

MONITORING SAMPLING METHODS & PROCEDURES

REPRESENTATIVE SAMPLING ON LINEAR PROJECT

Receiving water samples and storm water discharge samples will be collected by "grab samples", as specified in Part IV D.5.b. of the permit. All grab samples will be collected using the following methods and procedures:

RECEIVING WATER SAMPLING:

MANUAL SAMPLING:

Samples will be taken at the appropriate time as stated in Part IV.D.5.d. of the permit. Sampling will begin at the designated representative receiving water at the downstream location first. The sample will be taken as far downstream (within the project right of way) of the confluence of the last storm water discharge point, and upstream of any additional discharges not associated with the project. The sample will be taken in the center of the receiving water at a point where mixing of the receiving waters and the project outfall has occurred and produced a homogenous sample. On receiving waters where access to the center of the receiving waters is not practical, several samples from across the receiving waters will be taken and the arithmetic average of the turbidity of these samples will be used for the upstream value. A large mouth, clean, glass or plastic jar/bottle, labeled with project number and location will be used to collect the sample. The sample container will be held such that the opening faces upstream. Once the sample jar/bottle is full and capped, it will be transported to the location where the turbidity testing will be conducted. Samples may be analyzed at the site with properly calibrated portable turbidimeters. All turbidity tests will be conducted immediately but in no case, later than 48 hours after the time the sample was obtained.

Upstream samples will be taken after downstream samples have been acquired. The sample will be taken immediately upstream of the confluence of the first storm water discharge from the project (within the project right of way). The sample will be taken in the center of the receiving water. On receiving waters where access to the center of the receiving waters is not practical, several samples from across the receiving waters will be taken and the arithmetic average of the turbidity of these samples will be used for the upstream value. A large mouth, clean, glass or plastic jar, labeled with project number and location will be used to collect the sample. The sample container will be held such that the opening faces upstream. Once the sample jar/bottle is full and capped, it will be transported to the location where the turbidity testing will be conducted. All turbidity tests will be conducted immediately but in no case, later than 48 hours after the time the sample was obtained.

Sampling Guidance Document, "EPA 833-B-92-001" and guidance documents that may be prepared by the EPD.

1. Sample containers should be labeled prior to collecting the samples.
2. Samples should be well mixed before transferring to a secondary container.

3. Large mouth, clean and rinsed glass or plastic jars should be used for collecting samples. The jars should be cleaned thoroughly to avoid contamination.

4. Manual, automatic or rising stage sampling may be utilized. Samples required by this permit should be analyzed immediately, but in no case later than 48 hours after collection. However, samples from automatic samplers must be collected no later than the next business day after their accumulation, unless flow through automated analysis is utilized. Dilution of samples is not required. Samples may be analyzed using a direct reading, properly calibrated turbidimeter. Samples are not required to be collected.

5. Sampling and analysis of the receiving water(s) or outfalls beyond the minimum frequency stated in this permit must be reported to EPD as specified in Part IV.B.

Sampling Points:

(1). For construction activities the primary permittee must sample all receiving all water(s) and outfalls. Samples taken for the purpose of compliance with this permit shall be representative of the monitored activity and representative of the water quality of the receiving water(s) and/or the storm water outfalls using the following minimum guidelines:

- (a). The upstream sample for each receiving water(s) must be taken immediately upstream of the confluence of the first storm water discharge from the permitted activity (i.e., the discharge farthest upstream at the site) but downstream of any other storm water discharges not associated with the permitted activity. Where appropriate, several upstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the upstream turbidity value.

(b). The downstream sample for each receiving water(s) must be taken downstream of the confluence of the last storm water discharge from the permitted activity (i.e., the discharge farthest downstream at the site) but upstream of any other storm water discharge not associated with the permitted activity. Where appropriate, several downstream samples from across the receiving water(s) may need to be taken and the arithmetic average of the turbidity of these samples used for the downstream turbidity value.

(c). Ideally the samples should be taken from the horizontal and vertical center of the receiving water(s) or the storm outfall channel(s).

(d). Care should be taken to avoid stirring the bottom sediments in the receiving water(s) or in the outfall storm water channel.

(e). The sampling container should be held so that the opening faces upstream.

(f). The samples should be kept free from floating debris.

(g). Permittees do not have to sample sheet flow that flows onto undisturbed natural areas or areas stabilized by the project. For purposes of this section, stabilized shall mean, for unpaved areas and areas not covered by permanent structures, 100% of the soil surface is uniformly covered in permanent vegetation with a density of 70% or greater, or equivalent permanent stabilization measures (such as the use of rip rap, gabions, permanent mulches or geotextiles) have been used. Permanent vegetation shall consist of: planted trees, shrubs, perennial vines; a crop of perennial vegetation appropriate for the time of year and region; or a crop of annual vegetation and a seeding of target crop perennials appropriate for the region. Final stabilization applies to each phase of construction.

(h). All sampling pursuant to this permit must be done in such a way (including generally accepted sampling methods, locations, timing, and frequency) as to accurately reflect whether storm water runoff from the facility/site is in compliance with the standard set forth in Parts III.C.3. or III.C.4., whichever is applicable.

AUTOMATIC SAMPLING:

Samples will be taken at the appropriate times as specified in Part IV.D.5. d. of the permit. Automatic sampling can be accomplished at both upstream and downstream simultaneously by using a sampling device similar to the Isco Model 3700 or 6700. These devices can be triggered by flow meters or rain gages to obtain the required samples. This determination will be made on a project by project basis. The probe for the automatic sampler will be placed in the center of the receiving water at a point as far downstream of the confluence of the last storm water discharge point and upstream of any additional discharges not associated with the project. Samples will remain in the automatic sampler until the next business day, when they will be collected and tested.

The probe for upstream sampling will be positioned immediately upstream of the confluence of the first storm water discharge point from the project. The probe will be placed in the center of the receiving water. Samples will remain in the automatic sampler until the next business day, when they will be collected and tested.

TESTING:

All turbidity tests shall be done in accordance with 40 CFR Part 136 (unless other test procedures have been approved); the guidance document titled "NPDES Storm Water Sampling Guidance Document, EPA 833-B-92-001" and guidance documents that may be prepared by the EPD. Turbidity results will be recorded and reported to EPD in accordance with Part IV.E of the permit.

MONITORING GENERAL NOTES:

This project has a total size of 264.45 acres. The surface water drainage area for the stream to be monitored has a drainage area of 28.5 square miles. The receiving waters for this representative sampling point is Long Cane Creek. The turbidity of the receiving waters shall not be increased by more than 25 NTU.

For this project the Long Cane creek outfall to the Chattahoochee River shall be the representative sampling point.

A representative from the Department's Office of Environmental Compliance will be responsible for selecting alternate monitoring locations within the active phase of construction, when the designated site is not within the active phase of construction.

GENERAL NOTES

The existing and proposed contour lines are not shown on the plans. Proposed contours obscure and overly clutter the plan sheets, resulting in misinterpreting the plans. The Profile and Cross section sheets found in the Construction Plans provide equivalent information. The Construction Plans are located at C.W. Matthews Contracting Co. field office.

The Design Professional who prepared the ES & PC Plan has not inspected the installation of BMP's within 7 days after initial construction activity began. The responsibilities for this inspection has been delegated to the GDOT Construction Project Manager.

Project timeline and schedule is provided by the contractor and is also included with the NOI. The construction schedule is located at the C.W. Matthews Contracting Co. field office.

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to, or concurrent with, land disturbing activities.

Erosion control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source.

Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding.



REVISION DATES

05/06/08		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: URBAN DESIGN

ESPC GENERAL NOTES

1-85 INTERCHANGE
AT CR 98/GABBETTVILLE RD

DRAWING NO.
51-01

AS-BUILT

PLAN DATE: 09-07-07