GILES CHEMICAL CORPORATION							
COMPANY PROCEDURE							
Standard	Standard Operating Procedure		Page	:	1 of 3	Revision Date	: :11/29/06
Author: Stacy Howell/Tina Title: Flow, Temperature and pH Monitoring of Creek Water							

Safety: All proper safety equipment for the area.

Purpose or Objective: The purpose of this procedure is to ensure Giles Chemical Corporation is in compliance with North Carolina Department of Environment and Natural Resources permit NCG5500244. This facility's permit requires flow, temperature, and pH monitoring to be done semi-annually.

Procedure:

- 1) Flow of creek water will be estimated by process engineer.
- 2) Obtain bucket, 2 sample bottles with lids, thermometer, and leather gloves from lab.
- 3) At the upper bridge (upper bridge is located between Giles main plant and MgO house), tie the bucket to the bridge. Then throw the bucket over the side of the bridge and into the water. Ensure there is adequate water in the bucket and, using gloved hands, pull the bucket up.
- 4) Immediately check the temperature, with a thermometer. Water temperature should not exceed 29° Celsius.
- 5) Record the temperature and the location (i.e. upper bridge).
- 6) Fill one sample bottle and place lid on tightly.
- 7) Pour remainder of water back into creek and untie bucket from bridge.
- 8) Go down stream (steps and path have been built outside side door to right of store room in production area).
- 9) Dip bucket into creek.
- 10) Immediately check temperature, with a thermometer. The down stream water temperature should not be greater than 2.8° Celsius than the upper bridge water temperature.
- 11) Record the temperature and the location (i.e. down stream).
- 12) Fill other sample bottle and place lid on tightly.
- 13) Pour remainder of water back into creek.
- 14) Bring the two sample bottles of water to lab.
- 15) Using the pH meter, check the pH for both samples. The pH should not be less than 6.0 or greater than 9.0 for either sample.
- 16) Record data on computer spreadsheet.
- 17) This procedure is performed semi-annually.

GILES CHEMICAL CORPORATION						
COMPANY PROCEDURE						
Standard Operating Procedure		Page	:	2 of 3	Revision Date	: :11/29/06
Author: Stacy Howell/Tina McConnell	Title: Flow, Temperature and pH Monitoring of Creek Water					

TRAINING DOCUMENTATION

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GILES CHEMICAL CORPORATION						
COMPANY PROCEDURE						
Standard Operating Procedure		Page	:	3 of 3	Revision Date	: :11/29/06
Author: Stacy Howell/Tina McConnell	Title: Flow, Temperature and pH Monitoring of Creek Water					