

Capacity Building Plan
Appendix B
Training Matrix

Course Title	Description	Offered by	Comments
GENERAL NPDES COURSES			
Advanced Negotiations Skills Training: CST 304	This 2-day advanced course is designed to provide participants with an understanding of the more sophisticated processes of negotiations.	National Enforcement Training Institute (NETI)	Offered in 2004 through DEC-Bowden and Western States. Not scheduled as of 2-06.
AQUATOX Training Workshop	This course provides an overview of the AQUATOX model and lab time. AQUATOX is a PC-based simulation model for aquatic ecosystems and covers eutrophication, chemical fate, bioaccumulation, and ecotoxicology. It predicts the fate of various pollutants, such as nutrients and organic chemicals, and their effects on the ecosystem, including fish, invertebrates, and aquatic plants.	EPA	Staff scheduled to attend in 2007 or 2008.
Contaminant Chemistry and Transport in Soil & Groundwater	This course provides an overview of key concepts of environmental contamination and the release and transport of chemicals in soil and groundwater. The course is geared to environmental professionals who are not chemists, but who require a fundamental understanding of contaminant behavior and monitoring parameters.	Northwest Environmental Training Center	Pre-requisite: Fundamental Contaminant Chemistry.
CORMIX Mixing Zone Model Training Workshop	This 2-day course covers mixing zone modeling and the CORMIX system. This course is designed to provide technical training and guidance to engineers, scientists, regulators, and consultants on using the CORMIX system for NPDES mixing zone permits for point source discharges.	MixZon Inc.	Offered in March 2007 at Portland State University
Environmental Sampling and QA class	Two to four-hour workshop. Training materials will be web based and provide a background for applying sampling regimes and quality assurance principles	DEC QA/QC manager and staff	Offered annually in Juneau by Jim Gendron (ADEC). Teleconferenced to Anchorage and Fairbanks.
Extended Aeration Package Plant	One to two-day course.	Mike Pollen, Analytica	
Fundamental Contaminant Chemistry	Review of chemistry principles essential for understanding contaminant behavior	Northwest Environmental Training Center	Scheduled to be held Fall 2006 in Anchorage.
Mixing Zone Modeling	Four-day course on how to run mixing zone models to determine dilutions and mixing zone sizes for wastewater discharges.	ADEC	

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Orientation to Wastewater Treatment Processes: CWA106	Three-day introductory wastewater course focuses on basic treatment unit processes of wastewater treatment and is designed for new inspectors or inspectors transferring from other programs. Topics include wastewater characteristics, natural treatment systems, mechanical treatment systems, dual processes, basic wastewater microbiology, physical observations, wastewater flow measurement and sampling. Tour of operation wastewater treatment facility.	NETI	Could be useful for EPS II level.
Outliers in Data Sets	One to two-hour workshop.	DEC QA/QC staff	
Water Quality Standards Academy	Course outlines provisions of the Clean Water Act. Highlights state adoption, EPA review approval.	EPA	Scheduled for Anchorage February 2007.
WET Toxicity Identification Evaluation/toxicity Reduction Evaluations	Intermediate concepts of toxicity, identification evaluation/toxicity reduction evaluation for effluents.	EPA through the Society of Toxicity and Chemistry	Not scheduled.
WET(Whole Effluent Toxicity) of Complex Effluents	This introductory course covers standards, regulations, policy, guidance, and technical aspects of implementing the whole effluent toxicity program. The curriculum incorporates rationale and information on WET test requirements from EPA, Technical Support document.	EPA through the Society of Toxicity and Chemistry	
Wild, Wild, WET Responses to Questions Regarding Data Analysis And Interpretation of Toxicity Tests	Intermediate course addresses common questions related to the interpretation of toxicity tests.	EPA through the Society of Toxicity and Chemistry	Not scheduled.
PERMITTING COURSES			
National Pollutant Discharge Elimination System (NPDES) Permit Writers' Training Course	This course will provide the basic regulatory framework and technical considerations that support the development of wastewater discharge permits.	EPA through Tetra Tech	Provided in May 2006 in Anchorage. Attended by 36 ADEC staff.
STORMWATER COURSES			
How to Select, Install, and Inspect Construction Site Erosion and Sediment Control Best Management Practices (BMPs) for NPDES Storm Water Permit Compliance	The course covers rules and regulations, site planning and management, erosion, runoff, and sediment controls, the erosion control planning process, and construction site inspections.	International Erosion Control Association	This course was prepared under an EPA grant and with the association of the IECA and URS Corp.
Multi Sector General Permit	Half-day training about how stormwater intersects with dewatering.	DEC stormwater manager and staff	Offered in October or November 2006.
Stormwater Phase II Rule Workshop	One-day course on the Phase II storm water rule. Covers how the changes in the stormwater program affect municipalities, construction operators, and industrial facilities.	EPA	

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Stormwater Program Comprehensive Training Course	Two-day course on the entire stormwater program. Topics include requirements for industrial facilities, construction activities, and municipal separate storm sewer systems.	EPA	
PRETREATMENT COURSES			
General Overview of the Elements of an Industrial Pretreatment Program	The course provides the basic regulatory and technical framework which supports the development and implementation of a pretreatment program under NPDES and the CWA. The course emphasizes the basic knowledge requirements for personnel involved with administrative, field sampling, industrial inspection and enforcement responsibilities.	Water Environment Federation	
Pretreatment Training: Introduction and Intermediate Topics	This course provides the basic regulatory and technical framework which supports the development and implementation of pretreatment programs under the NPDES and the Clean Water Act CWA. It also provides the framework for collecting, managing, and applying the information necessary to develop and issue permits to industrial dischargers. It covers the process for reviewing industrial information to determine appropriate categorization of the industry and subsequent effluent limit derivation.	EPA and Water Environment Federation	
COMPLIANCE AND ENFORCEMENT COURSES			
Ability to Pay for Attorneys: CST 127	One-day course presents issues regarding preparing and presenting cases involving ability to pay claims. Topics include recent case developments, use of model interrogatories in obtaining cost data, effective use of the ABEL model outputs, practical negotiation tips. The format is lecture only. Enforcement personnel wishing to learn how to use the models should take the Basic ABEL, Basic INDIPAY and Basic MUNIPAY courses. Designed for attorneys, others may attend.	NETI	
ADEC Refresher/In-Service Training	Four-hour refresher course on inspections and enforcement	ADEC-Environmental Crimes Unit	Required every 3 years to renew inspector and compliance officer credentials
Advanced Environmental Investigations	This 80-hour course teaches advanced investigation techniques to environmental regulators and criminal investigators.	EPA	Meets requirement for ADEC enforcement credentials.
Advanced Inspector Training: CST 309	Three-day course designed for experienced inspectors (with at least 3 years of experience) provides discussion, demonstrations, and practice in specific skills, such as information research, digital camera usage, vulnerability assessment, interviewing, report writing, lab fraud, and courtroom testimony/evidence, and other topical issues.	NETI	

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Basic ABEL Training: CST 101	One half-day course on ABEL, a computer model that evaluates ability to pay claims from corporations and partnerships. ABEL is keyed to corporate partnership income tax returns and used to evaluate non-environmental cases.	NETI	
Basic BEN Training: CST 103	The half-day course trains enforcement staff to calculate the economic benefit of non-compliance.	NETI	
Basic Environmental Investigations	This three-day course covers the process and requirements for successful environmental crimes investigation.	Western States Project	Meets requirement for ADEC enforcement credentials.
Basic Inspector Course: CST 909	Computer based course designed for new environmental inspectors and meets the requirements of 3500.1. Provides overview of all aspects of inspection preparation, conduct, and follow-up. Students will practice basic inspection techniques through computer simulations and they will be provided with reference materials and advice through the simulation. Register at www.netionline.com .	NETI	
Basic Inspector Course: CST109	Four-day introductory course designed for new federal, state, tribal and local environmental inspectors. Meets the training requirement under EPA Order 3500.1. The course provides an overview of all aspects of inspection preparation, conduct, and follow-up. Introduces various federal environmental laws and regulations.	NETI	Attended by 28 Division of Water staff in April 2006 in Anchorage. Received 104(b)(3) grant to cover cost of training and travel.
BEN for Attorneys: CST 125	This half-day course, designed for attorneys, focuses on legal considerations when calculating a violator's economic savings from violating the law. Topics include recent case developments, the current status and impact of public comment process, model interrogatories in obtaining cost data, alternatives to BEN model, negotiation issues, trial/hearing considerations, statute limitations on benefit calculations and illegal competitive advantage issues.	NETI	
CWA/NPDES Inspector Train-the-Trainer Course CWA306	This 3.5-day workshop provides instructor training to experienced NPDES inspectors. The course covers instructional and facilitator skills as well as content materials and instructional aids necessary to instruct other inspectors interested in the CWA/NPDES program and inspector activities. The first 2.5 days of this course is in a classroom setting. The third day includes a visit to a Publicly Owned Treatments Works facility for hands-on activities, such as records review, flow measurement, and sampling.	NETI	

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Complex Case Development Course	This is an advanced course designed to allow teams of regulators, investigators, prosecutors and civil attorney to work as a task force through a practical exercise toward both a civil and criminal court proceeding.	Western States Project	
Enforcement Teamwork: Regulations to Resolutions: CST 208	Week long course provides overview of basic procedures and issues surrounding all aspects of the enforcement program, focusing on teamwork, case development, field work and case resolutions. Course will refine the understanding and coordination skills of students and will support many existing courses by borrowing a small piece of each and thereby building a vision for how various components of enforcement work together.	NETI	Compliance section manager/ senior staff person should take either CST 208 or 209.
Environmental Crimes Awareness Enforcement Pitfalls	This 2-hour course covers things not to do in an enforcement case.	ADEC Environmental Crimes Unit	
Field Investigators Course (NEEP): CST 209	This 3-day course is designed for experienced investigators and regulatory personnel. Through practical exercises, the participants work in multi-disciplinary teams to investigate and develop cases around seven scenarios involving environmental crimes.	NETI	Compliance section manager/ senior staff person should take either CST 208 or 209.
Introduction to Environmental Enforcement Course	This 3-day course focuses on the process of enforcement within the regulatory system.	Western States Project	Meets requirement for ADEC enforcement credentials.
NPDES Technical Inspector Workshop 2007	This 3 day course will increase inspector's knowledge of NPDES permits and regulations, field inspection capabilities, knowledge of wastewater processes and environmental management systems. Field exercises provide hands-on training in various aspects of NPDES inspection work.	NETI	
Performance Evaluations of Wastewater Treatment Facilities: CWA 105	This course is designed for industrial and municipal wastewater treatment plant inspectors. It provides an overview of the basic treatment units, principals of operation, and key physical observations to evaluate treatment plant performance. Course includes classroom and field components. Can be 2-3 day course with field activities.	NETI	Could be useful for EPS II level staff. Recommended for Compliance Officers.
Putting It All Together: The Case Development Process: CST 910	This computer-based training course provides a generic overview of the case development process. The target audience for this course includes enforcement personnel with less than three years enforcement experience who are responsible for developing, litigating, supervising, and ensuring the quality as well as integrity of enforcement cases.	NETI	

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ADMINISTRATION AND INFORMATION MANAGEMENT			
Complaint Automated Tracking System (CATS)	This training provides instruction on use of the Department's CATS database. CATS tracks each administrative, civil, and criminal enforcement action taken by the Department against an offender and provides cross program communications on enforcement issues.		Information in CATS is confidential. Access to system is limited.
Discharge Results and Online Permit System (DROPS) Introductory Course	New permitting and compliance staff will receive one-on-one DROPS training. DROPS user support guidance is posted to the intranet, and periodic refresher courses will be available to permitting and compliance staff.	DEC Administration and Information Management Program	In June 2006, 35 Division of Water staff received training on DROPS (two half day small-group classes, plus a two hour one-on-one session).
OTHER			
Interagency Consultation for Endangered Species	This course covers interagency consultation requirements.	USFWS	