ‘no exposure exclusion’ may be obtained for a discrete individual facility within a larger entity.

**Response:** SC Reg 61-9 Sec. 122.26 (g) speaks about the No Exposure Certification. Paragraph (3) (ii) says the certifications are available on a “facility-wide basis only.” Also the EPA guidance on the matter (Guidance Manual for Conditional Exclusion from Storm Water Based on ”No Exposure” of Industrial Activities to Storm Water, June 2000) states on page three:

“The exclusion from permitting is available on a facility-wide basis only, not for individual outfalls. Generally, if any exposed industrial materials or activities are found on any portion of a facility, the no exposure exclusion is not available to that facility.”

**Comment 12.** Part 2.1.1.d - This part states “minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches)…” There is confusion regarding infiltrating runoff. It seems that a word has been left out. The following language is suggested to clarify the intent:

“minimizing impervious areas at your facility and maximizing infiltration of infiltrating runoff from onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches)…”

**Response:** Taken in context with the title of the section and the introductory language of 2.1.1, paragraph d. is clear.
Comment 13. Part 2.1.2 - The permit makes statements in several places about meeting non-numeric effluent limits in Part 2.1.2. It is not clear what constitutes “meeting” these limits. These “limits” appear to be BMPs rather than limits. It is unclear whether or not a permittee would have to implement all of them to be in compliance. It is difficult to determine when compliance is being attained. SRS suggests that a definition of “non-numeric limits” be included in Appendix A.

Response: EPA has not issued an effluent limitation guideline in all industrial activities covered by this permit. In those cases where no numerical limits are given, best professional judgment is used to create technology–based controls. Hence a non-numeric effluent limit. Refer to IV. A (p. 34) of EPA’s Fact Sheet for the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity for more background on the process.

Comment 14. Part 2.1.3, Table 2-1 – Last line third column – Says “See Part 8.O.8” and there is no such section in the permit. It should be ‘Part 8.O.7’.

Response: Incorporated

Comment 15. Part 2.2.1.a - Please clarify “applicable water quality standards.” Does this mean the standards for parameters outlined in section 8? For example in Section 8.K.5 Subsector K1 has a list of 10 parameters with corresponding benchmark monitoring concentrations. Is this all of the water quality standards that apply to this sector? The same comment goes for other sectors as well. SCDHEC’s clarification with the term “applicable water quality standards” will allow permittees to know exactly what they are responsible for complying with in each sector.

Response: The water quality standards referenced are in SC Reg. 61-68 and are segregated by waterbody classification. The classifications are given in SC Reg. 61-69. Ephemeral, intermittent, or perennial flow is irrelevant as all are considered Waters of the State and thereby are subject. (SC Reg. 61-68. Sec. C.5.)

The numerical limits in Section 8 of the permit are either benchmarks or effluent limits. While many of these numbers are related to the standards, none actually are water quality standards.

Comment 16. Part 2.2.1.b - Clarification is needed to specify what the applicable water quality standards are being referring to in this section and where they can be found. It is unclear what would constitute an “exceedance of an applicable water quality standard. Compliance should be in stream and not end of pipe. SRS suggests that SCDHEC provide detailed information to clarify which water quality standards apply (e.g, chronic or acute freshwater aquatic life criteria) and whether or not they apply equally to ephemeral and perennial streams.

In addition SRS suggests the following alternative for the 2nd sentence to ensure that it is understood that a discharge must not cause an instream exceedance of a water quality standard, not that the point source itself must meet the water quality standard.

“If at any time you become aware, or SCDHEC determines, that your discharge causes or contributes to an exceedance of applicable water quality standards within the receiving
stream, you must take corrective action as required in Part 3.1 and document the corrective actions as required in Parts 3.4 and 5.4.”

Response: Stormwater compliance is to be met at the “end of the pipe.” Historically this has always been the case. Also see 15. above.

Comment 17. Part 2.2.2.1 - Many permittees may not know how to determine whether or not a receiving waterbody is “impaired”. SRS suggest that DHEC provide references where such information may be located.

Response: The definition in Appendix A would be the starting point. After understanding what constitutes an “impaired waterbody” the web link given at the end of the definition would be the next step. That Bureau of Water page should be enough to determine impairment however, to further assist the regulated community, the Department is developing an online tool. That will be available somewhere around the proposed issuance date of this permit.

Comment 18. Part 3.5 - This part states that the “Department will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations”. This language is unclear regarding SCDHEC’s expectations and could lead to confusion in implementing expected actions. BMPs, by their nature, may not solve a problem on the first attempt. After analyzing a particular BMP’s effect on a discharge, additional BMPs may be required. The permit should have language explaining the intent of SCDHEC in these cases as well as language for paths forward. This comment is also relevant for Part 5.1.4.

Response: This language is similar to that used in documents utilized in the enforcement process. An example of this type language can be found in An Overview of the Administrative Enforcement Process that goes out with all Notices of Alleged Violation from SCDHEC Environmental Quality Control.

Comment 19. Part 4.2 - This part requires that a quarterly visual inspection be performed and documented at each outfall. The part specifies 9 separate items that must be evaluated, but provides no guidance, analytical methods, or criteria for evaluations. These inspections are required to be documented and appropriate actions taken. The section does not provide sufficient information to adequately perform the tasks. SCDHEC should provide additional language to explain the expectations for this section, provide a link to the relevant information, or eliminate the requirement.

Response: The quarterly visual assessments are purely qualitative in nature. Therefore no analytical methods are required. Referencing language in 4.2.1.a:

“These samples are not required to be collected consistent with 40 CFR Part 136 procedures …”

Complete guidance is delineated in 4.2 including how the assessment is performed, what is evaluated, documentation, and corrective action requirements.

Comment 20. Part 4.2.2.a.ii – There are two ii. Renumber this section.
Response: Incorporated

Comment 21. Part 4.3.1.e - This part states that the annual Comprehensive Site Inspection (CSI) must be done for all areas of the facility affected by the requirements in this permit. In the past, select parts of the site and program areas were included in the CSI. This new requirement in the IGP would mean that all outfalls would have to be completely evaluated each year during the CSI, in addition to the quarterly inspections. This will be a huge burden on a large facility that could have in excess of 40 outfalls. SRS suggests that language be included in the permit to allow representative or ‘substantially identical’ outfalls to be selected for the CSI or that all outfalls must be inspected on a rotating 5 year (or a negotiated time period) cycle. This exception can be triggered by certain number of outfalls per facility. For example, it could state that “For facilities with 20 or more outfalls where it is impractical to review every outfall each year, individual outfalls shall be included in a CSI at least once for the life of the permit.” This would ensure that each outfall is inspected during the life of the permit and make the CSI a more reasonable inspection in terms of work load.

Response: The current language is remaining in the permit. If a site is having difficulty completing a CSI, they should contact the Department in order to work something out that is reasonable and agreeable.

Comment 22. Part 5.1.5.2.a - This section lists the five types of monitoring in the permit. One monitoring category is “other monitoring as required by the Department”. Language should be added explaining how, when and why this sampling be would required and communicated to the permittee. Also, an editorial comment – remove the strikethrough in ii.

Response: This is intended to address specific issues on a case-by-case basis. The referenced section (6.2.5) explains the “how, when and why.”

Strikethrough removed.

Comment 23. Part 5.1.5.2.e - This part states that you must document your procedures for inspections in the SWPPP. The implication here is that there needs to be a formal procedure in place for the performance of the inspections. Clarification should be provided as to what is actually required.

Response: The language simply requests the site to specify how it will perform the 3 types of monitoring. The SWPPP will be the document utilized, not the permit. The SWPPP must contain certain elements and this is one that needs to be reiterated from the permit.

Comment 24. 5.1.5.2.f.ii - This part requires that a schedule for inspections be placed in the SWPPP. Inspections are required once per quarter by the permit. That should be adequate for a schedule. The permit also requires that at least one inspection a year take place during a storm event. It would not be possible to prepare a schedule for sampling...
during a storm event. The requirement would open the facility up for constant schedule revisions because of failed inspection events. SRS suggests that this requirement be eliminated or state ‘Schedules, as prescribed by the permit, for conducting inspections’.

Response: The SWPPP is the document that will be utilized to implement the permit’s requirements, not the permit itself. While it seems redundant, the schedule and all other criteria listed in 5.1.5.2. need to be specified in the SWPPP.

Comment 25. Part 5.3 - The availability of the SWPPP is a reasonable requirement for SCDHEC and EPA, but need for availability for the US Fish and Wildlife Service and the National Marine Fisheries Service seems unwarranted. This seems to be a hold over from the Endangered Species section that was eliminated in previous drafts of the IGP. Please remove the references to these to agencies.

Response: Incorporated

Comment 26. Part 5.4.e - This part requires that certain records are required to be maintained with the SWPPP including maintenance and repair records. The sheer volume of maintenance and repair records at a large site would make this unfeasible. SRS suggests that the requirement be eliminated, in lieu of these records being maintained at the facility and available for SCDHEC review during audits.

Response: Paragraph 5.4.e. refers to maintenance and repair records for a site’s stormwater control measures only. Even for “large sites” this should not be onerous. Also separate records do not need to be created explicitly for the SWPPP. Language in 5.1.b allows for referral to outside documents.

Comment 27. Part 5.4.i.(3) - This part specifies that when a facility has a benchmark exceedance, they must document certain information including “a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part 6.2.1.2”. This statement is extremely vague. SRS suggests that SCDHEC include language to elaborate on the concepts for technologically available and economically practicable solutions.

Response: Definitions of best available technology economically achievable (BAT), best conventional pollution control technology (BCT), and best practicable control technology currently available (BPT) have been added to Appendix A and should assist in making this determination. Reference 2.1.2. as well. Because of the far-reaching scope of sites covered by this permit, prescriptive language is impractical, if not impossible. Each site has to make its own decisions based on the industry category that they are in.

Comment 28. Part 6.2.1.1.a - The following phrase should be added at the end of the 1st sentence.
“… applicable to your discharge, except that parameters associated with the primary industrial activity benchmarks do not require monitoring in facility locations where storm water does not come into contact with primary industrial activities.”

Response: See 3. above.

Comment 29. Part 6.1.3.a SRS suggest that SCDHEC delete the 72 hours requirement and use the term "3 days". The contention is that if it rains on Monday, then one can sample a rain event that starts any time on Thursday.

Response: In order to clarify exactly what timeframes are required, the Department has added the language “three 24-hr days” to the permit.

Comment 30. Part 6.1.3.b - This part requires that a facility document the duration of a storm event as well as the total inches of the rain event. Measuring the duration of a storm event would place a great burden on facilities because the only way they could measure the duration would be to install electronic sensing devices, resulting in a significant economic impact to facilities. SRS suggests that the requirement to record the duration of a storm event be removed. Again, SCDHEC should be consistent and use 3 days instead of 72 hours.

Response: See 29. above. A simple rain gauge from a hardware store will suffice for the total inches as will a rough estimate of the length of the storm event. The intent is to characterize the storm event’s intensity. An inch of rain over an hour will have more impact than that same inch over ten hours.

Comment 31. Part 6.2.1.2.b (Note there are two ‘b’s in this section. This comment refers to the second ‘b’. Please correct the numbering) The last sentence refers to ‘two actions above’. It is unclear to which actions it is referring. Please put in the specific reference or detail the requirement.

Response: Language in 6.2.1.3.b. has been added to clarify. The editorial correction has been made as well.

Comment 32. Part 6.2.2.1 Table 6-1 - 1) In the line referring to material storage piles at cement manufacturing facilities, does this include concrete batch plants which produce concrete from cement, but do not manufacture cement? 2) Last line third column – Says “See Part 8.O.8” and there is no such section in the permit. It should be ‘Part 8.O.7’.

Response: The material storage pile reference applies only to cement manufacturing, not concrete batch plants. The editorial correction has been made as well.

Comment 33. Section 6.2.4.1 - The permit does not clarify what benchmarks/limits would be imposed on a permittee discharging into impaired waters. As an example, would a permittee with galvanized fencing on his/her property have to monitor for zinc if the receiving stream was impaired for zinc? The associated limits are based upon the waste load allocation available for zinc that is established within the TMDL developed for the
receiving stream. Limits should not be required for permittees discharging in to impaired waters that have not yet had a TMDL established.

**Response:** In the Department’s best professional judgment, galvanized fencing would not cause a water quality standard violation.

**Comment 34.** Part 8.A.6 - Sector-Specific Benchmarks, and equivalent parts for each of the other subsectors: The wording here is a little confusing. Below is proposed substitution language.

Table 8.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply if your primary industrial activity or any co-located industrial activities is/are identified by the SIC Codes specified under Sector A in Table D-1 of Appendix D of the permit.

Alternately: Table 8.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply if the subsectors of Sector A are either your primary industrial activity or co-located industrial activities.

**Response:** The language that precedes each Sector’s table for benchmark limits (if applicable) has been altered to reflect that all industrial activities characterized at any given outfall must be sampled whether it is the primary or co-located industrial activity. For example reference the excerpt below:

*8.A.6 Sector-Specific Benchmarks*

Table 8.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

**Comment 35.** Part 8. Subpart J – Sector J It is unclear what is being referenced here – “[Reserved. See SCG730000.]” What is SCG730000? Some of the other sections only say [Reserved].

**Response:** This is the NPDES general permit for non-metallic mineral mining. Sector J in the MSGP would have covered this type of industrial activity but, since the Department has a stand-alone general permit for the activity, it will be the applicable permit. The name of the permit has been added to further clarify.

**Comment 36.** The terms “Tier 2, Tier 2.5, and Tier 3” are only found in the Definitions of the permit. Suggest removal or inclusion in the body of the permit.

**Response:** The terms have been removed from the Definitions section as they were artifacts from EPA’s MSGP.

**Comment 37.** Part 2.1.2.4.d makes numerous references to existing requirements contained within spill reporting regulations. There is no clear benefit of placing existing regulatory
requirements into this permit. This section should be removed since a permittee who fails to report a spill could be in jeopardy of violating both spill reporting requirements and IGP requirements.

Response: Spill prevention and control is not a new requirement for this permit. It has been an integral element of the industrial stormwater general permit for a long time (see 3.4.C.3 of the expired permit). The fact the language makes reference to certain elements of “existing regulatory requirements” is simply there for reinforcement, not to “pile on” from an enforcement standpoint.

Comment 38. Part 2.1.2.10 could be misunderstood to require the discharge of nothing other than industrial stormwater from a permitted outfall. Rather, this section is intended to require that all non-stormwater discharges released from a stormwater outfall be covered by a separate NPDES permit. A clearer way to state the requirement might be “Non-stormwater discharges may be released from an industrial stormwater outfall only if they are covered by a separate stormwater permit”.

Response: The language is clear. Non-stormwater discharges not covered by some other NPDES permit are not allowed. 1.1.4.3 compliments this. The proposed language contradicts the concept of allowable non-stormwater discharges as these are indeed discharges that are not stormwater in origin yet are allowed under this permit.

Comment 39. Part 2.2 requires that permittees meet “applicable” water quality standards. However, it does not specify what standards are “applicable”. Presumably, the applicable standards are those defined in each sector designation and found in R.61-68. In addition it is presumed that they apply in the receiving stream. This clarification should be added to prevent a misreading that standards must be attained at the end of pipe.

Response: See 15. above. Compliance should be met at end of pipe. Historically this has been the case and will not change for this iteration of the permit.

Comment 40. Part 4.1.1 Routine Facility Inspection Procedures. This section requires that the inspections be performed during periods when the facility is in operation. In general, smaller and less efficient electrical generating stations are used to meet peak electrical load conditions which most often occur in the hottest and coldest times of the year. As such, there may be extended time periods when these type facilities are not operated. For example, in 2009, there were some generating stations of a one of SC utilities that did not operated from March 24th through June 10th, or from August 31st through December 30th. In 2009, other coal fired units within the same organization did not operate from March 6th through July 8th, or from July 19th through December 10th. Although this section allows a quarterly inspection frequency, Part 8.0.6 requires that that the vast majority of a steam electric site be inspected monthly. As the data shows, this requirement can not be met at such electrical generating stations (and possibly not at some other type industrial facilities as well).
These type facilities must be ready to operate in emergency situations and during other non-scheduled periods, and as such, are always active and staffed; thus the “inactive and unstaffed” exception allowed in Part 4.1.3 can not be utilized. Therefore, it is requested that a Section “c” be added to Part 4.1.3 to provide an exception for these type situations. References to this new Section may be needed in Part 5.1.5.2 and Part 5.4. Please note that this is a request to allow a required inspection to be conducted during non-operating periods, not a request to forego an inspection.

**Response:** See a related comment/response in 21. above. Stand-by or extended ”at ready” status of a site is still an operational state. Therefore the language will not change.

**Comment 41.** Part 6.1.3 – Measurable Storm Events - The term “measurable storm event” is described in this section; however, the term is different than that used by EPA in their 2008 MSGP. EPA eliminated both the 0.1 inch rainfall and 72 hour (three day) storm interval restrictions. SCDEHC did eliminate the 0.1 inch of precipitation, but kept the 72 hour interval. SCDEHC should be consistent with EPA.

**Response:** EPA’s MSGP has the 72 hour criteria as does the Department’s draft IGP. Both are consistent. The reasoning for dropping the 0.1 inch threshold is highly impervious sites can have discharges at less than that amount. Many of those discharges are also viable for sampling, increasing the opportunities to sample while meeting the requirements of the permit.

**Comment 42.** Part 6.1.7 - In Section “b”, the year should be “2010” instead of “20010”.

**Response:** Incorporated

**Comment 43.** Part 6.2.4.1 establishes requirements for industrial stormwater discharges into impaired waters. It does not, however, clarify what limits apply. For impaired waters where TMDLs have been established, limits should be based upon the load allocation. For impaired waters where a TMDL has not yet been established, limits should not be required. To do otherwise would supersede the TMDL process and could require permittees to meet limits that are more stringent than necessary. For example, a permittee might install an expensive BMP to meet a water quality standard associated with a particular receiving water; only to see the water removed from the impaired waters list after subsequent sampling indicated it wasn’t actually impaired. ETC and SCMA request clarification of this section as to whether or when limits or benchmarks would apply.

In addition, this part requires facilities to monitor for all pollutants for which the water body is impaired, except for parameters that are clearly defined as pollutants that do not require monitoring. If a water body was impaired for fecal coliform, then according to the current language the facility would be required to sample for fecal coliform, even if the facility sends all of their sanitary water to a POTW.

It does not make sense to require a facility to monitor for a pollutant that is being discharged to a POTW rather than to an outfall. This pollutant should be identified as an exception provided the facility is discharging all of their sanitary water to a POTW.
Therefore, ETC and SCMA proposes the following language:

6.2.4.1.g Permittees Required to Monitor Discharges to Impaired Waters

If the pollutant for which the water body is impaired is fecal coliform, you are not required to monitor, if all sanitary water is discharged to a POTW.

Response: Stormwater runoff from industrial facilities covered by this permit are subject to the Waste Load Allocation found in the TMDL. The pollutant reduction varies from TMDL to TMDL. This is typically in the form of a percent reduction in the pollutant, as opposed to a strict numeric effluent limit. This percent reduction is not an effluent limit or a benchmark, but a reduction in pollutant load going to the waterbody for which the TMDL has been developed.

As for discharges to waterbodies included on the 303(d) List, SC Reg.61-9.122.44(d)(1) requires the Department to include conditions necessary to insure that discharges to impaired waters do “have the reasonable potential to cause, or contribute to an excursion above any State water quality standard.” Therefore, facilities must control their discharges to the waterbody, regardless of the potential for that waterbody to be removed from the 303(d) List at a later date.

Comment 44. Section 1.1.4.7(a.) – We propose changing the word “prevent” in this paragraph to “prevent and/or minimize and control”. The primary impact to the receiving water is whether the pollutant is detected at the discharge from the site. A new discharger should not be precluded from locating in South Carolina and beginning operation if its type of operations do not allow for preventing exposure based on a strict reading of this section.

Response: The intent of the language is not to preclude potential industry from locating in South Carolina. A discharger can always get individual NPDES coverage. Also note the language in 1.1.4.7 for paragraphs a. through c. contains an “or,” meaning only one set of criteria must be met. If paragraph a. is not agreeable, a potential permittee can pursue either b. or c. As long as one is met, the, requirement is satisfied. Also note SC Reg. 61-9.122.4(i) imposes a similar prohibition.

Comment 45. Section 1.3.1, Table 1-2 and Permit Fact Sheet – The Permit Fact Sheet states that coverage under the permit begins 17 days after postmark, and Table 1-2 of Part 1.3.1 states that coverage begins 17 days after receipt by SC DHEC. Please clarify which time frame is the intended coverage period on either the Permit Fact Sheet or in Table 1-2 of Part 1.3.1.

For new facilities as described in Table 1-2, the agency should also clarify that stormwater discharges within the 17 day period (after the effective date of the permit but before the owner/operator receives coverage) are authorized.

Response: The Fact Sheet has been corrected to agree with the permit. The 17-day period assumes an administratively and technically complete NOI submittal and no other further
extenuating circumstances. Reference the footnote under Table 1-2. Also note coverage officially occurs when the Department responds in writing granting coverage.

**Comment 46.** While “minimizing exposure” would appear to include considerations of engineering practicality in determining the best management measures for minimizing mobilization and discharge of storm water pollutants, this section would appear to only allow covering of all manufacturing, processing and materials storage areas, locating such areas inside, or preventing discharges from those areas. For large storage areas of materials such as wood wastes, these three options would preclude the traditional use of accepted best management practices (BMPs) to minimize and control the discharge of potential pollutants. We propose modifying the first sentence in this paragraph as follows:

You must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm resistant coverings (although significant enlargement of impervious surface area is not recommended), or providing a combination of accepted best management practices (which may include covering, locating materials inside and/or structural/non-structural controls) to manage runoff and control pollutant exposure and discharge.

**Response:** A definition for “minimize” has been added to Appendix A making additional language unnecessary.

**Comment 47. Section 2.2.2.3** - Several provisions of the new permit (e.g. proposed permit § 2.2.2.3) make a distinction between compliance obligations for “existing dischargers” and “new dischargers.” The definition of new discharger is triggered by a source receiving a finally effective NPDES permit for discharges from that site. The SC DHEC should clarify whether a facility would be considered a new discharger if it had only received a construction stormwater permit and had no other NPDES permit prior to the effective date of the new permit.

**Response:** The definition given in Appendix A for “new discharger” has been changed to mimic the definition of “existing discharger” in order to make the issue moot and to gain consistency.

**Comment 48. Section 3.3** – The requirement to document the discovery of conditions in Parts 3.1 and 3.2 within 24 hours may present a problem for conditions occurring on holiday, weekends or at sites staffed only by security guards during certain operating conditions. We propose replacing “24 hours” with “by the end of the next business day.” Additionally, the requirement to document a corrective action report in 14 days outlining the course of action may prove difficult for certain circumstances in which evaluation, inspection, hiring outside consultants, etc. may be required. We propose to replace “14 days” with “30 days” and modify section 3.3 as follows:
You must document your discovery of any of the conditions listed in Parts 3.1 and 3.2 by the end of the next business day of making such discovery. Subsequently, within 30 days of such discovery, you must document any corrective action(s) to be taken, or establish a suitable corrective action schedule as allowed in Part 3.4, to eliminate or further investigate the deficiency, or if no corrective action is needed, the basis for that determination. Specific documentation required by the end of the next business day and 30 days is detailed in Part 3.4. If you determine that changes are necessary following your review, any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event. These time intervals are not grace periods, but are schedules considered reasonable for documenting your findings and for making repairs and improvements. They are included in this permit to ensure that the conditions prompting the need for these repairs and improvements are not allowed to persist indefinitely.

Response: The language has been modified as requested in 3.3 and 3.4 to accommodate the extenuating circumstances mentioned in the comment. The 14-day timeframe will stay. The Department feels this is sufficient time to form a solution to any deficiencies. Note this is not a timeframe to implement these actions, merely a time to document any proposed solutions, if any. Specifically: “If you determine that changes are necessary following your review, any modifications to your control measures must be made before the next storm event if possible, or as soon as practicable following that storm event.”

Comment 49. Section 3.4 – Modify “24 hours” and “14 days” to “by the end of the next business day” and “30 days”, respectively.

Response: See 48. above.

Comment 50. Section 4.2.3 – We propose adding a section (d) entitled “Normal Business Hours”. This section would allow sampling only during normal business hours for operations and businesses that may only have limited hours of operation, may have few employees, and may be remotely located and not have employees that live nearby and can reach the site when a measurable storm event occurs. Other states, such as Washington, have included this provision in the general storm water permit (Section S4 A.). The proposed language for this section would read as follows:

The Permittee is not required to sample outside of regular business hours as documented in their SWPPP.

Response: Taking that concept and expanding it to all monitoring covered by the permit, the introductory language in 6. (Monitoring) has been modified. A reference to this language is placed in 4.2.1.

Comment 51. Section 5.1.5.1 b)(i)(A) - We request that SC DHEC provide an example “interim report” or an example form containing the information that SC DHEC is requesting in this part.
Response: The Department takes this under advisement and will develop as resources allow. However, a format for this report is not necessarily required. As long as the report describes how the site is meeting or will meet all applicable effluent limitations, it will suffice.

Comment 52. Section 5.3 – This section states that EPA provides access to portions of the Storm Water Pollution Prevention Plan (SWPPP) to a member of the public upon request. We propose this be changed to “SC DHEC” (South Carolina Department of Health and Environmental Control).

Additionally, we believe this section should be clarified such that the SWPPP should be provided within a reasonable time frame “upon request” since written correspondence and personnel presence at the facility may not always reasonably allow an immediate response. Accordingly, we propose the following changes to the end of the first sentence in this section:

…..at the time of the onsite inspection, or within 10 business days of receipt of a written request from SC DHEC.

Response: The language has been changed to “the Department” instead of EPA for all but the last sentence referring to Confidential Business Information. The SWPPP availability language will not change. The contents of a SWPPP should be readily available on site and the Department should have reasonably easy access. If the SWPPP is not readily available for personnel on site (and hence the Department), then compliance with its contents are immediately under question.

Comment 53. Section 6.1.6 – We propose adding a section 6.1.6 entitled “Normal Business Hours”. This section would allow sampling only during normal business hours for small operations and small businesses that may only have limited hours of operation, may have few employees, and may be remotely located and not have employees that live nearby and can reach the site when a measurable storm event occurs. Other states, such as Washington, have included this provision in the general storm water permit (Section S4 A.). The proposed language for this section would read as follows:

The Permittee is not required to sample outside of regular business hours as documented in their SWPPP.

Response: See 50. above.

Comment 54. Section 6.2.1.2 b.(i) – Since necessary modifications and additional controls may require additional design and construction, and cannot always be practically implemented immediately, we propose this paragraph be changed as follows:

Make the necessary modifications and continue quarterly monitoring until you have completed 4 additional quarters of monitoring for which the average does not exceed the benchmark. If modifications or additional BMPs are required that may require additional design and construction, establish a schedule in your SWPPP that is
reasonable for the implementation of such modifications (but no longer than 12 months). Begin the next 4 additional quarters of monitoring following implementation of such measures starting with the next full quarter; or

Response: The benchmark monitoring should continue during the modification and/or addition of BMP. Refer to p. 111 of EPA’s MSGP Fact Sheet for discussion.

Comment 55. Section 8.A.6 – The total zinc benchmarks proposed in this section are based on EPA values established in their 2008 MSGP and reflect an analysis of data from areas in different sections of the nation in which conditions and sources of zinc may vary considerably. For example, zinc in storm water is known to be influenced by air deposition. South Carolina is positioned to receive substantial deposition from air emissions across the southern part of the nation. We propose that the zinc benchmarks be eliminated for this 5 year issuance of the permit, and instead, a monitoring requirement only be required. Such monitoring information could be submitted to SC DHEC in reviewing the appropriate benchmarks for the next 5 year term of the permit. Establishing benchmarks which may be too low and inappropriate for South Carolina conditions may necessitate unnecessary investments in added structural BMPs that may not provide measurable environmental benefits.

Response: If a certain benchmark value appears to be too low, then the values obtained from monitoring across the state when the IGP is issued will demonstrate this. Adjustments can be made at the next renewal. Keep in mind there are natural background (6.2.1.2.c.) and “no further pollutant reductions” (6.2.1.2.b.ii.) available if compliance with the benchmark is not met. See a related comment in 90. below.

Comment 56. The level of detailed information contained in the proposed Industrial General Permit (IGP) is much greater than before. While this may be beneficial to the regulated community, there are numerous examples throughout the proposed IGP where the language used is more of a guiding nature or refers to a guidance document or website rather than a constituting a strict requirement. See, for example, Part 2.1.1 Control Measure Selection and Design Consideration, and Part 2.1.2.5 Recommendations for Erosion and Sediment Controls. While Alcoa Mt. Holly appreciates the guidance, it is not clear how the adherence to guidance will be viewed when related to compliance with this permit.

We believe that further clarification is needed on how the Department intends to address this issue. We also believe that the Department should make a definitive statement in the permit that the Department will utilize EPA's interpretation and guidance of the federal MSGP requirements and conditions that are the same as the IGP requirements and conditions to the maximum extent possible; with the exception of where South Carolina regulation or law requires a differing interpretation. EPA has nearly 14 years of experience with the MSGP format, including two permit renewal cycles, and the Department should use EPA's experience and not "reinvent the wheel"; especially with their acknowledgement that agency storm water personnel and budgets are already constrained.
Response: The cited language is verbatim from EPA’s 2008 MSGP therefore, the Department has utilized EPA’s guidance.

Comment 57. Part 2.1.2.5 - There are two concerns in this part. The first concern is that the terms "stabilize" and "exposed areas" are unclear because these terms can be subjective and can be interpreted in many ways. One inspector may think that an area is stable while another inspector may think that the same area has erosion issues. This section is located under Part 2.1.2, Non-numeric effluent limits; therefore, it is important that permittees have a clear understanding of the expectation for complying with this discharge limit. The proposed language below uses the word "minimize", which has been defined in Part 2. Control Measures and Effluent Limits. Because this term has been clearly defined, we believe that the addition of "minimize" to this part makes the expectation for compliance with this part much more clear.

The second concern in this Part is that the language, "In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with U.S. EPA's internet-based resources relating to BMP for erosion and sedimentation, including the sector specific Industrial Stormwater Fact Sheet Series, (www.epagov/npdeslstormwater/msgp), National Menu of Stormwater BMPs (www.epa.gov/npdeslstormwater/menuotbmps), and National Management Measures to Control Nonpoint Source Pollution from Urban Areas (www.epa.gov/owow/nps/urbanmmindex.html), and any similar State or Tribal publications," is a recommendation from The Department. As mentioned in the first comment, guidance language should not be shown in the permit. This language is helpful; however, the permit should be used to relay strict requirements rather than suggested language that could be confused as an enforceable permit condition.

You must minimize exposed areas which contribute to stormwater pollution by stabilizing exposed areas which contribute to stormwater pollution and managing runoff using structural and/or nonstructural control measures to minimize onsite erosion and sedimentation and the resulting discharge of pollutants. Among other actions you must take to meet this limit, you must place flow velocity-dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants."

Response: Guidance is useful at that point in the permit and will stay.

Comment 58. Part 4.2.3.c.i. - This section allows the permute to identify outfalls which have substantially identical effluent discharges, but it requires the permute to conduct a visual assessment of the discharges from each of the substantially identical outfalls, on a rotating basis. The substantially identical outfall condition in the 2005 IGP does not require sampling or monitoring at all outfalls on a rotating basis. This condition in the 2005 IGP permit allows the permute to select the substantially identical outfall that flows more often in response to precipitation, is easier and safer for sampling, and allows the permute to avoid the burden of sampling at other, more difficult to sample, substantially identical outfall(s) that may not have flow except in the most extreme cases. The addition of the requirement to assess all substantially identical outfalls on a rotating basis is a tremendous burden for facilities many outfall, particularly in those areas that are located...
in hard to sample locations. We believe that the language requiring sampling on a rotating basis should be removed.

Proposed Language:

"If your facility has two or more outfalls that you believe discharge substantially identical effluents, as documented in Part 5.1.5.2, you may conduct quarterly visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s)."

Response: Quoting from EPA’s Fact Sheet for the 2008 MSGP, p. 73:

“EPA also received several comments expressing concern about the difficulty of trying to perform visual assessments of multiple outfalls. While EPA still believes it is appropriate to assess each unique outfall quarterly, EPA did modify the frequency of these assessments for substantially identical outfalls from at least annually for each outfall to “a rotating basis over the course of the permit.” EPA also clarified in the final permit that if stormwater contamination is identified through visual monitoring, the permittee must assess and modify control measures for each substantially identical outfall represented by the one assessed outfall.”

The Department fully agrees with this approach and feels it is appropriate to assess each outfall at least once during the permit term.

Comment 59. Part 4.2.3. - This part currently lists three types of exceptions to water quality visual assessments, including, adverse weather conditions, inactive and unstaffed sites, and substantially identical outfalls. The exception, Alternative Certification, which is in Part 5.2.G in the current 2005 IGP, is not listed as an exception in this part. The Alternative Certification exception allows facilities to identify outfalls that do not have runoff from industrial activities, provided the responsible official signs a certification statement indicating that there will be no industrial activities occurring in the drainage area to the identified outfall for the next year. Once an outfall has been designated as an outfall with an Alternative Certification, the outfall is not required to be assessed or monitored. By not including the Alternative Certification exception in this part, facilities will be required to take on the burden of monitoring discharge from these areas.

For example, Alcoa Mt. Holly facility currently has two outfalls that are certified annually under the Alternative Certification. These outfalls discharge stormwater that runs off the site from large grassed areas, where industrial operations do not occur. Collecting a sample for quarterly visual assessments could be especially burdensome at these two outfalls because the grassy fields absorb most of the stormwater runoff, making sample collection very difficult. The recommendation for this part is to add a fourth exception, Part 4.2.3.d. The language below is proposed for this new section.

Proposed Language:

“The requirement for quarterly visual assessment does not apply for outfalls that discharge runoff from areas where there are no material handling equipment or activities, raw materials, intermediate products, final products, waste materials, by-
products, industrial machinery or operations, significant materials from past industrial activity, or in the case of airports, deicing activities, provided the discharger makes a certification for a given outfall, on an annual basis, under penalty of law, signed in accordance with R.61-9.122.22 and 41(k).

Response: In your example, the outfalls are not covered by the IGP as they do not contain stormwater from industrial activities (see the definition of “Storm Water Discharges Associated with Industrial Activity” in Appendix A). Therefore the issue of alternative certification is moot and the proposed language is unnecessary.

The concept of the alternative certification is largely superceded by the monitoring and inspections required in the IGP, particularly 5.2.G.2. The monitoring and inspections allow for a stoppage of themselves if certain thresholds are met and/or situations occur, in effect achieving the same goal as the certification.

Comment 60. Part 5.3.a. - In order for facilities to identify CBI in the SWPPP, the Department will need to identify the items that can qualify, and the items that can not quality as CBI. The Department should include reference to the appropriate Federal and South Carolina requirements pertaining to CBI in the permit.

Response: For general information on confidential information, refer to 40 CFR 2.203. The Department has a process to handle information deemed confidential in nature including keeping it under “lock and key” and strict personnel handling procedures. If there is ever a question on whether information deemed confidential is in fact confidential, our Bureau of Water staff and/or our Freedom of Information office will contact you or is available for reference.

Comment 61. This part requires facilities to monitor for all pollutants for which the water body is impaired, except for parameters that are clearly defined as pollutants that do not require monitoring. For example Part 6.2.4.1.e says "no monitoring is required when a water body's impairment is related to hydraulic modification, impaired hydrology, or temperature." If a water body was impaired for fecal coliform, then according to the current language the facility would be required to sample for fecal coliform, even if the facility sends all of their sanitary water to a POTW.

It does not make sense to require a facility to monitor for a pollutant that is being discharged to a POTW rather than to an outfall. This pollutant should be identified as an exception in a new part, provided the facility is discharging all of their sanitary water to a POTW. To address this issue, there should be new section, Part 6.2.4.1.g, which should added to provide an exemption for sampling for fecal coliform, provided that the facility discharges to the POTW and determines there are no unauthorized discharges.

Proposed Language

6.2.4.1.g

If the pollutant for which the water body is impaired is fecal coliform, you are not required to monitor if all of the sanitary water is discharged to a POTW, and if the facility determines in the Non-Stormwater Discharge Evaluation (Part 5.1.3.4) that there
are no unauthorized discharges.

Response: There can be less obvious sources of fecal coliform on any given site that end up in discharges outside of those directly to a POTW (i.e. vermin or other wildlife, trash areas). There are also “outs” for impaired waterbody monitoring in 6.2.4.2 that involve natural background or data that prove the pollutant(s) of impairment are not present in a site’s discharges.

Comment 62. Part 8.F.4 - As currently written, the first sentence of this part appears to require two separate inspections of the air pollution control equipment within the same timeframe, one as a part of quarterly routine facility inspections under the proposed permit, and the second in conjunction with any inspections required by air quality permits.

Conducting two duplicative inspections is overly burdensome for larger facilities with extensive air pollution control systems. For example, Alcoa Mt. Holly is currently performing monthly routine inspections of over 80 pieces of air pollution control equipment to comply with its air quality permit. Adding an additional inspection requirement of the same equipment that looks for similar issues is overly burdensome. Facilities should have the flexibility to use existing inspections programs and records, of air pollution control equipment to satisfy the additional inspection requirements of Part 8.FA, provided the existing inspections are completed at least at the frequency specified by this section, and address the required elements of the inspections specified by this section.

Proposed Language

"As part of conducting your quarterly routine facility inspections (Part 4.1) or in conjunction with air quality permit inspections that are completed at least quarterly address all potential sources of stormwater pollutants, including (if applicable) air pollution control equipment (e.g. baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g. leaks, corrosion, or improper operation) that could contribute to stormwater pollution. Also inspect all process and material handling equipment (e.g. conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material- and material storage areas (e.g. piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

Response: The suggested language has been cosmetically edited and adopted into the permit with the addition of “and/or” in place of the suggested “or” to give maximum flexibility.

Comment 63. Part 8.0.6 - This section requires that certain areas at electrical generating stations be inspected monthly. However, it states and refers to Part 4.3 - Comprehensive Site Compliance Inspection. Since the Comprehensive Site Compliance Inspection is required to be conducted annually, it would appear that this section was intended to refer to Part 4.1 Routine Facility Inspections.

Response: The language has been changed to reference 4.1 and 4.3, since the monthly inspections can occur at any time during either routine and/or comprehensive site inspections.

Comment 64. Part 7.1 - The first sentence of Section i, Part 6.2.5 is referenced as "effluent
limitations corrective actions”; however, the title of Part 6.2.5 is *Additional Monitoring Required by the Department*. Also, under Section ii, the dates will need to be adjusted to correspond with the effective date.

**Response:** The language in parentheses has been removed and the dates corrected.

**Comment 65.** Sector L - Landfills, Land Application Sites, and Open Dumps.

The term "direct contact with the waste" is used in several sections concerning wash water and storm water from trucks and equipment, but no definition of the term is provided. Temporarily exposed waste streams, such as ash or gypsum, in landfills are commonly driven on by vehicles other than the trucks and equipment that are actually used to haul, compact, or otherwise work directly with the waste stream. Examples would include vehicles used by inspectors or water trucks. Based on the present language, discharge of storm water and wash water from the exterior of such vehicles and equipment could be interpreted to be prohibited, or be required to be treated and disposed of under another permit. It is recommended that the definitions be clarified such that the term "direct contact with the waste" is applied only to trucks and equipment that are actually used to haul, compact, or otherwise work directly with the waste being landfilled or applied. It should be clear that the discharge of storm water and wash water from the exterior of vehicles and other equipment that come into only "casual contact" with the waste and/or dust is allowed under this permit.

**Response:** A definition is not needed since the only vehicles coming into direct contact with the waste should be amongst the waste. All others will either be driving around on various stages cover or in areas outside of the waste cells. If they do contact the waste directly and are washed, the effluent is clearly not allowed by this NPDES permit. The categorization of casual vs. regular contact is extraneous.

**Comment 66.** Spartanburg Water appreciates the opportunity to share its concerns and comments associated with the proposed IGP. Spartanburg Water currently owns and operates 6 wastewater treatment facilities that are located throughout Spartanburg County that will require coverage under Sector T - Treatment Works of the (GP. The requirement to conduct quarterly benchmark monitoring of Fecal Coliform at each outfall of each plant will create an operational and financial challenge for Spartanburg Water due to the following:

- None of the facilities have staff on-site 24 hours per day, but the facilities do not qualify for the inactive and unstaffed exception.

- It can take 30 minutes to travel to some of the sites therefore making it nearly impossible to fulfill the requirement of 6.1.4 of the permit where a sample should be taken within 30 minutes of an initial discharge.

- Spartanburg Water will have to dedicate staff, which is already limited, to focus on stormwater sampling; or contract someone from outside the company to perform the sampling. Both alternatives would require additional financial resources to be dedicated to fulfilling the requirements of the permit.

**Response:** See 50. above for the first bullet. For the second bullet there are allowances to
sample beyond the first 30 minutes of discharge in 6.1.4. Coupled with the response for the first bullet, this should not be an issue. On the third bullet, everyone has felt the tightening effects of the recent prolonged economic downturn. The Department is no exception and certainly understands the burden of additional responsibilities on existing staff without additional moneys or resources to fulfill those responsibilities. However this permit is based largely on EPA’s 2008 MSGP and any significant deviation from fundamental requirements will not be looked upon favorably during any EPA review. The Department has added flexibility in several areas of our IGP compared to the 2008 MSGP. To do so any more will make the IGP ineffective and surely will draw unfavorable review from EPA.

Comment 67. If a facility has more than one outfall do you average the results for each outfall to come up with one quarterly number, or does each outfall have to be considered individually?

Response: Individually. Averaging over all applicable outfalls can mask a potential problem with one or more from the group.

Comment 68. Given that the "Benchmark Average" applies to determining the results of biological samples, Spartanburg Water will be using the geometric mean to determine this average.

Response: The Department agrees that is appropriate for the fecal coliform benchmark. Also reference the added language in 6.2.1.2.d.ii.

Comment 69. Can more than one sample be taken at an outfall in one quarter?

Response: There is nothing that prevents a site from taking more than the minimum required number of samples. However all samples should be noted in the SWPPP records.

Comment 70. I recommend that the following footnote be noted next to "average" in 6.2.1.2.a:

Since pH is measured on a log scale, the average of the 4 monitoring values for pH should be determined by first converting each pH measurement to its corresponding hydrogen ion concentration, calculating the average of the four hydrogen ion concentrations, and then converting the average hydrogen ion concentration back to its corresponding pH value, which would be equal to the average pH value.

Since pH is based on a logarithmic scale, the use of an arithmetic mean to average pH is not appropriate. Therefore, the above footnote is required to make it perfectly clear as to the proper method for calculating average pH to determine whether the Benchmark Monitoring Cutoff Concentration for pH of 6.0-9.0 s.u. has been exceeded. If this footnote is not added to the permit, I am afraid that most of the pH averages obtained under the new stormwater permit will be incorrectly based on the arithmetic mean of four quarterly pH readings.

Response: Similar language has been added to the permit as 6.2.1.2.d.i.
Comment 71. In several places in the proposed permit there is a distinction made between existing and new dischargers. The definition of new discharger seems to turn on whether the discharger had a previous "finally effective permit." I'm just wondering if a facility that only had a construction stormwater permit (and no individual NPDES permit) prior to the effective date of this proposed permit is going to be considered a new discharger when this permit goes final? Or would the existence of the construction stormwater permit be considered sufficient to put that facility in the existing category?

Response: See 47. above. Coverage under the NPDES General Permit For Storm Water Discharges From Large And Small Construction Activities (SCR100000) would meet the criteria of “existing discharger.”

Comment 72. During 2002-2008, much of South Carolina experienced severe drought conditions. What provisions are available in the General Permit to cover such circumstances?

Response: There are several places that address “adverse weather” in the IGP. Reference 4.2.3.a. and 6.1.5. for example.

Comment 73. The Treated Wood Council is concerned about the excessively low benchmark level for copper under certain hardness ranges, as listing under Table 8.A-1. Would the Department explain the rationale for such levels?

Response: Virtually all of the numerical limits in the IGP are based upon EPA’s 2008 MSGP. The copper benchmark limit is one of those. The limit comes from a 2006 EPA document named “National Recommended Water Quality Criteria” (EPA-822-F-04-010). Specifically it is the acute aquatic life freshwater CMC (criterion maximum concentration). It is interesting to note EPA issued another pertinent document shortly thereafter in 2007 called “Aquatic Life Ambient Freshwater Quality Criteria – Copper” (EPA-822-R-07-001) that involves analysis of several other parameters in addition to waterbody hardness. For the typical hardness ranges of the waterbodies here in the state of South Carolina, the values obtained by the correlation of the various parameters analyzed gave copper values approximately the same if not a bit lower.

Comment 74. Part 5.1.5.1(a)(ii) requires that Preventative maintenance procedures, including regular inspection, testing, maintenance, and repair of all industrial equipment systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any backup practices in place should a runoff event occur while a control measure is off line must be documented in the SWPPP. I feel this section needs some clarification to understand the intent. Is the intent to summarize these activities or to include copies of all maintenance procedures, schedules and activities of “all industrial systems and control measure”? Requiring the SWPPP to include copies of all maintenance procedures, schedules and activities of all industrial systems will place considerable burden on the permitted facility in preparing and maintaining the SWPPP.

Response: See 26. above. Language in 5.1.b. allows for reference to other documents. Whether in the SWPPP or associated with some other document, as long as these are available on site is
the key requirement. The language in 5.1.5.1(a)(ii) is requesting the practices and procedures involved in maintenance, not the work orders or records of it’s performance.

**Comment 75.** Part 5.1.51(a)(iii) states you may reference the existence of plans for Spill Prevention Control and Countermeasure programs… I propose you add additional language to include facility Emergency Response Plans. We have an integrated SWPPP and SPCC Plan which references our Emergency Response Plan since it contains the actual emergency response procedures, including spill response procedures. This would clarify that it is acceptable to reference our ERP in the SWPP to meet this requirement and that we would not need to duplicate spill response procedures in the SWPPP.

**Response:** This language says other plans may be referenced to cover SPCC requirements. If your site’s ERP contains or even restates the requirements of an SPCC plan, then the Department has no problems with this approach.

**Comment 76.** The SCRDA would like to propose that Section 8.M.2.1 be amended to read:

8.M.2.1 Spill and Leak Prevention Procedures

Upon arrival to site, if vehicle has any leakage in progress, the vehicle must be drained immediately or placed on an impermeable area that is bermed and/or drains to a sump to capture any potential fluid leaks.

OR

Drain vehicles intended to be dismantled of all fluids within fifteen (15) days of arrival at the site, or employ some other equivalent means to prevent spills and leaks. An example of other equivalent means would be placing vehicles not drained within fifteen (15) days of arrival on an impermeable area that is bermed and/or drains to a sump to capture any potential fluid leaks. Potential stormwater pollution is precluded until the fluids can be removed.

**Response:** The language has been modified to eliminate specific time frames and remove determination of the vehicle leakage upon arrival at a given site:

Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks. An example of other equivalent means would be placing vehicles not drained upon arrival on an impermeable area that is bermed and/or drains to a sump to capture any potential fluid leaks. Potential stormwater pollution is precluded until the fluids can be removed.

**Comment 77.** We would like to see more time for clients to update their SWPPP Plans. As it is currently written all permittees must submit a New NOI (and have their SWP3 Plans updated) within 90 days of the effective date of the permit. We would like to see a longer period of time for the updating of SWP3 Plans. Maybe require NOIs within 90 days and give an additional 90 days to have SWP3 plans updated.

**Response:** The Department has made a conscientious effort to let the regulated community know of this renewal of the IGP. This has included, among others, informational mailers in the
annual invoices, courtesy letters to all coverage holders that the permit was in public notice, meetings/training/Q&A sessions with numerous stakeholders and trade organizations, and copious amounts of question-answering/consulting/teaching through correspondence and face-to-face meetings. For most situations the 90 days from the effective date is ample time since everyone should generally be aware of what their particular site will be required to do. The Department’s plan is to send out the recertification NOIs soon after the permit is issued and the appeal timeframe has passed. With the current plans this will allow for considerably more than 90 days to resubmit the NOI and update the SWPPP. See comment 10. above.

**Comment 78.** Provide additional clarification on discharge into an "impaired water". For many facilities, discharges eventually reach an "impaired water", however, the closest Water Quality Monitoring Station which shows this impairment may be several miles away from the facility. Is there a limit to how far downstream we must look for an impairment for it to be applicable to the facility?

**Response:** Each circumstance offers its own uniqueness that makes broad-based answer impossible. We have in the IGP (6.2.4.2.b.) a link to the impaired water/TMDL portion of the Bureau of Water’s website and the number of the manager of that section for reference. The Department has also developed an online tool to help a site determine impairments/TMDLs downstream of their discharges. It should be available at the time of this permit’s issuance.

**Comment 79. Section 6.1.4.**

The Haile Mine site covers several hundred acres. Within the property, there are over twenty sediment control structures. Some of these basins will be designated as "Substantially Identical Outfalls," however, the ability to collect all the benchmark samples within the first 30 minutes is impossible. Haile realizes that Section 6.1.4 says"... documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes initial discharge", but that appears to be 'making excuses' instead of getting the job done. Haile suggests that the sample collection process be initiated within the first 30 minutes and continue until all samples are collected. The documented time of the sample collection would indicate which samples were taken within or after the first 30 minutes. The first sediment basin sampled past the 30 minute window would be noted and that sediment basin would be the first basin sampled during the next sampling event. This sampling rotation would continue throughout the required sampling period as required in the permit. This sampling procedure would be specified in the SWPPP and would demonstrate Haile's commitment to the sampling program.

Secondly, due to the remote locations of sediment ponds, some earthworks will be required to access the discharge points from all the sediment basins for sampling. Even with construction to access these points, sampling during rain events at night could be extremely hazardous. Personnel trained to collect samples are not likely to be scheduled to work at night. The employees could be called to the mine site when it begins to rain, however, they would not arrive in time at the storm water discharge points to sample within the 30 minute requirement. Thus, for the safety of mine personnel, the sampling should be during normal daylight working hours to exclude weekends and holidays.
Response: The Department has no problem with the proposed sampling scheme. On the second issue look at 5. above.

Comment 80. Natural background pollutant levels: Section 6.2.1.2c.
Haile has documented that the pH of the local rain is less than the minimum 6.0 SU listed in Table 8.G-2. This low pH rain may not be a 'natural background pollutant' but it is also not a benchmark monitoring exceedence. Since SC-DHEC has recognized this low pH issue in the past, Haile suggests a footnote to Table 8.G-2 forgoing the low pH results if all other benchmark parameters are met.

Response: SC Reg. 61-68, Sec. C. 10. does allow for natural conditions to exceed water quality standards in a waterbody. However it also states current water quality shall not be degraded. In order to accommodate this seemingly dichotomous situation and since low pH rainfall is indeed not a natural background pollutant, the Department has added a miscellaneous note to the Fact Sheet. It is excerpted here:

*If the pH of the receiving waterbody is less than 6.0 standard units (6.5 for classifications SFH, SA, and SB), the discharge pH may be less than 6.0 standard units (6.5 for classifications SFH, SA, and SB) only if the discharge pH is not less than the stream pH by a difference of more than 0.2 standard units. This variance will be granted only if the waterbody’s pH is analyzed on the day of the discharge.*

*Example: If a Freshwater classification waterbody’s pH is 5.5, the discharge pH must be between 5.3 and 8.5. The difference between the waterbody’s pH (5.5) and the discharge pH (5.3) is 0.2 standard units.*

This allows for some effect of the low pH rain on the waterbody without having meaningful degradation of the water quality.

Comment 81. Technology-Based Effluent Limits: Section 8.G.4
The Haile Mine had been in operations for many years before the first Storm Water permits were issued. To obtain coverage at the time, significant earthworks were completed on-site to segregate and vegetate areas, implement BMPs and construct sediment basins. Since these basins had to be fitted within the existing mine facilities, their sizing may not meet the specified '3,600 cubic feet of storage per acre drained'. Haile suggests that existing sediment basins be grandfathered as there may not be room to expand them.

Response: The language allows for downslope sediment control options other than the designed-specified basins, including a combination of several different types. The Department suggests looking into complimentary sediment control to the basins.

Comment 82. Temporary Stabilization of Disturbed Areas: Section 8.G.4.3.2, Final Stabilization of Disturbed Areas: Section 8.G.4.3.3
The requirement that "erosion control blankets must be deployed" could be onerous and expensive where such practices are unnecessary. These two sections are being removed from the draft Mineral Mining NPDES permit. To maintain consistency, these sections should be removed from 8.G of the IGP as well.

Response: See comment above. Also the sections referenced are still in the Nonmetallic Mineral Mining NPDES general permit (SCG730000). The language in both 8.G.4.3.2 and 8.G.4.3.3 have been modified to make it clear ECB are not mandatory but are simply an option.

Comment 83. Section 8.G.5.3
"If treatment of storm water (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of storm water runoff is encouraged where practicable." If there is a list of 'approved' flocculents (North Carolina has a list), this would be helpful to the regulated community.

Response: The Department has no such list and does not anticipate having one. Such a list can be perceived as prescriptive in nature and the Department wishes to avoid mandating. Flexibility is something the regulated community has requested on many different levels in this permit; we will continue in that mindset.

Comment 84. Table 8.G-2: Benchmark Parameter - pH
Of all the parameters listed in Table 8.G-2, pH is the only "field" parameter and it has a holding time of 15 minutes. Unless mine sites are certified for pH analyses consistent with 40 CFR Part 136 or are able to contract with a SC Certified laboratory, mine sites will not be able to comply with the pH requirement of the permit. Haile suggests that field readings be submitted in lieu of SC certified laboratory data for pH only.

Response: The Department has added language to the IGP to accommodate this request. Refer to 6.2.d.

Comment 85. Definition of Uncontaminated: Appendix A
The NPDES GP for Discharges Associated with Non-metallic Mineral Mining Facilities defines Uncontaminated as "Free from the presence of pollutants attributable to industrial activity." Haile suggests including the definition of Uncontaminated to clarify and support by what process an environmental media can be contaminated and that natural conditions do not contaminate.

Response: See 7. above.

Comment 86. Permit Should Emphasize Treatment Best Management Practices
StormwaterRx commends the South Carolina Department of Health and Environmental Control (DHEC) for requiring permit holders to consider combinations
of best management practices (BMPs). Draft Permit at 2.1.1. The Draft Permit reflects this approach. See, e.g., Draft Permit at 2.1.1. However, the permit and cited resources do not adequately discuss industrial storm water treatment BMPs. See, e.g., US EP A, Industrial Fact Sheet Series for Activities Covered by EPA's MSGP, http://cfpub.epa.gov/npdes/stormwater/swsectors.cfm. Through counseling with hundreds of industrial facilities, StormwateRx has determined that many industrial sectors must implement combinations of BMPs to include source control, structural and treatment BMPs to achieve applicable standards. Accordingly, we recommend that the permit identify treatment BMPs as a category of BMPs that permittees should consider.

Treatment BMPs are often necessary at metal manufacturing and recycling facilities, larger auto recycling facilities, boat yards, and other covered industries, to meet the best available technology requirements of the Clean Water Act, 33 U.S.C. § 1311(b). South Carolina's final permit and its industry-specific appendices should address this requirement more explicitly. For example, the permit states that treatment BMPs such as sand filters may be appropriate in some instances. Draft Permit at 2.1.1. The permit should provide additional criteria to help permittees determine which instances make treatment appropriate or necessary. In particular, DHEC should encourage treatment at facilities that are unable to fully implement other, more basic BMPs, such as storing all materials under cover. These facilities that cannot prevent pollutants from entering storm water must compensate by removing pollutants with treatment in order to meet the statutory best available technology standards, 33 U.S.C. § 1311 (b).

DHEC should also help permittees choose appropriate BMPs by providing BMP selection resources that are tailored to industrial sites. The Draft Permit makes general references to the National BMP Menu, Draft Permit at 2.1.2.6, which is primarily a resource for municipal governments. See generally, US EPA, National Menu of Stormwater Best Management Practices, http://www.epa.gov/npdes/stormwater/menuofbmps (last visited April 26, 2010). Rather than making general or inapplicable references, the permit (or a separate guidance manual) should point permit holders to the BMPs that are appropriate for industrial storm water, such as the "Post-Construction, Filtration" section of the BMP Menu. US EPA, National Menu of Stormwater Best Management Practices, http://www.epa.gov/npdes/stormwater/menuofbmps (follow "Post-Construction" hyperlink) (last visited April 26, 2010). The Draft Permit also references US EPA's Industrial Stormwater Fact Sheet series, Draft Permit at 2.1.2.6, which does a better job of providing industry sector-specific BMPs. See generally, US EPA, Industrial Fact Sheet Series for Activities Covered by EPA's MSGP, http://cfpub.epa.gov/npdes/stormwater/swsectors.cfm (last visited April 26, 2010). However, EPA's fact sheets provide little if any discussion of treatment BMPs. DHEC should point permittees to additional resources for industrial storm water treatment BMP selection such as the State of Washington Department of Ecology's Economic Impact Analysis - Draft General Permit for Boatyards at 32 (September 2009), available at http://www.ecy.wa.gov/programs/wq/permits/boatyard/permitdocuments/boatyardsEIAdraftsept09 ("The multimedia filtration unit (StormwateRx®) demonstrated the best performance at the lowest cost.") See also, Gary Minton, STORMWATER TREATMENT: BIOLOGICAL, CHEMICAL, AND ENGINEERING PRINCIPLES (5d ed. forthcoming 2010) available
Response: The Department agrees adding more refined resources for applicable sites to review and utilize is advantageous. Most of the suggested links/references have been added to 2.1.2.6.

Comment 87. Draft Permit Corrective Action Triggers Allow Too Much Facility Discretion

The Draft Permit states that permittees must revise their control measures if they realize that they "are not stringent enough for the discharge to meet applicable water quality standards." Draft Permit at 3.1(c). This is perhaps the most important component of the permit, yet it is extremely subjective, vague and nearly unenforceable as written. By contrast, section 3.2(b) of the Draft Permit provides a clear and enforceable trigger (an average of four quarterly sample in excess of the benchmark) but the responsive action required - merely reviewing control measures to determine if they are adequate - will not ensure facilities meet the Clean Water Act's best available technology standards. See 33 U.S.C. § 1311 (b). StormwateRx understands that this language is taken from EPA's MSGP, but it is nonetheless inadequate.

Several states have crafted more objective corrective action triggers and more effective corrective actions that DHEC can and should adopt. For example, Washington and Oregon require active responses to every benchmark exceedance. In response to benchmark excursion in three out of any four quarters, Washington Department of Ecology's industrial stormwater permit requires facilities "make appropriate revisions to the [Stormwater Pollution Prevention Plan] to include additional Treatment BMPs with the goal of achieving the applicable benchmark value(s) in future discharges." Washington Department of Ecology, Industrial Stormwater General Permit, 36 (2010) available at http://www.ecy.wa.gov/programs/wq/stormwater/industria1/permitdocs/iswpfinal1 021 09.pdf. The Oregon Department of Environmental Quality takes another approach when the geometric mean of the last four samples of the permit term exceed benchmark concentrations: automatic revocation of general permit and substitution of an individual permit requirement. NPDES General Permit No. 1200-Z, 14 (2006) available at http://www.deq.state.or.us/wq/wppermit/ docs/ generallnpdes 1200z/permit2012. pdf. StormwateRx suggests DHEC adopt a combination of the corrective action requirements such as those in Washington and Oregon's permits by requiring responses to every benchmark excursion and transferring permittees to an individual permit after corrective actions prove insufficient to bring the facility's mean effluent concentrations below the benchmarks.

Response: Since the preceding iterations of the IGP have not followed EPA’s multi-sector format, many of the concepts in this iteration are new including the benchmark. For this particular renewal, the Department will allow a site to make its own determinations on meeting the applicable benchmark(s) in an effort to “ease into” such a dramatic shift in this permit’s focus and procedure. This includes the “no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice” outcome specified in 6.2.1.2.b.ii. of the IGP.

However in the next renewal of the IGP, the Department will certainly consider the outcomes suggested here and others for failure to meet the benchmark values. Many states have had two or more iterations of the multi-sector concept permit in place and can implement compliance
tightening based on benchmark monitoring failure. Acclimation of the permitted community and feedback from years of experience implementing the multi-sector concept allow for this. The state of South Carolina has neither.

Comment 88. Permit Should Require Benchmark Monitoring Reports
The Draft Permit generally mirrors US EPA's Multi-Sector General Permit (MSGP), and in many cases the result is a strong regulatory scheme. DHEC should continue to adhere to EPA's model when it comes to reporting analytic benchmark monitoring results. Benchmark reporting requirements are a critical component of EPA's MSGP. EPA underscored the importance of analytic monitoring and reporting when it chose to mention this requirement in its Federal Register notice for its MSGP, 73 Fed. Reg. 56574 (Sept. 29 2008) ("Permitted facilities are required to submit to EPA quarterly benchmark monitoring results."). Requiring facilities to report benchmark monitoring results will increase facility accountability and give DHEC a way to ensure monitoring occurs.

The lack of oversight in the Draft Permit creates a strong incentive for facilities to ignore benchmark exceedances and cease analytic benchmark monitoring after the first four quarters. See Draft Permit at 6.2.1.2(a). Without a reporting requirement, it is highly unlikely DHEC will ever detect such behavior. On the other hand, if a facility must report benchmark monitoring results, there is a threat of DHEC enforcement if the facility fails to adequately respond to benchmark excursions, see Draft Permit at 6.2.1.2(b). The threat of enforcement at least provides facilities some incentive to comply with permit requirement 6.2.1.2(b). Additionally, the cost and administrative burden of reporting monitoring results would be minimal for both facilities and DHEC, as the permit already requires many facilities to submit various reports to DHEC. See Draft Permit at 7.1 - 7.4. For ease of administration, industrial sectors subject to effluent limits can submit benchmark monitoring results along with their annual monitoring data reports. See Draft Permit at 7.1. DHEC can also establish similar staggered reporting deadlines for industries with benchmarks but without effluent limits.

Response: The Department does not have the resources to review all of the reports that would be generated from the benchmark monitoring for some 2200 active sites at the time of this document’s typing. This would be in addition to the effluent guideline monitoring reports required to be submitted. If resources become available in the future, certainly that can be a consideration at permit renewal. See the comment immediately preceding this one and 66. for related discussion.

Comment 89. Monitoring Requirements Should Reflect Effluent Variability
The Draft Permit's benchmark monitoring requirement provides that if the average of the monitoring values for any parameter does not exceed the benchmark after four quarterly samples, permittees may cease monitoring for the remainder of the permit term. Draft Permit at 6.2.1.2(a). StormwateRx's experience with industrial runoff throughout North America suggests that an average of merely four quarterly samples is not a reliable indicator of a site's effluent concentrations. Figures 1-3 are examples from real industrial facilities where the average pollutant concentration is below the applicable benchmark for some four quarter periods but spikes thereafter, such that the average for the next four quarters may not be below the benchmark.
These same concerns apply to the monitoring waiver available to facilities that have four consecutive samples at or below water quality standards. Draft: Permit at 6.2.4.2(b )(vi). Furthermore, there is no clear requirement in the Draft: Permit that permittees reinstitute benchmark or impairment pollutant monitoring following a change to the facility or operations that may affect pollutant concentrations. StormwaterRx thus recommends that DHEC require either monthly analytic monitoring or, at the very least, quarterly monitoring throughout the permit term to better reflect the variable nature of stormwater effluent.

If DHEC nonetheless retains the benchmark and impairment pollutant monitoring waiver provisions, it should clarify in the final permit that the four quarterly samples must be four quarters in a row, so that permittees cannot pick and choose cleaner samples.

The once per year grab sample monitoring requirements for effluent limit compliance, Draft: Permit 6.2.2, impairment pollutant screening, Draft: Permit at 6.2.4.2, are similarly inadequate given industrial stormwater's variable nature. See Figures 1-4.

If DHEC declines to enhance these monitoring requirements, the monitoring provisions for discharges to waters with a TMDL will still merit clarification in the final permit. The Draft Permit states that permittees may cease sampling for impairment pollutants "[s]hould the results of the monitoring conducted for the pollutant of concern in your stormwater discharges analyzed in the first 12-month period fall below detection limits." Draft Permit at 6.2.4.2. This clause is ambiguous and susceptible to the interpretation that if the pollutant of concern is not detected in only one of the four samples, the permittee may stop sampling - even if the pollutant is detected in the other three samples. DHEC should re-word this clause to make clear that a permittee may stop screening for the pollutant of concern only if it does not detect the pollutant in any of its samples taken in the first 12-month period. Finally, the permit should mandate a monitoring schedule that spaces monitoring over the year and ensures that the samples are representative of the typical discharge profile. Without a monitoring schedule, facilities have the discretion to sample only when the effluent is at its cleanest, which will not accurately depict whether the facility is complying with the TMDL.

Response: Reference Appendix B, SC Reg. 61-9.122.41 (l) of the IGP. A site should notify the Department before affecting such a change. Further monitoring may very well be required, including benchmark and water quality-based monitoring, if applicable. For similar discussion, also look at the MSGP Fact Sheet, p.112.

While the Department believes the language in the IGP is clear on the requirement to collect consecutive samples for benchmark and TMDL monitoring, language in 6.2.1.2.b.iii. has been altered to bolster the intent.

Similarly language in 6.2.4.2.b.iv. & v. has been modified to make it expressly clear that detection of the pollutant of concern in any of the four samples constitutes continuation of
sampling and that meeting the water quality standard for the waterbody in question for all four sample is required to stop monitoring.

Comment 90. The DHEC Bureau of Water State Primary Drinking Water Regulation R.61-58 establishes standards and procedures necessary to maintain reasonable standards of purity of the drinking water of the State consistent with the public health, safety, and welfare of its citizens. These regulations establish Maximum Contaminant Levels (MCLs) for Inorganic Chemicals, Organic Chemicals, Microbiological Contaminants, Radionuclides, Volatile Synthetic Organic Chemicals, Disinfection Byproducts, and Secondary MCLs for drinking water. As provided in R.61-58.5 (R), the Secondary MCL for zinc in drinking water is 5 mg/l. Based on the Secondary MCL for zinc, discharge of drinking water at the IGA-Columbia facility into a stormwater outfall would trigger an exceedance of the highest benchmark value of 0.26 mg/l.

Response: While the proposed scenario should be rare for any given site during a storm event, there is a reason for the disparity. Since many of the benchmarks, including zinc, are based upon an acute aquatic life freshwater standard, their ultimate regulatory basis is the Clean Water Act. Toxicity is the driving factor. For the drinking water standards, the Safe Drinking Water Act is the ultimate regulatory basis. Cost was a major concern in the Safe Drinking Water Act and conventional treatment (read typical costs) were set as a baseline. Also in the definition of “secondary maximum contaminant level” in SC Reg. 61-58, the language states “which may adversely affect the odor or appearance of such water and consequently may cause a substantial number of the persons served by the public water system providing such water to discontinue its use …” Clearly these organoleptic criteria will impose a much higher limit than toxicity.

By virtue of no cost effect in formulating the benchmark values and the fact the MCL are of a largely qualitative nature, the MCL will be considerably higher. In the situation proposed both are subject however the benchmark will be the more restrictive limit.

Comment 91. It is also recommended that absolute compliance not be expected in the industrial permits, but that appropriate benchmarks be established that allow a small fraction of the monitored events to exceed the goals.

Response: Since the value that is compared to a benchmark is the average of four samples, numerically one (or more) of those samples can exceed the benchmark value and the site still meet the limit.