

7.1.2 Special Conditions/Commonly Used Special Conditions/ Special Studies and Additional Monitoring

Applicability:

Conditions included in site-specific State Operating Permits that result in development of needed data and information.

Content:

Special studies and additional monitoring requirements that may be included under the Special Conditions of a permit are generally used to supplement numeric effluent limits or support future permit development activities. Examples of types of special studies include:

- 1) Treatability studies, when treatability information is lacking for a pollutant or pollutants that would prohibit a permit writer from developing defensible technology-based limits. Treatability studies can also be required when the permit writer is not completely confident that a facility is able to comply with an effluent limit.
- 2) Toxicity identification evaluation/Toxicity reduction evaluation (TIE/TRE), required for facilities for which wastewater discharges are found to be toxic as a result of whole effluent toxicity (WET) test. The purpose of these evaluations is to identify and control the sources of toxicity in an effluent.
- 3) Mixing or mixing zone studies are used to assist in determining the allowable ambient mixing that can be applied when developing water quality based effluent limits.
- 4) Sediment monitoring may be used if the permit writer suspects that pollutants contained in wastewater discharges accumulate in the sediments of the receiving water.
- 5) Bioconcentration studies are used to determine whether pollutants contained in wastewater discharges bioaccumulate in aquatic organisms. These types of studies are usually recommended when water quality based effluent limits for pollutants that bioaccumulate are established below analytical detection levels.

When establishing special conditions, the permit writer must ensure that any particular requirements related to the study (e.g., sampling or analytical procedures) are specified in the permit condition. In addition, the permit writer must establish a reasonable schedule for completion and submission of the study or monitoring program. If the anticipated schedule is longer than 6 months to 1 year, then it is recommended that the permit writer require that the facility provide an interim progress report.

Legal References:

Code of State Regulations

[10 CSR 20-6.010\(8\)\(B\)](#)

Construction and Operating Permits - Permit Terms and Conditions

Other Links:

Key Words:

"Studies" or "Monitoring"

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Revised By: Jerry Croy

Modification Date: 05/14/2004 JFP 1/5/06