# **Section C - Other Requirements**

- 1. The herein-described treatment works, structures, electrical and mechanical equipment shall be adequately protected from physical damage by the maximum expected one hundred (100) year flood level and operability be maintained during the twenty-five (25) year flood level.
- 2. The entire sewage treatment facility shall be adequately protected by fencing.
- 3. The proper operation and maintenance of the listed sewage treatment facility shall be performed, or supervised, by a certified operator possessing at least a Class 2 certificate for Waste Water Treatment Plant Operators as issued by the State of West Virginia. The on-site attendance of this facility's Class 2 operator shall be determined and directed by the Bureau for Public Health, Office of Environmental Health Services.
- 4. (deleted)
- 5. The arithmetic mean of values for effluent samples collected in a period of seven (7) consecutive days shall not exceed 45.0 mg/l for BOD5 and TSS.
- 6. The arithmetic mean of the effluent values of the TSS discharged during a period of 30 consecutive days shall not exceed 15 percent of the respective arithmetic mean of the influent values for these parameters during the same period except as specifically authorized by the permitting authority.
- 7. The permittee shall not accept any new non-domestic discharges without first obtaining approval from the Director of the Division of Water and Waste Management as provided in Title 47, Series 10, Section 14 of the West Virginia Legislative Rules.
- 8. If any existing non-domestic discharge causes, or is suspected of causing, interference or pass through (as defined by 40 CFR 403.3) or otherwise violates any provision of 40 CFR 403, the permittee shall notify the Director of such violation or suspected violation.
- 9. If any existing non-domestic discharge is identified as being subject to Categorical Pretreatment Standard under 40 CFR Chapter 1, Subchapter N, and the discharge is not regulated by this permit, the permittee shall notify the Director of such identification.
- 10. The permittee shall submit each month according to the enclosed format, a Discharge Monitoring Report (DMR) indicating in terms of concentration and/or quantities the values of the constituents listed in Section A analytically determined to be in the plant effluent(s). Additional information pertaining to effluent monitoring and reporting can be found in Section III of Appendix A.
- 11. The required DMRs should be postmarked no later than 15 days following the end of the reporting period or recieved no later than 20 days following the end of the reporting period and be addressed to:

Director	U. S. Environmental Protection Agency
Division of Water and Waste Management	Region III, Water Protection Division
601 - 57th Street	NPDES Branch (3WP31)
Charleston, West Virginia 25304	1650 Arch Street
Attention: Permitting Section	Philadelphia, PA 19103

12. The Director is required to include effluent discharge limitations in WV/NPDES Water Pollution Control Permits for all priority pollutants, that are present in amounts that could potentially cause violation of Water Quality Standards. Certain pollutants are known to be present in Publicly Owned Treatment Works treatment systems. At the time of issuance of this Permit, the Director did not have adequate information to determine if the pollutants are present in the effluent in amounts that would jeopardize Water Quality Standards. Further, uncertainty exists relative to the amounts of pollutants in the receiving stream upstream of Outlet No. 001. Therefore, the Director is deferring assessment of water quality-based limitations for priority pollutants, pending receipt of additional information. (This procedure will also need to be completed when the modification is completed.)

A phased information generation procedure is proposed herein. the first phase involves the collection of effluent data to determine if pollutants are potentially present in the effluent in amounts exceeding Water Quality Standards. The specifics relative to effluent monitoring are contained in Section 12.a, below. If the effluent potentially contains priority pollutants in amounts above Water Quality Standards, then the Director will consider the feasibility of utilizing complete mix.

In the second phase, the permittee will be required to generate information relative to the upstream water quality. The second phase of information generation is described in Section 12.b, below.

Page No.: draft Permit No.: WV0022349 Revised Date : October 12, 2004

# **Section C - Other Requirements**

- 12. a. The Director will determine if there is reasonable potential for any priority pollutant to be present in Outlet No. 001 in amounts exceeding applicable Water Quality Standards. The Director's assessment will be based upon the effluent data collected and generated by the permittee, and the statistical procedures of the Environmental Protection Agency's Technical Support Document for Water Quality-based Toxics Control.
  - 1) The permittee shall monitor the effluent discharge from Outlet No. 001 for Total Recoverable Cadmium, Hexavalent Chromium, Total Recoverable Copper, Total Recoverable Lead, Total Recoverable Nickel, Total Recoverable Silver, Total Recoverable Zinc, Total Mercury, Total Arsenic, Free Cyanide, and Total Hardness.
  - 2) The effluent shall be performed during the 12 month period beginning on the effective date of the permit. The sample type shall be 24-hour "batch" composite for all parameters except cyanide that shall use a grab sample type. A minimum of 12 test results for each pollutant should be obtained.
  - 3) Unless otherwise specified herein, sample collection, preservation, and analysis shall be conducted in accordance with the procedures of 40 CFR Part 136. The permittee should refer to the effluent discharge limitations prescribed in Section A for comparative purpose. The permittee shall assure that the test procedure being utilized has an appropriate method detection level (MDL) for the parameters. Analyses shall be conducted using the most sensitive methods and detection levels commercially available, and economically feasible. The following methods and detection levels are offered as a guide.

Parameter	EPA Method No.	Recommended Detection Level (	ug/l)
Copper, Total Recoverable	220.2	1	
Lead, Total Recoverable	239.2	1	
Zinc, Total Recoverable	289.2	1	
Chromium, Hexavalent	218.4	1	
Arsenic, Total	206.2	2	
Nickel, Total Recoverable	249.2	3	
Cadmium, Total Recoverable	213.2	0.2	
Silver, Total Recoverable	272.2	0.2	
Mercury, Total	245.1	0.2	
Cvanide, Free			

- 4) The analytical test procedures, set forth in 40 CFR Part 136, prescribe colorimetric methods for certain parameters. The digestion process for the performance of total recoverable is not sufficient for the utilization of a colorimetric procedure. Therefore, colorimetric procedures shall not be acceptable for the analysis of parameters prescribed as total recoverable.
- 5) The permittee shall perform the analyses of the effluent discharge, as prescribed in Section C.12.a.1)through 4), and shall submit to the Director on or before 15 months from the effective date, a written summarization of the sampling data and a "reasonable potential" assessment of the toxic pollutants. Thereupon, the Director shall review the sampling data and RP assessment. Upon completion of the review, the Director shall notify the permittee in writing of the pollutants which demonstrate a reasonable potential to be present in amounts that would violate Water Quality Standards. After receipt of the reasonable potential of pollutants determination from the Director, the permittee shall, immediately, proceed with the implementation of the data generation requirements of Section 12.b below.
- b. The information collected and provided in this evaluation will be used to determine effluent limitations necessary to protect water quality in Evitts Run, as provided in Title 46 Series 1, Water Quality Standards.
  - 1) The permittee shall monitor the receiving stream, upstream of Outlet No. 001, for the purpose of generating data relative to the background concentrations of pollutants in the receiving stream. Such monitoring shall be conducted in accordance with the following conditions.
  - 2) The receiving stream shall be monitored for each pollutant of concern that the permittee will be requesting a complete mix analysis. Where applicable, the "total recoverable" form of cadmium, copper, lead, nickel, silver, and zinc, the "total" form of mercury and arsenic, the "hexavalent" form of chromium, and the "weak acid dissociable" form of cyanide, shall be analyzed. Receiving stream hardness shall also be monitored for metal pollutants that have Water Quality Standards that are hardness-based.

Page No.: draft Permit No.: WV0022349 Revised Date : October 12, 2004

## **Section C - Other Requirements**

- 12. b. 3) The sampling location shall be upstream and outside the influence of Outlet No. 001. Samples shall be collected at approximately one half the width of the receiving stream from the bank. Samples shall be collected at approximate mid-depth. The precise latitude and longitude of the sampling location shall be recorded. If practicable, the sampling location shall be identified through the use of the Global Positioning System.
  - 4) Grab samples shall be obtained.
  - 5) Unless otherwise specified herein, sample collection, preservation and analysis shall be conducted in accordance with the procedures of 40 CFR Part 136. Analyses shall be conducted using the most sensitive approved methods and detection levels commercially available and economically feasible. Refer to the guidance prescribed in Section 12.a.3) above.
  - 6) Sampling frequency shall be twice per month (2/month) during the calendar months of July through October, inclusive, and once per two (2) months during the period of November through June. Monitoring shall be representative of an entire calendar year, and a minimum of 12 samples shall be obtained.
  - 7) The permittee shall make a reasonable effort to perform background monitoring on days the receiving stream discharge is at, or below, normal for the period. Monitoring should not be performed in the 72-hour period following a significant precipitation event.
  - c. Upon completion of the data generation requirements of Section 12.b above, the permittee shall submit to the Director, a Permit Modification Application, including a written summarization of the sampling data, for the institution of the appropriate revisions to Section A.001. The said permit modification application shall be submitted 32 months after the effective date of the permit or prior. Thereupon, the Director shall perform an analysis of the complete mix water quality-based effluent discharge limitations for the pollutants which demonstrated a reasonable potential to be present in amounts that would violate Water Quality Standards. Further, the Director will, at that time, consider reduction of the self monitoring frequency for pollutants determined not to have reasonable potential to be present in the effluent in amounts exceeding Water Quality Standards. Additionally, if effluent quality is such that pollutants present in the effluent in amounts that will violate water quality standards, then the Director may consider elimination of the prescribed effluent discharge limitation.
  - d. Whereby, the permittee does not perform the monitoring and generate the requisite data, as requested in Section 12.b above, the permittee shall comply with the effluent discharge limitations as established in Section A.001, herein, which are based upon compliance with Water Quality Standards in the effluent at the point of discharge.
  - e. If the permittee submits an approvable permit modification application by the specified date, and the Director fails to process the application prior to the effective date of the effluent discharge limitations prescribed in Section A.001, then such limitations shall not become effective until the Director takes final action.
- 13. a. The average daily design flow of the Publicly Owned Treatment Works has been established at 1.2 million gallons per day. When the average monthly effluent flow reported on Discharge Monitoring Reports reaches, or exceeds, 90 percent of the average design flow, (1.08 million gallons per day) during three (3) consecutive monthly periods, the permittee shall submit a Plan of Action to the Director. The Plan of Action shall present, at a minimum, an analysis of current hydraulic and organic loadings on the plant, an analysis of the future projected loadings, and a Schedule of Tasks to accomplish procedures necessary to maintain required treatment levels. (This applies to existing plant.)
  - b. The average daily design flow of the Publicly Owned Treatment Works has been established at 1.75 million gallons per day. When the average monthly effluent flow reported on Discharge Monitoring Reports reaches, or exceeds, 90 percent of the average design flow, (1.575 million gallons per day) during three (3) consecutive monthly periods, the permittee shall submit a Plan of Action to the Director. The Plan of Action shall present, at a minimum, an analysis of current hydraulic and organic loadings on the plant, an analysis of the future projected loadings, and a Schedule of Tasks to accomplish procedures necessary to maintain required treatment levels. (This applies to the plant after the modification is completed.)

Page No.: draft Permit No.: WV0022349 Revised Date : October 12, 2004

## **Section C - Other Requirements**

- 14. a. Any future collection system extensions projected to cause an increase in the wastewater flow, equal to, or greater than, 60,000 gallons per day shall require the permittee to contact the Director to secure approval of the extension. After consideration of the complexity of the project, and the available treatment capacity of the facility, the Director may require the permittee to seek approval through Modification of the Permit. (This applies to the existing plant.)
  - b. Any future collection system extensions projected to cause an increase in the wastewater flow, equal to, or greater than, 87,500 gallons per day shall require the permittee to contact the Director to secure approval of the extension. After consideration of the complexity of the project, and the available treatment capacity of the facility, the Director may require the permittee to seek approval through Modification of the Permit. (This applies to the plant after the modification is completed.)
- 15. Over the term of this permit, the permittee is allowed up to three (3) excursions of the maximum daily fecal coliform effluent limitation prescribed in Section A.001 (Final Requirements). The number of allowed excursions is based upon one (1) percent of the number of required self-monitoring events. Utilization of the excursion allowance is conditioned as follows.
  - a. Excursion allowances are afforded only to self-monitoring results and only when self-monitoring activities assess compliance with the maximum daily effluent limitation by analysis of an individual grab sample.
  - b. No excursion allowance can be applied to analytical results obtained by representatives of the Director in the performance of their compliance assessment activities. Additionally, representatives of the Director may assess compliance with the maximum daily effluent limitation by collection and analysis of an individual grab sample.
  - c. No more than one excursion may be utilized in any calendar month.
  - d. The excursion allowance is contingent upon the permittee's prompt return to compliance as evidenced by the next required fecal coliform self-monitoring event.
  - e. The result for which an excursion allowance is claimed shall be included in the calculation of the average monthly effluent value.
  - f. Should an excursion allowance be utilized by the permittee, said allowance must be reported as an attachment to the Discharge Monitoring Report. This attachment should state that (1) an excursion allowance was taken in accordance with the conditions outlined above, (2) the total number of allowances taken to date during the term of this permit, and (3) the total number of allowances remaining during the term of this permit. The permittee shall maintain an on-site record of the excursion allowances utilized during the term of the permit.
- 16. Because the permittee is using ultraviolet light as their disinfection method, no Total Residual Chlorine (TRC) effluent limitation shall currently be imposed. Should the permittee in the future decide to use chlorine as a disinfection method, a TRC effluent limitation shall be promulgated and imposed.
- 17. For any noncompliance reports required to be submitted in writing by Appendix A, Part IV of this Permit, a copy of said report shall also be forwarded to the Environmental Protection Agency at the address specified in Section C.11 of this Permit.
- 18. Because of the Sequential Batch Reactor technology being utilized by the permittee, "Batch" samples shall be collected. "Batch" sampling procedures shall be defined as the collection and compositing of one (1) grab sample from each individual batch discharge cycle during a 24-hour period.
- 19. Certain characteristics of sewage, industrial wastes, and other wastes cause pollution and are objectionable in all waters of the State. The Environmental Quality Board has proclaimed that there are certain general conditions that are not to be allowed in any of the waters of the State. Therefore, the effluent discharge from the permittee's treatment facility shall not cause violation of any of the following conditions not allowed in State waters as stated below (pursuant to Chapter 22B, Article 3):
  - a. Distinctly visible floating or setteable solids, suspended solids, scum, foam, or oily slicks;
  - b. Deposits or sludge banks on the bottom;
  - c. Odors in the vicinity of the waters;
  - d. Taste or odor that would adversely affect the designated uses of the affected waters;
  - e. Materials in concentrations which are harmful, hazardous or toxic to man, animal, or aquatic life;

# **Section C - Other Requirements**

- 19. f. Distinctly visible color;
  - g. Concentrations of bacteria which may impair or interfere with the designated uses of the affected waters;
  - h. Requiring an unreasonable degree of treatment for the production of potable water by modern water treatment processes as commonly employed; and
  - i. Any other condition, including radiological exposure, which adversely alters the integrity of the waters of the State including wetlands; no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.
- 20. The language contained in Section I.12 of Appendix A of this permit shall be amended to read as follows:

"Subject to 47 WV CSR 10.3.4.a), the effluent or effluents covered by this permit are to be of such quality so as not to cause violation of applicable water quality standards adopted by the Environmental Quality Board."

- 21. This Division recognizes that upon startup of a new or modified wastewater treatment facility and for a period of time thereafter, operational adjustments will need to be made in order to get the system working to its optimal levels. During this startup period, compliance with the permit effluent limitations is uncertain. Therefore, during the one month plant startup period, the permittee shall report only the sampling results and shall not be subject to the discharge limitations of Section A.001 of this permit. It is the responsibility of the permittee to notify this Agency when the startup occurs. Additionally, the required "batch" sampling, done during this startup period only, may be collected over an eight (8) hour period.
- 22. The permittee shall be required to test the sewage treatment plant's influent in order to calculate the percent (%) removal parameters for BOD5 contained in Section A.001 of this permit. Influent sampling requirements include:
  - a. Percent removal shall be defined as a percentage expression of the removal efficiency across the wastewater treatment plant for a given pollutant parameter, as determined from the thirty day average values of the influent concentrations to the facility and the thirty day average effluent pollutant concentrations. Only influent and effluent samples taken concurrently as specified below shall be used for reporting.
  - b. Influent BOD5 samples shall be collected at least one time per week (1/week) for the wastewater treatment facility.
  - c. Influent BOD5 shall be collected using an eight (8) or 24-hour composite sample.
  - d. Influent BOD5 sampling shall be performed over the same time period as the effluent BOD5 sampling.
- 23. The Division has started to analyze the impacts of nutrients upon water quality and whether there is a need to establish nutrient water quality standards. Therefore, the Division shall impose effluent sampling for Total Nitrogen and Total Phosphorus in order to assist in this analysis. The Division recognizes there is not an EPA approved method to directly test for Total Nitrogen. The Total Nitrogen value to be reported on the permittee's Discharge Monitoring Reports (DMRs) shall be the sum of the following parameters; Total Kjeldahl Nitrogen, Nitrate and Nitrite.