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In the rows below, select "Do It All The Time", "Limited Experience" or "Never Do This" based on your c	urrent know	ledge and ex	perience.
Based on your responses, you can asses your overall preparedness for each Domain.			
	Do It All The Time	Limited Experience	Never Do This
Domain 1 – Environmental Knowledge, Regulations, and Complia	nce		
Sub-Domain 1.1 – Environmental Knowledge			
1. Basic knowledge of chemistry principles that relate to industrial and commercial wastewater.			
2. Basic knowledge of wastewater treatment concepts and pretreatment processes used to manage industrial			
waste (i.e., physical, chemical, and biological).			
3. Basic knowledge of pretreatment and the mechanical function of grease removal equipment, sand-oil clarifiers,			
oil/water separators, gravity separators, and related equipment.			
4. Basic knowledge of structural, non-structural, and stormwater management best practices for existing			
development and construction projects.			<u> </u>
5. Basic knowledge of manufacturing processes as sources of industrial waste and their effects on wastewater treatment processes.			
Sub-Domain 1.2 - Environmental Regulations and Compliance			
1. Basic knowledge of the Clean Water Act and its implications on wastewater management.			
2. Basic knowledge of National Pollutant Discharge Elimination System (NPDES)			
permits and their requirements. 3. Basic knowledge of the Environmental Protection Agency's Code of Federal			
Regulations (CFR) 40, CFR 40 Subchapter N, CFR 403.			
4. Basic knowledge of state-specific regulations related to industrial waste, pretreatment and stormwater			+
management.			
5. Basic awareness of local ordinances and guidelines governing industrial and commercial waste discharges.			
6. Basic knowledge of the Industrial Waste and Stormwater Programs and their requirements.			
7. General knowledge of site plans, maps, waste management plans, slug control plans, spill containment plans,			
and other projects wastewater discharge.			
How would you rank Domain 1 based on what you selected for each Sub-Domain?			
Domain 2 – Sampling, Monitoring, and Data Analysis	•		
Sub-Domain 2.1 –Sampling			
1. Identify appropriate sampling techniques for collecting wastewater samples from various sources, including			
industrial, commercial, and domestic dischargers, and stormwater and conveyance systems.			
2. Basic understanding of sample preservation and documentation procedures, ensuring proper chain of custody.			
3. Gather and prepare labels and sampling equipment.			
4. Install and troubleshoot samplers.			1

5. Retrieve, preserve, and transport samples according to established procedures, and properly dispose of samples collected and analyzed in the field.		
6. Inspect and record observed conditions during sampling events that might influence sample results.		
Sub-Domain 2.2 - Laboratory Testing		
1. Basic knowledge of laboratory testing methods used for analyzing collected samples including chemical, biological, and bacteriological analysis of water, stormwater, groundwater, and wastewater.		
2. Basic knowledge of how to operate, calibrate, clean, and maintain a variety of field meters, sampling, and related equipment including pH meters, flow meters, atmosphere monitors, conductivity and other various meters, ammonia and chlorine test kits, and automatic sampling devices.		
Sub-Domain 2.3 – Monitoring		
 Identify field monitoring equipment, such as samplers, hydrogen sulfide (H2S) monitors, pressure monitors, pH meters, flow meters, and Lower Explosive Limit (LEL) meters. Conduct system checks on instrumentation to verify their proper functioning and accuracy (e.g., samplers, 		
meters, in-line monitoring).	 	
Sub-Domain 2.4 - Analysis		
1. Analyze collected data, including temperature, pH, flow, and other relevant observations to determine compliance with regulations.		
2. Set up, calibrate, and operate a variety of field instruments used to analyze samples.		
How would you rank Domain 2 based on what you selected for each Sub-Domain?		
Domain 3 - Inspection and Enforcement		
Sub-Domain 3.1 – Inspection		
1. Inspect industrial and commercial facilities to determine compliance with environmental regulations and agency guidelines.		
2. Basic knowledge of pretreatment and stormwater devices, including sample points (e.g., grease traps, grease interceptors, sand and oil clarifiers, sumps, rain valves and pumps, drain inserts/screens/baskets, downspout filters, hydrodynamic separators, vegetated swales, detention, bioretention and infiltration basins, sand filters, and other stormwater or sewer pretreatment systems).		
3. Basic knowledge of industrial inspection procedures used to detect evidence of illicit non-rainwater discharges.		
4. Basic knowledge of permitting requirements for commercial portions of the industrial waste pretreatment and stormwater programs.		
5. Review, modify, and recommend issuance of permits to industrial users for a variety of discharge permit applications.		
6. Investigate complaints of alleged violations of waste discharge standards and possible illicit discharges into the stormwater conveyance system and/or sanitary sewer.		
Sub-Domain 3.2 – Enforcement		
1. Basic knowledge of enforcement actions and procedures for addressing violations and non-compliant sites.		
2. Issue enforcement documents (Warning Notice, Notice of Violation) and take other routine steps as they relate to the enforcement of rules and regulations.		
How would you rank Domain 3 based on what you selected for each Sub-Domain?		

Domain 4 – Safety		
Sub-Domain 4.1 – Safety		
1. Adhere to safety principles and practices while handling chemicals, operating equipment, and conducting fieldwork.		
2. Identify potential hazards in the field or workplace and implement safety precautions to protect oneself and others.		
3. Observe proper safety procedures, rules, regulations, and practices.		
4. Use appropriate Personal Protective Equipment (PPE).		
5. Basic knowledge of confined space.		
6. Basic knowledge of common gases encountered in a sewer system.		
7. Basic knowledge of temporary traffic control.		
How would you rank Domain 4 based on what you selected for each Sub-Domain?		
Domain 5 – Recordkeeping, Documentation, and Communicatio	on	
Sub-Domain 5.1 – Recordkeeping and Documentation		
1. Maintain accurate and detailed records of field activities, inspections, and sample data in field notebooks and computer programs.		
2. Prepare necessary documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping.		
3. Prepare technical reports and correspondence related to facility inspection and/or sampling activities.		
4. Monitor and track submission of compliance reports from permitted industries.		
5. Maintain chain-of-custody documentation.		
6. Recognize the importance of chain-of-custody procedures and the consequences of breaking such procedures.		
Sub-Domain 5.2 – Communication and Collaboration		
1. Communicate technical information clearly and concisely to supervisory and environmental compliance personnel.		
2. Collaborate with team members, industry representatives, and the public to explain regulatory requirements and ensure compliance.		
3. Provide public outreach to businesses and the general public regarding various environmental programs.		
How would you rank Domain 5 based on what you selected for each Sub-Domain?		
Domain 6 – Math		
Sub-Domain 6.1 – Math		
1. Understand basic mathematical principles and perform basic calculations using arithmetic.		
2. Calculate detention time.		
3. Calculate sewer fees.		
How would you rank Domain 6 based on what you selected for each Sub-Domain?		



You may want to focus your studying in the areas where you selected "Limited Experience" or "Never Do This". See Collection System Maintenance Candidate Handbook.

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In the rows below, select "Do It All The Time", "Limited Experience" or "Never Do This" based on your cu	urrent know	ledge and ex	perience.
Based on your responses, you can asses your overall preparedness for each Domain.			
	Do It All The Time	Limited Experience	Never Do This
Domain 1 – Environmental Knowledge, Regulations, and Complia	nce		
Sub-Domain 1.1 – Environmental Knowledge			
1. Knowledge of chemistry principles that relate to industrial and commercial wastewater.			
2. Knowledge of wastewater treatment concepts and pretreatment processes used to manage industrial waste (i.e., physical, chemical, and biological).			
3. Knowledge of pretreatment and understanding of the mechanical function of grease removal equipment, sand- oil clarifiers, oil/water separators, gravity separators, and related equipment.			
4. Knowledge of structural and non-structural stormwater best management practices for existing commercial and industrial users.			
5. Knowledge of the types of wastestreams generated by manufacturing processes and their impacts on wastewater treatment.			
Sub-Domain 1.2 – Environmental Regulations and Compliance			
1. Knowledge of the Clean Water Act and its implications on wastewater management.			1
2. Knowledge of National Pollutant Discharge Elimination System (NPDES) permit requirements, Waste Discharge Requirements (WDR), and Municipal Separate Storm Sewer Systems (MS4).			
3. Knowledge of the Environmental Protection Agency's Code of Federal Regulations (CFR) 40, CFR 40 Subchapter N, CFR 136, and CFR 403.			
4. Knowledge of state-specific regulations related to industrial waste, pretreatment, and stormwater management.			
5. Knowledge of local ordinances, rules, and codes governing industrial and commercial waste and enforcement response plans.			
6. Knowledge of the Federal Resource Conservation Recovery Act (RCRA), Industrial Wastewater and Stormwater Programs and their requirements.			
How would you rank Domain 1 based on what you selected for each Sub-Domain?			
Domain 2 – Sampling, Monitoring, and Data Analysis			
Sub-Domain 2.1 – Sampling			
 Use approved sampling techniques and equipment for collecting wastewater samples from various sources, including industrial, commercial, and domestic dischargers, and stormwater and conveyance systems. Understand sample preservation and documentation procedures (including field analyses) and ensure proper 			
chain of custody.			
3. Gather and prepare labels and sampling equipment.			
4. Install, set up, operate, and troubleshoot samplers.			

5. Retrieve, preserve, and transport samples according to established procedures, and properly dispose of samples collected and analyzed in the field.		
6. Monitor and record observed conditions during sampling events that might influence sample results.		
7. Review sample collection and preservation policies, procedures, and methods (Reference 40 CFR 136).		
Sub-Domain 2.2 - Laboratory Testing		
1. Knowledge of approved laboratory testing methods used for analyzing collected samples including chemical, biological, physical, and bacteriological analysis of water, stormwater, groundwater, and wastewater.		
2. Operate, calibrate, troubleshoot, clean, and maintain a variety of field meters, sampling, and related equipment, including pH meters, flow meter, atmosphere monitor, conductivity and other various meters, ammonia, sulfide, and chlorine test kits, and automatic sampling devices.		
Sub-Domain 2.3 – Monitoring		
1. Proficiency in using field monitoring equipment, such as samplers, flow meters, pH meters, and atmospheric monitoring devices (e.g., hydrogen sulfide (H2S) monitors, oxygen (O2), carbon monoxide (CO), and Lower Explosive Limit (LEL) meters).		
2. Conduct system checks on instrumentation to verify their proper functioning and accuracy (e.g., samplers, meters, in-line monitoring).		
3. Review compliance monitoring reports, such as toxic organic management plans (TOMPs), stormwater pollution prevention plans (SWPPPs), spill prevention control and countermeasure plans, slug discharge control plans, baseline and self-monitoring reports, 90-day reports, periodic reports of continued compliance, and monitoring reports for compliance with federal, state, and local requirements.		
Sub-Domain 2.4 – Analysis		
1. Analyze collected data, including temperature, pH, flow, and other relevant observations to determine compliance with regulations.		
 Analyze data by comparing test results to requirements to determine compliance status. 	+	
How would you rank Domain 2 based on what you selected for each Sub-Domain?	+	
Domain 3 – Inspection, Investigation, and Enforcement		
Sub-Domain 3.1 – Inspection and Investigation	1	
 Conduct industrial and commercial facility inspections to determine compliance with environmental regulations and agency guidelines. 		
2. Inspect pretreatment and stormwater devices, including sample points (e.g., grease traps, grease interceptors, sand and oil clarifiers, sumps, rain valves and pumps, drain inserts/screens/baskets, downspout filters, hydrodynamic separators, vegetated swales, detention, bioretention and infiltration basins, sand filters, and other stormwater or sewer pretreatment systems).		
3. Understand industrial inspection procedures used to detect evidence of illicit non-rainwater discharges.		
4. Familiarity with permitting requirements for commercial portions of the industrial waste pretreatment and stormwater programs.	1	
5. Review, modify, and recommend issuance of permits to industrial users for a variety of discharge permit applications.		
6. Investigate complaints of alleged violations of waste discharge standards and possible illicit discharges into the stormwater conveyance system and/or sanitary sewer.	ý	

7. Issue new, renewal, or updated Industrial User permits and explain changes and compliance requirements.	
8. Develop and negotiate complex industrial discharge permits.	
9. Investigate and trace sources of illegal or toxic wastes and unusual discharges entering stormwater and	
wastewater collection systems.	
10. Research compliance history of facilities.	
11. Recognize when a facility is in Non-Compliance or Significant Non-Compliance and respond appropriately.	
Sub-Domain 3.2 – Enforcement	
1. Knowledge of enforcement actions and procedures for addressing violations and non-compliant sites/Industrial	
Users.	
2. Understand the escalation of enforcement hierarchy, issue Notice of Violation, and implement other	
enforcement actions as they relate to the enforcement of rules and regulations as outlined in the agency's enforcement response plan and sewer use ordinance.	
Sub-Domain 3.3 – Site Plans and Permits	
1. Review and evaluate site plans, maps, waste management plans, slug control plans, spill containment plans, and	
other projects involving wastewater discharge.	
2. Receive and review plans for pretreatment of new buildings or tenant improvements and verify completed	
applications.	
3. Use sample and flow data to assist with the Industrial User permitting process.	
4. Review plumbing plans for compliance with sewer ordinance and suggest modifications to plumbing	
inspectors or engineers.	
5. Evaluate commercial and industrial discharge loading to assess sewer impact fees.	
How would you rank Domain 3 based on what you selected for each Sub-Domain?	
Domain 4 – Safety	
Sub-Domain 4.1 – Safety	
1. Adhere to safety principles and practices while handling chemicals, operating equipment, and conducting fieldwork.	
2. Identify potential hazards in the field or workplace and implement safety precautions to protect oneself and	
others.	
3. Observe proper safety procedures, rules, regulations, and practices.	
4. Use appropriate Personal Protective Equipment (PPE).	
5. Knowledge of confined space, permitted confined space, the hazards they pose,and requirements for entry.	
6. Knowledge of common gases encountered in a sewer system.	
7. Review Safety Data Sheets for pertinent information about materials stored and used at permitted facilities.	
8. Identify flash point temperatures of liquids commonly encountered in the field.	
9. Knowledge of proper protocol for safely and effectively opening a sewer manhole.	
10. Basic knowledge of temporary traffic control.	
How would you rank Domain 4 based on what you selected for each Sub-Domain?	
Domain 5 – Recordkeeping, Documentation, and Communication	n

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Sub-Domain 5.1 – Recordkeeping and Documentation	
1. Maintain accurate and detailed records of field activities, inspections, and sample data in field notebooks and	
computer programs.	
2. Prepare necessary documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping.	
3. Prepare technical reports and correspondence related to facility inspection and/or sampling activities.	
4. Monitor and track submission of compliance reports from permitted industries.	
5. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures.	
6. Assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspection (PCI), and Pretreatment Compliance Audit (PCA).	
7. Prepare surcharges, sampling fees, violations, and capacity fee bills for Industrial Users.	
Sub-Domain 5.2 – Communication and Collaboration	
1. Communicate technical information clearly and concisely to supervisory and environmental compliance personnel and facility contacts (e.g., when initiating enforcement actions).	
2. Collaborate with team members, industry representatives, and the public to explain regulatory requirements and ensure compliance.	
3. Provide public outreach to businesses and the general public regarding various environmental programs.	
4. Communicate effectively with local, regional, state, and federal departments and agencies.	
5. Provide professional customer service in both internal and external settings (e.g., de-escalation).	
6. Provide training and technical guidance to lower-level colleagues.	
How would you rank Domain 5 based on what you selected for each Sub-Domain?	
Domain 6 – Math	
Sub-Domain 6.1 – Math	
1. Understand mathematical principles and perform calculations using arithmetic.	
2. Calculate detention time.	
3. Calculate sewer fees.	
4. Calculate size requirements of basin/containment structures.	
5. Perform calculations to determine industrial discharge permit limits, including production-based and mass- based limits.	
6. Calculate pollutant loading in wastewater discharges.	
7. Calculate percent removal and removal efficiency.	
8. Perform common wastewater conversions (e.g., ug/L to mg/L, CF to gallons, mg/L to lbs, etc.).	
How would you rank Domain 6 based on what you selected for each Sub-Domain?	

You may want to focus your studying in the areas where you selected "Limited Experience" or "Never Do This". See Collection System Maintenance Candidate Handbook.

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In the rows below, select "Do It All The Time", "Limited Experience" or "Never Do This" based on your cu Based on your responses, you can asses your overall preparedness for each Domain.	urrent know	ledge and ex	perience.
Dased off your responses, you can asses your overall preparedness for each Dorham.	Do It All The Time	Limited Experience	Never Do This
Domain 1 – Environmental Knowledge, Regulations, and Complia	nce		
Sub-Domain 1.1 – Environmental Knowledge			
1. Knowledge of chemistry principles that relate to industrial and commercial wastewater.			
2. Advanced knowledge of wastewater treatment concepts and pretreatment processes used to manage			
industrial waste (i.e., physical, chemical, and biological).			
3. Advanced knowledge of pretreatment and understanding of the mechanical function of grease removal			
equipment, sand-oil clarifiers, oil/water separators, gravity separators, and related equipment.			
4. Advanced knowledge of structural and non-structural stormwater best management practices for existing			
commercial and industrial users.			
5. Advanced knowledge of the types of wastestreams generated by manufacturing processes and their impacts			
on wastewater treatment.			
Sub-Domain 1.2 – Environmental Regulations and Compliance	-		
1. Advanced knowledge of the Clean Water Act and its implications on wastewater management.			
2. Advanced knowledge of National Pollutant Discharge Elimination System (NPDES) permit requirements, Waste			
Discharge Requirements (WDR), and Municipal Separate Storm Sewer Systems (MS4).			
3. Advanced knowledge of the Environmental Protection Agency's Code of Federal Regulations (CFR) 40, CFR			
40 Subchapter N, CFR 136, and CFR 403.			
4. Advanced knowledge of state-specific regulations related to industrial waste, pretreatment, and stormwater			
management.			
5. Advanced knowledge of local ordinances and guidelines governing industrial and commercial waste and enforcement response plans.			
6. Advanced knowledge of the Federal Resource Conservation Recovery Act (RCRA), Industrial Waste and			
Stormwater Programs and their requirements.			
How would you rank Domain 1 based on what you selected for each Sub-Domain?			
Domain 2 – Sampling, Monitoring, and Data Analysis	l	l	
Sub-Domain 2.1 – Sampling			
1. Oversee the appropriate use of sampling techniques for collecting wastewater samples from various sources,			
including industrial, commercial, and domestic dischargers, and stormwater and conveyance systems.			
2. Advanced understanding of sample preservation and documentation procedures, ensuring the integrity of the			
chain of custody.			
3. Oversee the inventory of sampling equipment and gather and prepare labels and sampling equipment when			
necessary.			
4. Oversee the installation, set up, operation, and troubleshooting of samplers.			

5. Retrieve, preserve, and transport samples according to established procedures, and properly dispose of samples and their preservatives collected and analyzed in the field.			
 Oversee the inspection and documentation of observed conditions at the sample locations that might influence 		<u> </u>	
sample results.			
Sub-Domain 2.2 - Laboratory Testing			
1. Advanced knowledge and understanding of laboratory testing methods used for analyzing collected samples			
including chemical, biological, and bacteriological analysis of water, stormwater, groundwater, and wastewater.			
2. Operate, calibrate, clean, maintain, and train others how to use a variety of field meters, sampling, and related			
equipment including pH meters, flow meter, atmosphere monitor, conductivity and other various meters,			
ammonia and chlorine test kits, and automatic sampling devices.			
Sub-Domain 2.3 – Monitoring			
1. Advanced proficiency in using field monitoring equipment, such as samplers, hydrogen sulfide (H2S) monitors,			
pressure monitors, pH meters, flow meters, and Lower Explosive Limit (LEL) meters.			
2. Conduct system checks on instrumentation to verify proper functioning and accuracy (e.g., samplers, meters, in			
line monitoring).			
3. Review and generate compliance monitoring reports, such as toxic organic management plans (TOMPs),			
stormwater pollution prevention plans (SWPPPs), spill prevention control and countermeasure plans, slug			
discharge control plans, baseline and self-monitoring reports, 90-day reports, periodic reports of continued			
compliance, and monitoring reports for compliance with federal, state, and local requirements.			
Sub-Domain 2.4 – Analysis			
1. Analyze collected data, including temperature, pH, flow, and other relevant observations, to determine			
compliance with regulations.			
2. Evaluate data to identify instances of noncompliance.			
3. Conduct sampling and evaluate data for local limit studies.			
How would you rank Domain 2 based on what you selected for each Sub-Domain?			
Domain 3 – Inspection and Enforcement			
Sub-Domain 3.1 - Inspection and Investigation			
1. Conduct industrial and commercial facility inspections to ensure compliance with environmental regulations			
and agency guidelines.			
2. Inspect pretreatment and stormwater devices, including sample points (e.g., grease traps, grease interceptors,			
sand and oil clarifiers, sumps, rain valves and pumps, drain inserts/screens/baskets, downspout filters,			
hydrodynamic separators, vegetated swales, detention, bioretention and infiltration basins, sand filters, and other			
stormwater or sewer pretreatment systems).			
3. Comprehensive understanding of industrial inspection procedures used to detect evidence of illicit non-			
rainwater discharges.	L		
4. Comprehensive understanding of permitting requirements for commercial portions of the industrial waste			
pretreatment and stormwater programs.	 		
5. Review, modify, and recommend issuance of permits to industrial users for a variety of discharge permit			
applications.	1		

6. Investigate complaints of alleged violations of waste discharge standards and possible illicit discharges into the		
stormwater conveyance system and/or sanitary sewer. 7. Issue new, renewal, or updated Industrial User permits, clarify modifications, and outline compliance obligations.		
8. Develop and negotiate complex industrial discharge permits.		
9. Research compliance history of facilities.		
10. Recognize when a facility is in Non-Compliance or Significant Non-Compliance and respond appropriately.		
11. Assist with the development of appropriate inspection procedures, sampling locations and methodology, for a		
broad variety of industrial users.		
12. Respond to and investigate illegal discharges to sewers, streets, and storm drains, including sewer stoppages, spills/Sanitary Sewer Overflows (SSO), and illicit discharges.		
13. Report spills/SSOs, submit accurate and certified sanitary sewer overflow reports into the California		
Integrated Water Quality System (CIWQS), California State Office of Emergency Services (OES), and to other		
regulators.		
Sub-Domain 3.2 - Enforcement		
1. Advanced knowledge of enforcement actions and procedures for addressing violations and non-compliant sites.		
2. Generate and issue Notice of Violations and take other routine steps as they relate to the enforcement of rules		
and regulations.		
3. Facilitate and participate in enforcement hearings and monitor follow-up action.		
4. Provide support for legal action in response to permit non-compliance.		
5. Address complaints and meet with industrial and commercial dischargers to resolve waste problems.		
Sub-Domain 3.3 – Site Plans and Permits		
1. Review and evaluate site plans, maps, waste management plans, slug control plans, spill containment plans, and other projects involving wastewater discharge.		
2. Receive and review plans for new buildings or tenant improvements; update plan check log sheet, review		
plumbing plans for compliance, suggest modifications, conduct inspections, and ensure appropriate completion.		
3. Assist with permitting and analyzing industrial flow and samples.		
4. Understand fundamental hydraulic and environmental engineering concepts and interpret engineering		
drawings effectively.		
5. Evaluate commercial and industrial discharge loading to assess sewer impact fees.		
How would you rank Domain 3 based on what you selected for each Sub-Domain?		
Domain 4 – Safety and Training		
Sub-Domain 4.1 – Safety and Training		
1. Adhere to and provide training on safety principles and practices while handling chemicals, operating		
equipment, and conducting fieldwork.		
2. Provide training on potential hazards in the field or workplace and implement safety precautions to protect		
oneself and others.		
3. Observe and provide training on proper safety procedures, rules, regulations, and practices.		
4. Provide training on and oversee the use of appropriate Personal Protective Equipment (PPE).		
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5. Knowledge of confined space, permitted confined space, the hazards they pose, and requirements for entry.	
6. Knowledge of common gases encountered in a sewer system.	
7. Review Safety Data Sheets for pertinent information about materials stored and used at permitted facilities,	
and recognize incompatible chemicals.	
8. Identify flash point temperatures of liquids commonly encountered in the field.	
9. Assist in the administration of a safety program.	
10. Perform job hazard assessments and develop appropriate standard operating procedures (SOPs).	
11. Perform field inspections for compliance with SOPs.	
Sub-Domain 4.2 – Supervision and Administration	
1. Assist management with employee development and training programs to meet performance standards.	
2. Provide instruction and training to staff on sampling and inspection methodologies, as well as the application	
of laws, codes, ordinances, and procedures governing implementation and enforcement of pretreatment	
regulations.	
3. Coordinate, strategize, oversee, and assess the activities, work, and performance of managed personnel.	
4. Perform managerial and supervisory tasks such as budget management, invoice approval, and requisition	
submission, and assist in the drafting of requirements for Requests for Proposals (RFPs).	
How would you rank Domain 4 based on what you selected for each Sub-Domain?	
Domain 5 – Recordkeeping, Documentation, and Communicatio	n
Sub-Domain 5.1 – Recordkeeping and Documentation	
1. Maintain and review records of field activities, inspections, and sample data for accuracy and completion.	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections (PCI), and Pretreatment Compliance Audits (PCA). 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections (PCI), and Pretreatment Compliance Audits (PCA). Prepare and review surcharges, sampling fees, violations and capacity fee bills for Industrial Users. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections (PCI), and Pretreatment Compliance Audits (PCA). Prepare and review compliance letters to industrial waste dischargers. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections (PCI), and Pretreatment Compliance Audits (PCA). Prepare and review surcharges, sampling fees, violations and capacity fee bills for Industrial Users. Draft and review compliance letters to industrial waste dischargers. Prepare technical reports for the State Water Quality Control Board and the Environmental Protection Agency. 	
 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections (PCI), and Pretreatment Compliance Audits (PCA). Prepare and review compliance letters to industrial waste dischargers. Draft and review compliance letters to industrial waste dischargers. Prepare technical reports for the State Water Quality Control Board and the Environmental Protection Agency. Monitor discharge volumes and loadings from industrial and commercial users for billing and data collection 	
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 Maintain and review records of field activities, inspections, and sample data for accuracy and completion. Prepare and review completed documentation for sample collection and preservation, laboratory analysis, and enforcement actions, ensuring proper record-keeping. Prepare and review completed technical reports and correspondence related to facility inspection and/or sampling activities. Review submitted compliance reports from permitted industries and identify violations. Maintain chain-of-custody documentation and recognize the consequences of breaking procedures. Participate in the administration of the NPDES program and assist in the preparation of NPDES program reports and other related reports and documents, such as Annual Reports, Pretreatment Compliance Inspections (PCI), and Pretreatment Compliance Audits (PCA). Prepare and review compliance letters to industrial waste dischargers. Prepare technical reports for the State Water Quality Control Board and the Environmental Protection Agency. Monitor discharge volumes and loadings from industrial and commercial users for billing and data collection purposes. 	

2. Provide support to team members, industry representatives, and the public to explain regulatory requirements and ensure compliance.		
3. Coordinate and provide public outreach to businesses and the general public regarding various environmental		
programs.		
4. Interface with local, regional, state, and federal departments and agencies.		
5. Oversee and provide professional customer service in both internal and external settings (e.g., de-escalation).		
6. Develop and implement Pollution Prevention Programs to promote environmental compliance.		
7. Prepare and conduct presentations to industrial users and the public to educate and raise awareness on environmental compliance.		
How would you rank Domain 5 based on what you selected for each Sub-Domain?		
Domain 6 – Math		
Sub-Domain 6.1 – Math		
1. Perform calculations to determine industrial discharge permit limits, including production-based and mass-		
based limits.		
2. Calculate pollutant loading in wastewater discharges.		
3. Calculate percent removal and removal efficiency.		
4. Use the combined waste stream formula in the calculation of permit limits and compliance.		
5. Calculate the pollutant travel time from the sample point to the treatment plant.		
How would you rank Domain 6 based on what you selected for each Sub-Domain?		

You may want to focus your studying in the areas where you selected "Limited Experience" or "Never Do This". See Collection System Maintenance Candidate Handbook.

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In the rows below, select "Do It All The Time", "Limited Experience" or "Never Do This" based on your cu	urrent know	ledge and ex	perience.
Based on your responses, you can asses your overall preparedness for each Domain.			
	Do It All The Time	Limited Experience	Never Do This
Domain 1 – Environmental Knowledge, Regulations, and Complia	nce		
Sub-Domain 1.1 – Environmental Knowledge			
1. Apply knowledge of chemistry and biology to understand the composition, properties, and impacts of wastewater and stormwater discharges on the environment.			
2. Identify and assess the risks associated with sewer and stormwater discharges, sampling, and inspection, and develop procedures to mitigate those risks.			
3. Use chemical, biological, physical, and environmental sciences to analyze environmental data, identify trends, and reach valid conclusions.			
4. Apply methods and techniques used in sampling and principles of statistical analysis.			
5. Understand the principles and practice of environmental compliance, including the development and implementation of environmental compliance programs, the conduct of inspection and reviews, and enforcement of environmental regulations.			
Sub-Domain 1.2 – Compliance Enforcement			
1. Monitor and enforce program regulations, ensuring compliance with federal, state, and local laws.			
2. Evaluate Notices of Intent (NOI) and Storm Water Pollution Prevention Plans (SWPPPs) for compliance with relevant regulations.			
3. Evaluate industrial dischargers for compliance with discharge regulations.			
4. Prepare compliance letters and implement enforcement action against noncompliant industrial dischargers.			
5. Review and make recommendations regarding California Environmental Quality Act (CEQA), Environmental Impact Reports (EIRs), and associated documents to ensure adherence to stormwater regulations for construction activities and new and redevelopment projects.			
6. Oversee completion of mitigation measures.			
7. Implement monitoring programs as required by the Regional Water Quality Control Board (RWQCB), State Water Resources Control Board (SWRCB), U.S. Environmental Protection Agency (EPA), Department of Public Health (DPH), and other regulatory agencies.			
8. Develop and recommend revisions of local ordinances and Enforcement Response Plans (ERPs) related to environmental compliance for adoption by the agency's governing board.			
Sub-Domain 1.3 – Wastewater and Stormwater Programs			
1. Plan, organize, develop, administer, and monitor complex wastewater treatment and stormwater management programs.			

2. Identify, inspect, and evaluate new industries and businesses for enrollment in wastewater pretreatment and/or stormwater programs.		
3. Review industrial, commercial, and institutional accounts for sanitary and storm sewer service fee accuracy.		
4. Coordinate, direct, and conduct inspections of industrial, commercial, and residential facilities and construction sites regulated by wastewater pretreatment and/or stormwater programs.		
5. Respond to, or direct the response to, illicit discharges and potential pollutants in the municipal separate storm sewer system (MS4); including assessing cleanup procedures and making appropriate recommendations for cleanup.		
6. Investigate liability claims and policy violations related to wastewater and stormwater issues and maintain documentation that may be used in a court of law.		
7. Analyze stormwater run-off sample data results to determine effectiveness and compliance with stormwater program objectives.		
Sub-Domain 1.4 - Regulatory Requirements		
1. Perform technical review of existing environmental regulations, and review and provide technical input for new local, state, and federal environmental regulations.		
 2. Possess knowledge of pertinent federal, state, local, and department regulatory requirements, including the following: Environmental Protection Agency (EPA) California Environmental Protection Agency (CalEPA) Department of Environmental Quality (DEQ) California Environmental Quality Act (CEQA) State Water Resources Control Board (SWRCB) National Pollutant Discharge Elimination System (NPDES) Permit Program California Gode of Regulations, Title 27 California Biosolids Management Program Biosolids Beneficial Use Program Biosolids Outreach Program Cialifornia Air Resources Board (CARB) 		
3. Develop, implement, and manage various programs related to National Pollutant Discharge Elimination System (NPDES) Permit Program, including but not limited to pollution prevention programs, pretreatment programs, sanitary sewer collection system, stormwater, municipal separate storm sewer system (MS4), recycled water, and biosolids management to ensure compliance with requirements.		
Sub-Domain 1.5 – Construction and Capital Improvement Projects		
1. Oversee and coordinate the completion of permit conditions and mitigation requirements for capital improvement projects, to ensure compliance with all applicable regulations.		
2. Review new construction, redevelopment, and tenant improvement plans for compliance with necessary industrial waste requirements, including wastewater pretreatment, and stormwater management.		

3. Understand how to read and interpret plans and specifications, including drawings and diagrams.	
4. Coordinate with building departments, industries, public agencies, and business representatives to review blueprints/plans to confirm proper configuration of facilities and compliance with all applicable regulations.	
5. Review project plans for water efficiency and monitoring and managing water use. Inspect plans and	
documents for dewatering of construction sites and the disposal of hazardous waste.	
How would you rank Domain 1 based on what you selected for each Sub-Domain?	
Domain 2 – Administration	
Sub-Domain 2.1 – Data Management and Technical Reporting	
1. Manage and manipulate complex database information including the collection, storage, and analysis of data related to wastewater treatment, Fats, Oils, and Grease (FOG) management, stormwater management, and air quality from methane from biosolids.	
2. Analyze stormwater run-off sample data results to determine effectiveness and compliance with established objectives, identify trends, and make recommendations for improvement.	
3. Prepare and submit periodic reports to the California Regional Water Quality Control Board (CRWQCB) and other related regulatory agencies, in accordance with all applicable regulations.	
4. Prepare technical reports analyzing a variety of environmental data, including wastewater treatment plant operations, stormwater management programs, and environmental compliance activities.	
5. Maintain detailed records, which may be used in a court of law, including all data collected, analyzed, and reported, such as:	
 Data related to wastewater treatment and stormwater management Data related to air quality from methane from biosolids Records of all inspections, monitoring, and testing activities 	
•Records of all permits and approvals	
•Correspondence with regulatory agencies	
•Reports of any incidents, plant upsets, or spills	
Sub-Domain 2.2 – Public Outreach and Communication	
1. Interact with public and private sector individuals, firms, agencies, and schools to promote environmental compliance, including providing information, answering questions, and responding to complaints.	
2. Provide guidance on environmental compliance matters to businesses and the public, promoting adherence to regulations, and best practices.	
3. Answer questions and provide information to the public in a clear and concise manner, using plain language that is easy to understand.	
4. Investigate complaints and recommend corrective action as necessary to resolve complaints.	
5. Coordinate pollution prevention activities with local businesses and other government agencies to reduce the environmental impact of their operations.	
6. Participate in administrative appeals and show cause hearings on environmental compliance matters.	
7. Ensure continuous communication with agency personnel and governing board regarding spills, plant upsets, and investigations to promptly disseminate information, coordinate response efforts, and facilitate adherence to established environmental compliance protocols.	

CWEA TECHNICAL CERTIFICATION PROGRAM Gap

Gap Analysis Tool

Sub-Domain 2.3 – Budgeting			
1. Develop cost projections for budget proposals that are consistent with the agency's strategic objectives.			
2. Submit justifications for staff, supplies, equipment, and services that demonstrate a rationale for the estimated			
costs, that alternatives that were considered, and the benefits that will be realized.			
3. Monitor and control expenditures by tracking the actual expenditures against the budget and taking corrective			
action as needed to ensure that the budget is not exceeded.			
Sub-Domain 2.4 - Administration			
1. Identify supplies and materials needed, obtain quotes from suppliers, and place orders in a timely manner to			
ensure that they are available when needed.			
2. Identify equipment needs, specify the features and performance requirements, draft Requests for Proposals (RFPs), and obtain quotes from suppliers in a clear and concise manner to ensure that the correct equipment is			
purchased.			
3. Oversee and assist in the preparation of wastewater capacity fee calculations and other cost recovery fees to			
ensure that calculations are accurate and that fees are fair, equitable, and based on sound financial principles.			
4. Prepare reports and presentations with recommendations for action to the agency's governing board.			
5. Draft staff reports for local governing board.			
How would you rank Domain 2 based on what you selected for each Sub-Domain?			
Domain 3 – Supervision and Safety	ļ	1	
Sub-Domain 3.1 – Supervision			
1. Plan, prioritize, assign, supervise, monitor, and review the work of staff involved in conducting environmental			
compliance inspections and wastewater and stormwater programs to ensure that work is accurate and meets			
required standards.			
2. Provide technical and functional guidance and supervision over assigned personnel, including directing and			
training them on environmental compliance investigations, inspections, and enforcement.			
3. Direct staff evaluation activities, including reviewing performance records, conducting performance			
evaluations, recommending improvements and modifications to staff training programs, and conducting staff			
training activities to address deficiencies in knowledge and/or skills.			
4. Participate in the recruitment and selection of staff by reviewing job descriptions, interviewing candidates, and			
making recommendations for hiring and promotion.			
5. Monitor staff and address actions that may be improper, illegal, or in violation of policies or procedures.			
Sub-Domain 3.2 – Safety			
1. Ensure work is performed in a safe manner consistent with safety policies and procedures.			
2. Oversee, coordinate, and document staff safety trainings.			
3. Understand occupational hazards and standard safety practices including those associated with working in			
confined spaces.			_
4. Understand traffic control principles, practices and procedures and implement traffic control plans.			
How would you rank Domain 3 based on what you selected for each Sub-Domain?			
Domain 4 – Audits			

Sub-Domain 4.1 – Environmental Protection Agency (EPA) and State Audits	
1. Ensure the environmental compliance department's adherence to all applicable environmental regulations by	
reviewing the audit schedule, collecting necessary documentation, and identifying areas that need to be	
addressed.	
2. Oversee and coordinate the audit response team, providing training on the audit process, procedures, purpose,	
and auditor and staff roles.	
3. Maintain professional communication while adhering to the audit process and procedures.	
4. Cooperate with the Environmental Protection Agency (EPA), consultants, and the Regional Water Quality	
Control Board (RWQCB) to perform Pretreatment Compliance Inspections and Audits.	
5. Conduct and revise Local Limits Studies for wastewater.	
Sub-Domain 4.2 - Self-Audits	
1. Periodically evaluate the program's alignment with local, state, and federal environmental regulations.	
2. Identify instances and trends of non-compliance and coordinate necessary corrective action.	
3. Maintain documentation of the self-audit process, findings, and corrective actions.	
4. Foster a culture of continuous improvement.	
How would you rank Domain 4 based on what you selected for each Sub-Domain?	

You may want to focus your studying in the areas where you selected "Limited Experience" or "Never Do This". See Collection System Maintenance Candidate Handbook.