

Ohio EPA Class IV Drinking Water Examination Review Checklist

Applicant: _____

Submittal No. 1___ 2___ 3___

Date of Council Review: _____

Reviewer: DB VC BD CC RL TM RR JS

Evaluation Results: Pass: ___ Return: ___

I. Experience

(Do not attach formal position/job descriptions; provide a detailed explanation of your duties in your own words.)

	<u>Yes</u>	<u>No</u>
1. Describe in detail your experience using the format given.	___	___
2. Describe your duties and give dates of promotions.	___	___
3. Described related experience which may be relevant. Cover your entire experience related to the water field. (Include past jobs, training, schooling or volunteer experiences. Include skills acquired and licenses/certifications obtained.)	___	___

General Comments on Experience Section

II. Administration

Provide details of administrative experience.

1. Discuss how many people work for you.	___	___
2. Explain their duties and responsibilities. (Do not attach formal position/job descriptions.)	___	___
3. Discuss the manner in which you supervise their daily activities.	___	___
a. Describe how you assign duties and responsibilities.	___	___
b. Discuss how you provide feedback to your employees.	___	___
c. Discuss how you exchange information between you and other staff and shifts.	___	___
d. Discuss how you motivate employees (financial and non-financial incentives).	___	___
4. Provide Table of Organization with names & job titles.	___	___

General Comments on Administrative Section

III. Budget

	<u>Yes</u>	<u>No</u>
1. Provide a copy of the most recent budget for your plant(s).	___	___
2. Describe and discuss the budget preparation process and your personal involvement:		
a. Explain the various steps of the budget process.	___	___
b. Explain how budget amounts are developed.	___	___
c. Describe who is responsible for submitting what information.	___	___
d. Discuss who reviews and approves the budget at each step in the process.	___	___
e. Discuss the purchasing process.	___	___
f. Discuss any long term budgeting processes, such as capital improvement budgeting and 2, 5 or 10 year budget forecasting.	___	___
g. Describe how expenditures are tracked.	___	___
3. Provide a brief explanation of the budget accounts.	___	___

General Comments on Budget Section

IV. Plant

1. Describe and discuss all treatment process units and compare their operation with respect to design vs. actual performance. (Include raw water supply, recycled streams, etc.)	___	___
2. Discuss specific water quality and operational goals and the plant performance relative to those goals. [For example operational parameters (such as settled water turbidity or what determines when a filter is backwashed), finished water quality goals, etc.]	___	___
3. Discuss how plant is designed to operate.	___	___
4. Discuss how it is operating.	___	___
5. Discuss how you would like it to operate.	___	___
6. Describe your greatest challenges in meeting water quality and/or operational goals.	___	___
7. Describe what information is utilized and how this information is gathered to make treatment chemical dosage adjustments and how these adjustments are determined and made (manually or automatic).	___	___
8. Describe any current or future need for operational and mechanical improvements or concerns about water quality or		

quantity.

- | | ___ | ___ |
|--|------------|-----------|
| | <u>Yes</u> | <u>No</u> |
| 9. Describe and discuss residuals reuse/disposal practices. (Include the operation of the liquid and solids handling processes and compliance with pertinent permits or regulations.) | ___ | ___ |
| 10. Provide a flow diagram. | ___ | ___ |
| 11. Provide a 12-month summary of actual operating data. (i.e. monthly averages and/or ranges of data such as pumping, chemical dosages, treatment parameters, raw and finished water quality, etc). Do not include copies of monthly operating reports. | ___ | ___ |
| 12. Provide any other information related to the plant and its performance. | ___ | ___ |

General Comments on Plant Section

V. Distribution System

- | | | |
|---|-----|-----|
| 1. Describe and discuss water distribution system and how it operates. | ___ | ___ |
| 2. Submit a system map. (In lieu of submitting a map, you may discuss how and where the system map is maintained.) | ___ | ___ |
| 3. Provide information on: | | |
| a. major piping sizes | ___ | ___ |
| b. piping material | ___ | ___ |
| c. pumping rates | ___ | ___ |
| d. system pressures (pressure districts/zones) | ___ | ___ |
| e. consumption rates (for example residential, industrial and seasonal demands) | ___ | ___ |
| f. fire flow | ___ | ___ |
| g. disinfection residuals | ___ | ___ |
| h. backflow prevention | ___ | ___ |
| i. metering | ___ | ___ |
| j. percent of unaccounted for water | ___ | ___ |
| 4. Discuss any affects the distribution system has on water quality. (Disinfection byproducts, lead, copper, taste and odor, discolored water.) | ___ | ___ |
| 5. Discuss dist. system problem areas (quality and quantity). | ___ | ___ |
| 6. Describe need for improvements. Include improvements necessary due to new regulatory requirements. | ___ | ___ |

	<u>Yes</u>	<u>No</u>
7. Describe and discuss booster pumping stations. (Limit to the 5 largest)	_____	_____
a. Provide information on:		
i. areas served	_____	_____
ii. rechlorination	_____	_____
iii. number of pumps	_____	_____
iv. types of pumps	_____	_____
v. flow rates	_____	_____
vi. system pressures	_____	_____
vii. control devices	_____	_____
viii. emergency power supply	_____	_____
b. Discuss problem areas	_____	_____
c. Describe the need for improvements to the booster stations.	_____	_____
8. Storage Facilities		
a. Describe and discuss the following:		
i. number and types of storage facilities	_____	_____
ii. storage capacity	_____	_____
iii. tank turnover	_____	_____
iv. monitoring and control devices	_____	_____
v. supervisory control and data acquisition (SCADA) system(s).	_____	_____
vi. routine maintenance or inspection programs	_____	_____

General Comments on Distribution System Section

VI. Safety Program

1. Describe and discuss the safety program at your facility. (Include a discussion of the risk management plan, if required.)	_____	_____
2. Discuss your personal involvement in the development & implementation of the safety program.	_____	_____
3. Include a listing of personal safety equipment for the plant.	_____	_____
4. List other safety equipment available at the plant.	_____	_____
5. Include a copy of the minutes from the most recent safety committee meeting.	_____	_____
6. Provide a summary or outline of your safety manual.	_____	_____

Yes No

7. Indicate how your facility's safety program addresses provisions of the general OSHA standards. (Code of Federal Regulations 29-1910 and 1926) such as chemical safety, confined space, hazard communication, lock/tag out, personal protective equipment.

___ ___

General Comments on Safety Section

VII. Planning

If you have no direct experience in planning for a plant change then describe a plant/system related event that required you to use planning skills such as plant shutdown/start-up, emergency planning, etc.

Providing a list of projects without description and discussion is not acceptable. A thorough description of one topic is preferred over short descriptions of multiple topics.

1. Describe and discuss your experience related to planning for a plant or system related project. Include planning for a new plant, improvements or expansions, any plans for future regulatory compliance and equipment or process changes.
2. Discuss the various steps in the planning process.
3. Discuss the end result of your planning efforts.
4. Discuss the extent of your responsibilities for the planning.
5. Discuss any 5 to 10 year plans.

___ ___
___ ___
___ ___
___ ___
___ ___

General Comments on Planning Section

VIII. Research

The projects could be completed or currently underway. Research experience may include anything from full scale studies to minor process modifications related to the treatment facility.

This section should follow the format of developing a hypothesis (goal), experimentation, analyzing results and developing conclusions. Providing a list of projects without description and discussion is not acceptable. A thorough description of one topic is preferred over short descriptions of multiple topics.

	<u>Yes</u>	<u>No</u>
1. Describe or discuss any investigations or research programs you participate in related to water	___	___
2. Show		
-Your degree of responsibility	___	___
-dates	___	___
-results and conclusions of research	___	___
3. Submit abstracts of reports, if any.	___	___

General Comments on Research Section

IX. Design

Providing a list of projects without description and discussion is not acceptable. A thorough description of one topic is preferred over short descriptions of multiple topics.

1. Describe and discuss your personal involvement in plant/system design.	___	___
2. Discuss minor improvements suggested or implemented.	___	___
3. Discuss your involvement with consulting engineers on major plant improvements.	___	___

General Comments on Design Section

X. Staff Training and Development

1. Describe and discuss how and by whom employees are trained to operate and maintain your plant.	___	___
2. Is training provided in-house?	___	___
3. Do employees attend outside training?	___	___
4. How have you assisted your co-workers in furthering their		

advancement in the field?

Yes No

- | | | |
|--|---------------|---------------|
| 5. Give names and Ohio EPA certificates obtained for persons you have assisted in their advancement. | <u> </u> | <u> </u> |
| 6. Describe your related teaching experience. | <u> </u> | <u> </u> |

General Comments on Staff Training and Development Section

XI. Publications

Publications could include consumer confidence reports, brochures, standard operating procedures, annual reports, etc.

- | | | |
|--|---------------|---------------|
| 1. Describe publications you prepared, presented and/or published. | <u> </u> | <u> </u> |
| 2. Discuss your degree of contribution to the publication. | <u> </u> | <u> </u> |
| 3. Submit abstracts of papers. | <u> </u> | <u> </u> |

General Comments on Publications Section

XII. Additional Information

Applicant should submit 3 references. (The forms may be reviewed in the Class IV Exam & Guidance document.)