

Ohio EPA Class IV Wastewater Treatment 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 in the wastewater 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 hydraulic and organic loadings.	___	___
2. Discuss and compare how the plant was designed to operate and how it is currently operating. (The discussion should include process control methodologies and any additional loadings such as I & I flows, industrial, septage, leachate, side streams, etc.)	___	___
3. Discuss how you would like the plant to operate.	___	___
4. Discuss how it is operating.	___	___
5. Discuss how you would like it to operate.	___	___
6. Discuss your greatest challenges in meeting your effluent permit limits and operational goals.	___	___
7. Describe any need for operational or mechanical improvements.	___	___
8. Describe and discuss the effects (including biological, chemical or physical impacts) of the effluent discharge on receiving waters.	___	___

	<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 a discussion on compliance with pertinent Ohio Administrative Code requirements.)	___	___
10. Provide a plant flow diagram.	___	___
11. Provide a summary, by month, for the last 12 months of actual operating data. [This should include items such as the monthly averages of: plant flows, process control flow rates and solids concentrations, chemical doses, % removals, sludge volume index (SVI), mean cell residence time (MCRT), settleable solids, influent and effluent quality, etc.] Do not include copies of monthly operating reports.	___	___
12. Provide any additional information related to plant and its performance which may be pertinent.	___	___

General Comments on Plant Section

V. Collection System

1. Describe and discuss the wastewater collection system and how it operates.	___	___
2. Submit a system map.	___	___
3. Discuss the major service areas, trunk lines, routine maintenance, emergency response, etc.	___	___
4. Provide a discussion on:		
a. major piping sizes	___	___
b. piping materials	___	___
c. flow rates	___	___
d. inflow & infiltration (I & I)	___	___
e. odor/corrosion problems	___	___
5. Describe and discuss sanitary sewer overflows (SSOs) and combined sewer overflows (CSOs).	___	___
6. Discuss problem areas.		
7. Describe the need for collection system improvements.	___	___
8. Discuss programs for the reduction of SSOs, water in basement (WIB), CSO long term control plans, I & I reduction programs, and their current status.	___	___
9. Describe and discuss collection system pump stations. (Limit to the 5 largest)		
Provide a detailed discussion on:		
a. collection areas	___	___
b. type of station	___	___
c. number of pumps	___	___

- | | | |
|--|-------------|-------------|
| d. types of pumps | <u> </u> | <u> </u> |
| | <u>Yes</u> | <u>No</u> |
| e. level control devices | <u> </u> | <u> </u> |
| f. force main size | <u> </u> | <u> </u> |
| g. flow rates | <u> </u> | <u> </u> |
| h. emergency power supply | <u> </u> | <u> </u> |
| 10. Discuss pump station problem areas. | <u> </u> | <u> </u> |
| 11. Describe the need for pump station improvements. | <u> </u> | <u> </u> |

General Comments on Collection 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.) | <u> </u> | <u> </u> |
| 2. Discuss your involvement in the development & implementation of the safety program. | <u> </u> | <u> </u> |
| 3. Include a listing of personal safety equipment for the plant. | <u> </u> | <u> </u> |
| 4. List other safety equipment available at the plant. | <u> </u> | <u> </u> |
| 5. Include a copy of the minutes from the most recent safety committee meeting. | <u> </u> | <u> </u> |
| 6. Provide a summary or outline of your safety manual. | <u> </u> | <u> </u> |
| 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. | <u> </u> | <u> </u> |

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

	<u>Yes</u>	<u>No</u>
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.

1. Describe or discuss any investigations or research programs you participate in related to wastewater treatment. (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.)	___	___
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.

- | | <u>Yes</u> | <u>No</u> |
|--|------------|-----------|
| 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? | ___ | ___ |
| 5. Give names and Ohio EPA certificates obtained for persons you have assisted in their advancement. | ___ | ___ |
| 6. Describe your related teaching experience. | ___ | ___ |

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. | ___ | ___ |
| 2. Discuss your degree of contribution to the publication. | ___ | ___ |
| 3. Submit abstracts of papers. | ___ | ___ |

General Comments on Publications Section

XII. Additional Information

___ ___

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