

Comprehensive Performance Evaluation (CPE) Checklist Surface Water Treatment Rule (SWTR)

FOR SURFACE WATER/GUDI PUBLIC WATER SYSTEMS THAT ARE
REQUIRED TO CONDUCT ADDITIONAL INDIVIDUAL FILTER MONITORING

Part 1: General Public Water System (PWS) and Monitoring Period Information			
Regulatory Agency: <input type="checkbox"/> ADEQ <input type="checkbox"/> PDEQ <input type="checkbox"/> MCESD			Date:
PWS Name:			PWS ID#:
Contact Person:			Phone#:
Email Address:		Month/Year:	
Treatment Plant Name:		Treatment Plant Number:	
Date ADEQ was consulted for CPE:			
Schedule Date of CPE:		Date CPE was Performed:	
CPE Performed by (Name and Organization):			
ADEQ Approval of 3 rd Party (if Necessary):			
Part 2: Comprehensive Performance Evaluation Checklist			
<p>INSTRUCTIONS: This worksheet is based on responses provided to Individual Filter Effluent (IFE) Turbidity questions on Page 2 of the Surface Water Treatment Reporting form (DWAR15A&B). If your water system has answered 'YES' to Question 4 or Question 5 on DWAR 15A&B, complete a Filter Profile form. If your water system has answered 'YES' to Question 6 on DWAR15A&B, complete an Individual Filter Self-Assessment. If your water system has answered 'YES' to Question 7 on DWAR15A&B, review the checklist and include all required components in a Comprehensive Performance Evaluation.</p> <p>Use this checklist to ensure all the required components are included in your system's CPE. The CPE must include an assessment of plant performance, evaluation of major processes, identification and prioritization of limiting factors, an assessment of the applicability of comprehensive technical assistance and CPE report (40 CFR 141.2/A.A.C R18-4-103).</p>			
ASSESSMENT OF PLANT PERFORMANCE AND EVALUATION OF MAJOR UNIT PROCESSES	No Issues Identified	Issues Identified (include in CPE)	Explanation Provided in CPE
Evaluated plant design capacity and compare flow rate to maximum design capacity	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated unit Filter Run Volume (gallons/ ft ²) compared to plant design	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Conducted filter surveillance of backwash rates, bubbling in backwash	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Mapped drained filter bed to determine issues with filter performance	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Assessed filter media (number of sites, layer thickness) to determine issues with filter performance	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated filter performance during normal and "worse case" operations	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluate cross section of media to determine issues with filter performance	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated media core to determine issues with filter performance	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Assessed chemical feed operations for coagulation, flocculation and disinfection practices	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated the specific gravity and concentration of chemicals (dosing)	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated sedimentation basin to determine issues with	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>



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performance			
Assessed the operation of equipment compared to manufacturer procedures	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Assessed the operation of raw water intake for issues with performance	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated redundancy, bypass capabilities, and modified treatment flow of current treatment process	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated pressure and vacuum (ultrafiltration only)	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated operation of SCADA equipment	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated the location of sample sites, injection points, and analyzers compared to treatment process	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated the overall treatment flow for efficiency	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
Evaluated administrative tasks	<input type="checkbox"/>	<input type="checkbox"/>	YES <input type="checkbox"/> NO <input type="checkbox"/>
IDENTIFICATION AND PRIORITIZATION OF LIMITING FACTORS			Included in CPE
Identified limiting factors to treatment plant's performance			YES <input type="checkbox"/> NO <input type="checkbox"/>
Prioritized limiting factors based on impact to plant performance			YES <input type="checkbox"/> NO <input type="checkbox"/>
APPLICABILITY OF COMPREHENSIVE TECHNICAL ASSISTANCE			Included in CPE
Described required follow up actions based on plant assessment and limiting factors			YES <input type="checkbox"/> NO <input type="checkbox"/>
Described the applicability of required follow up actions in a Comprehensive Technical Assistance plan			YES <input type="checkbox"/> NO <input type="checkbox"/>
Part 3: Attachments			
Ensure the below attachments are included with your Comprehensive Performance Evaluation:			Provided with CPE
Written Comprehensive Performance Evaluation Report, including assessment of plant performance, evaluation of major unit processes, identification and prioritization of limiting factors; applicability of comprehensive technical assistance; and preparation of a CPE report.			YES <input type="checkbox"/> NO <input type="checkbox"/>
Graphical representation of the system's turbidity over the past 12 months (include raw, clarified and filtered effluent turbidity levels)			YES <input type="checkbox"/> NO <input type="checkbox"/>

Submit completed report to your ADEQ Compliance Assistance Coordinator:
https://static.azdeq.gov/comp/dw/coordinator_contact_list.pdf

Maricopa County Environmental Service Department
Email: sdwquestions@maricopa.gov
Phone: 602-506-6935