

## **NPDES PERMIT WRITERS' TRAINING COURSE CONTENT SUMMARY**

**Module 1 - Overview of the Clean Water Act and the National Pollutant Discharge Elimination System (NPDES) Program** Identifies the history, objective, goals, and major provisions of the Clean Water Act; reviews the purpose, history, and evolution of the NPDES program; defines essential terminology

**Module 2 - Scope and Regulatory Framework of the NPDES Program** Identifies NPDES program areas; provides an overview of the Code of Federal Regulations and NPDES program regulatory framework; explains the roles of federal state, territorial, and tribal authorities; reviews the status of states and territories with authorized programs

**Module 3 - NPDES Permits: Types, Coverage, and Emerging Program Areas** Explains the various types of NPDES permits; introduces and discusses the major components of an NPDES permit; explains the permit development process; discusses the scope and size of the NPDES program; provides background information on potential future direction of the NPDES program

**Module 4 - The Permit Application Process** Identifies parties responsible for submitting an individual permit application; lists and provides regulatory citations for each NPDES permit application form; distinguishes between requirements for new and existing dischargers; discusses application submittal deadlines; reviews requirements of Application Form 2C; explains the process of reviewing applications; highlights ways of obtaining additional information for permit development

**Module 5A - Overview of Technology-based Effluent Limitations** Explains the purpose of technology-based effluent limitations in NPDES permits and defines the general types of technology-based requirements for different types of dischargers

**Module 5B - Secondary Treatment Standards for POTWs** Describes secondary treatment standards; explains how secondary treatment standards are applied in NPDES permits; explains the exceptions and alternatives to requirements based on secondary treatment standards

**Module 5C - Effluent Limitations Guidelines for POTWs (Industrial Facilities)** Explains the general process for developing effluent limitations guidelines; defines treatment standards for direct dischargers (i.e., BPT, BCT, BAT, NSPS); defines the term "new source"; provides a step-by-step overview of applying effluent guidelines in NPDES permits

**Module 5D – Case-by-Case Technology-based Effluent Limitations** Provides overview of when to develop case-by-case effluent limitations using best professional judgment (BPJ); discusses technical and economic considerations and available tools and resources available for developing case-by-case effluent limitations using BPJ

**Module 5E - Variances to Technology-based Effluent Limitations** Describes the role of variances in NPDES permits and the types of relief granted by variances; lists the types of variances for technology-based effluent limitations in NPDES permits; reviews the thermal variance provisions of the Clean Water Act; explains how variance requests are initiated and discusses the process for granting or denying a variance request

**Module 6A - Overview of Water Quality-based Effluent Limitations (WQBELs)** Provides a brief overview of water quality standards and the relationship between water quality-based and technology-based effluent limitations

**Module 6B – Identifying Applicable Water Quality Standards** Identifies the objectives and components of water quality standards; describes the types of water quality criteria and examples of each type; explains the relationship between criteria and standards and between standards and effluent limitations; explains the methods for temporary or permanent modifications of standards

**Module 6C - Characterizing the Effluent and Receiving Water** Discusses how to determine pollutants of concern for water quality-based permitting; identifies two techniques for characterizing the interaction between effluent and receiving water; describes how to identify effluent and critical receiving water conditions and why these conditions are important; explains the process for determining dilution allowances and mixing zones

**Module 6D – Determining the Need for Water Quality-based Effluent Limitations** Reviews the “reasonable potential” regulations and a step-by-step approach to determining when water quality-based effluent limitations are needed based on EPA guidance; provides an example of applying this process using a simple mass-balance equation as a water quality model

**Module 6E - Developing Chemical-specific Water Quality-based Effluent Limitations** Provides an understanding of how wasteload allocations are calculated; explains the steps for translating wasteload allocations into water quality-based effluent limitations

**Module 7 – Antibalancing** Explains the statutory and regulatory prohibitions against backsliding and discusses exceptions to these antibalancing requirements

**Module 8 – Monitoring and Reporting Requirements** Explains the purpose of establishing monitoring requirements in NPDES permits; discusses regulations and other considerations for establishing monitoring requirements; identifies sample collection methods and discusses conditions under which various sampling techniques are appropriate; explains analytical requirements for sample analysis; discusses reporting and record-keeping requirements, including discharge monitoring reports (DMRs)

**Module 9A – Special Conditions** Describes the purpose of special conditions, the regulatory authority for establishing special conditions, and the types of special conditions applicable to both municipal and non-municipal dischargers, including additional monitoring or special studies, best management practices (BMPs), and compliance schedules

**Module 9B – Special Conditions for Municipal Dischargers** Describes the purpose of special conditions applicable to municipal dischargers, including the pretreatment, biosolids, and combined sewer overflow requirements; describes the regulatory authorities for establishing these requirements

**Module 10 – Standard Conditions of NPDES Permits** Identifies the purpose of standard conditions; discusses methods for incorporating standard conditions into NPDES permits and provides a basic understanding of the meaning of the standard conditions

**Module 11 – Administrative Process** Explains the federal regulatory requirements and procedures for permit issuance; discusses the need for a fact sheet or statement of basis and the required elements of each; provides examples of good permit documentation; explains public participation requirements and the permit appeals process; explains federal and state roles in permit issuance; discusses administrative activities that might occur final permit issuance, including conditions under which a permitting authority might re-open existing permits