

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Clean Water Act, as amended, 33 U.S.C. 1251 et seq.,  
(the "Act"),

Buena Vista Rancheria  
P.O. Box 162283  
Sacramento, CA 95640

is authorized to discharge treated municipal wastewater from the Flying Cloud Casino  
Wastewater Treatment Plant located at 4650 Coal Mine Road, Ione, California to an unnamed  
tributary to Jackson Creek as described below:

Outfall Serial No.	Description of discharge	Latitude	Longitude
001	Wastewater Treatment Plant Effluent	N. 38 <sup>0</sup> 16' 23"	W. 120 <sup>0</sup> 54' 36"

in accordance with effluent limitations, monitoring requirements and other conditions set forth  
herein, and in the attached EPA Region 9 "Standard Federal NPDES Permit Conditions," dated  
June 3, 2002.

This permit shall become effective on:\_\_\_\_\_ .

This permit and the authorization to discharge shall expire at midnight,

Signed this \_\_\_\_\_ day of \_\_\_\_\_.

For the Regional Administrator

\_\_\_\_\_  
Alexis Strauss, Director  
Water Division



**Part I EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

A. Buena Vista Rancheria (“permittee”) is authorized to discharge treated wastewater from Outfall 001 as specified in Table 1 below:

**Table 1: Effluent Limitations and Monitoring Requirements**

Parameter	Maximum Allowable Discharge Limitations						Monitoring Requirements	
	Mass Limits			Concentration Limits				
	Average Monthly	Average Weekly	Daily Maximum	Average Monthly	Average Weekly	Daily Maximum		
Flow	----	----	---	(1)	----	(1)	Continuous	meter
Ammonia (Total, as N)	----	----	----	(2)	----	(2)	Once/week	Composite
Biochemical Oxygen Demand (5-Day) (3)	45 lbs/day	68 lbs/day	----	30 mg/l	45 mg/l	---	Once/week	Composite
Electrical Conductivity	----	-----	-----	(1)	----	(1)	Once/week	Discrete
Total Coliform Bacteria	----	----	----	----	(4)	23 MPN/ 100 ml	Once/week or Once/day (6)	Discrete
Nitrate (measured as N)	----	----	----	10 mg/L	----	----	Once/week	Composite
Oil and Grease	----	----	----	10 mg/L	----	15 mg/L	Once/week	Discrete
Settleable Solids	----	----	----	1 ml/l	----	2 ml/l	Once/week	Discrete
Total Suspended Solids (3)	45 lbs/day	68 lbs/day	----	30 mg/l	45 mg/l	---	Once/week	Composite
Total Dissolved Solids	-----	-----	----	(1)	-----	(1)	Once/week	Composite
Turbidity (5)	----	----	----	2 NTU	----	5 NTU	Once/week or Continuous (6)	Discrete
Whole Effluent Toxicity, Chronic	----	----	----	(1)	----	(1)	Annually	Composite
pH	The pH shall not be depressed below 6.5 nor raised above 8.5. Changes in normal ambient pH levels shall not exceed 0.5						Once/day	Discrete

Footnotes to Table 1: (see Next Page)

Footnotes to Table 1:

- (1) Monitoring and reporting required. No limit set at this time.
- (2) Ammonia effluent limitations are pH and temperature dependent and are contained in Appendix C and Appendix D.
- (3) Both the influent and the effluent shall be monitored for Biochemical Oxygen Demand (5-day) and Suspended Solids by concentration. The arithmetic mean of effluent samples collected over a monthly period shall not exceed 15 percent of the arithmetic mean of the values for influent samples collected over the same time period. (I.e., Must demonstrate 85% removal of BOD and TSS).
- (4) Total Coliform Bacteria shall not exceed 2.2 MPN/ 100 ml as a weekly median.
- (5) The daily average turbidity shall not exceed 2 NTU. Turbidity shall not exceed 5 NTU more than 5 percent of the time within a 24-hour period. At no time shall the turbidity exceed 10 NTU.
- (6) Reclaimed water must be monitoring continuously for Turbidity and once per day for Total Coliform Bacteria.

B. Additional Monitoring Requirements

The permittee shall conduct effluent monitoring for the following parameters once during the first 90 days of discharge from the new wastewater treatment plant and in the 3<sup>rd</sup> and 5<sup>th</sup> year of the permit term.

1. *Priority Toxics Pollutants*. The permittee shall monitor for the full list of priority pollutants as listed in the Code of Federal Regulations (CFR) at 40 CFR Part 122 Appendix J, Table 2)
2. *Hardness (CaCO<sub>3</sub>)*. The permittee shall monitor for hardness in addition to priority pollutants.
3. *Chronic Toxicity*. The requirements for monitoring acute and chronic toxicity are specified in Part IV of this permit.

C. The discharge shall not cause the following in unnamed receiving waters immediately downstream of the discharge:

1. The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mg/L or cause more than 10 percent of total samples taken during any 30-day period to exceed 400 MPN/100 mg/L.
2. Biostimulatory substances that promote aquatic growths in concentrations that cause nuisance or adversely affect beneficial uses.
3. Esthetically undesirable discoloration.
4. Concentrations of dissolved oxygen to fall below 7.0 mg/L. The monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation.
5. Floating material to be present in amounts that cause nuisance or adversely affect beneficial uses.
6. Oils, greases, waxes, or other materials to accumulate in concentrations that cause nuisance, result in a visible film or coating on the water surface or on objects in the water, or that otherwise adversely affect beneficial uses.
7. The ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units. A one-month averaging period may be applied when calculating the pH change of 0.5 units.
8. Radionuclides to be present in concentrations that harm human, plant, animal or aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.
9. Deposition of material that causes nuisance or adversely affects beneficial uses.
10. Taste- or odor-producing substances to impart undesirable tastes or odors to domestic or municipal water supplies or to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
11. The ambient temperature to increase more than 5°F.
12. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
13. The turbidity to increase as follows:
  - i. More than 1 Nephelometric Turbidity Units (NTUs) where natural turbidity is between 0 and 5

NTUs.

- ii. More than 20 percent where natural turbidity is between 5 and 50 NTUs.
- iii. More than 10 NTUs where natural turbidity is between 50 and 100 NTUs.
- iv. More than 10 percent where natural turbidity is greater than 100 NTUs.

14. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.

**Part II. SPECIAL CONDITIONS**

A. Erosion Protection

The permittee shall design and install erosion protection measures to prevent erosion from the discharge point to receiving water. The erosion protection measures shall be designed to protect adjacent wetlands from harm.

B. Reporting of Capacity Attainment and Planning

The permittee shall file a written report with EPA within ninety (90) days after the average dry-weather waste flow for any month either equals or exceeds 90 percent of the annual dry weather design capacity of the waste treatment and/or disposal facilities. The permittee's senior administrative officer shall sign a letter which transmits that report and certifies that the policy-making body is adequately informed about it. The report shall include:

1. Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for the day.
2. The permittee's best estimate of when the average daily dry weather flow rate will equal or exceed the design capacity of the facilities.
3. The permittee's intended schedule for the studies, design, and other steps needed to provide additional capacity for the waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present facilities.

C. Reclaimed Water Limitations

1. Reclaimed water used for irrigation shall meet the criteria contained in Title 22, California Code of Regulations.
2. Reclaimed water shall be monitored continuously for turbidity and once per day for total coliform.
3. All reclamation equipment, pumps, piping, valves, and outlets shall be appropriately marked to differentiate them from potable facilities. All reclamation distribution system piping shall be purple or adequately wrapped with purple tape.
4. All use areas where recycled water is used that are accessible to the public shall be posted with signs that are visible to the public, in a size no less than 4 inches high by 8 inches wide, that include the following wording: "Recycled water - Do Not Drink" and the international symbol for non-potable water.
5. No physical connection shall be made or allowed to exist between any system and any separate system conveying potable water except as allowed under section 7604 of title 17, California.
6. Direct or windblown spray of reclaimed water shall be confined to the designated land application area and shall be prevented from entering outdoor eating areas, dwellings, drinking water facilities, food handling facilities, and other locations where the public may be present. In addition, direct or windblown spray of reclaimed water shall not enter surface watercourses.
7. Application of wastewater to land shall not be performed within 24 hours before a forecasted storm, during precipitation, or within 24 hours after any precipitation event, nor when the ground is saturated.
8. Areas irrigated with reclaimed water shall be managed to prevent breeding of mosquitoes. More specifically:
  - a. All applied irrigation water must infiltrate completely within 24

hours.

b. Ditches not serving as wildlife habitat should be maintained free of emergent, marginal, and floating vegetation.

c. Low-pressure and un-pressurized pipelines and ditches which are accessible to mosquitoes shall not be used to store reclaimed water.

9. A 15-foot buffer zone shall be maintained between any watercourse and the wetted area produced during land application of effluent.
10. A 50-foot buffer zone shall be maintained between any spring, domestic well or irrigation well and the wetted area produced during land application of effluent.

- D. Reopener - This permit may be modified in accordance with the requirements set forth at 40 CFR Parts 122 and 124, to include appropriate conditions or limits to address demonstrated effluent toxicity based on newly available information, or to implement any EPA-approved new State or Tribal water quality standards.

Upon request from the discharger, monitoring requirements may be reduced to quarterly analysis after 24 months of sampling demonstrating no reasonable potential to cause or contribute to water quality standards. This may be applicable to the following parameters: ammonia, nitrate, EC, and total dissolved solids.

The effluent limits for ammonia and Nitrate may be revised pending an assessment of anti-degradation requirements or to establish a more stringent technology based effluent limit based on demonstrated performance data.

**Part III. MONITORING AND REPORTING**

A. Sample locations - Samples taken in compliance with the monitoring requirements specified in Part I, Section A, above, shall be taken at the following location(s):

1. Influent samples shall be taken after the last addition to the collection system prior to treatment.
2. Effluent samples shall be taken downstream from the last treatment process prior to discharge into receiving waters.

B. Reporting of Monitoring Results

1. Monitoring results obtained during the month shall be submitted on forms to be supplied by the Regional Administrator, to the extent that the information reported may be entered on the forms. The results of all monitoring required by this permit shall be submitted in such a format as to allow direct comparison with the limitations and requirements of the permit. Unless otherwise specified, discharge flows shall be reported in terms of the average flow over each monthly period and the maximum daily flow over that monthly period. If there is no discharge during the month, the reporting form shall be marked "No Discharge" and submitted in accordance with this section. Each monthly report is due by the 28th of the following month, i.e. January report is due by February 28. Duplicate signed copies of these, and all other reports required herein, shall be submitted to EPA at the following address:

U.S. EPA Region IX  
NPDES/DMR, WTR-7  
75 Hawthorne Street  
San Francisco, California 94105-3901

2. Where quarterly monitoring is required for a continuous discharge, samples shall be taken during the months of January, April, July and October.
3. For effluent analyses, the permittee shall utilize an analytical method with the published Method Detection Limit (MDL, as defined in Appendix A. of this permit) that is lower than the effluent limitations (or lower than EPA's nationally recommended water quality criteria). If all published MDLs are higher than effluent limitations or water quality criteria concentrations, the permittee shall utilize the EPA approved analytical method with the lowest published MDL. In accordance with 40 CFR 122.45(c), effluent analyses for metals shall measure "total recoverable metals".
4. For the purposes of reporting, the permittee shall use the reporting threshold equivalent to the laboratory's MDL<sup>1</sup>. As such the permittee or its laboratory must utilize a standard calibration where the lowest standard point is equal to or less than, the minimum level (ML), as defined in Appendix A of this permit.

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<sup>1</sup> Because MLs and MDLs specified in or approved under 40 CFR 136 are generally determined by the EPA using reagent water, matrix interferences in some wastewaters may result in a permittee being unable to achieve a required ML. In other cases, inappropriate laboratory techniques and poor quality assurance/quality control (QA/QC) procedures will result in a permittee failing to achieve a required ML. To distinguish between cases where a ML (or MDL) is not achieved due to poor laboratory technique and when matrix interferences do, in fact, occur, and to document that a discharge-specific MDL and ML are warranted, a permittee attempting to overcome matrix interference problems shall follow guidelines provided in *Guidance on Evaluation, Resolution, and Documentation of Analytical Problems Associated with Compliance Monitoring* (EPA 821-B-93-001, June 1993). In such a case, the permittee shall submit a report to EPA documenting that a discharge-specific MDL is warranted. Upon approval of this report by EPA, the permittee shall follow procedures set forth in 40 CFR 136, Appendix B, to determine the discharge-specific MDL and ML, which are also subject to EPA evaluation and approval. Additional guidance on development and review of discharge-specific MDLs is available in EPA's draft National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels, March 22, 1994, Appendix B.

For analytical results the laboratory's MDL and # ML, the permittee shall report No Discharge/No Data (Not Quantifiable) ["NODI (Q)"] on the DMR form. Analytical results below the laboratory's MDL shall be reported as No Discharge/No Data (Below Detection Level) ["NODI (B)"].

As an attachment to the first DMR form submitted following the effective date of this permit, and at any time thereafter that the following information should change, the permittee shall report for all parameters with monitoring requirements: the analytical result; the analytical method number or title, preparation and analytical procedure, and published MDL; the laboratory MDL, standard deviation (S) from the laboratory's MDL study (see 40 CFR Part 136, Appendix B), and the number of replicate analyses used to compute the laboratory's MDL (n); and ML.

When requested by EPA, the permittee or its laboratory shall participate in the NPDES DMR-QA performance study and shall submit their study results to EPA. The permittee must have a success rate of at least 80 percent. (%)

5. **Quality Assurance (QA) Manual**

Sample collection will be performed as stated in the Quality Assurance (QA) Manual/QA Plan.

The permittee shall develop a QA Manual/QA Plan for collection and analysis of samples. If the water samples are analyzed by an independent laboratory, the permittee shall ensure that the laboratory has a Quality Assurance (QA) Manual.

The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. As appropriate and applicable, the QA Manual shall include the details enumerated below. The QA Manual shall be retained on the permittee's premises and be available for review by EPA upon request. The permittee or the independent laboratory as the case may be shall review its QA Manual annually and revise it when appropriate. Throughout all field sampling and laboratory analyses, the permittee or the laboratory shall use quality assurance/quality control (QA/QC) procedures as documented in their QA Manual.

- (i) Project Management including roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples.
- (ii) Sample collection procedures; equipment used; the type and number of samples to be collected including QA/QC samples (i.e., background samples, duplicates, and equipment or field blanks); preservatives and holding times for the samples (see 40 CFR Part 136.3); and chain of custody procedures.
- (iii) Identification of the laboratory to be used to analyse the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; method detection limit (MDL) and minimum level (ML) to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken by the permittee or the laboratory as a result of problems identified during QC checks.
- (iv) Discussion of how the permittee will perform data review and requirements for reporting of results to EPA to include resolving of data quality issues and identifying limitations on the use of the data.

C. **Monitoring and Records**

In addition to the information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: The laboratory(ies) which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. These should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The









the presentation of credentials, to:

- a) enter upon all premises where biosolids produced/treated by the permittee are treated, stored, used, or disposed, either by the permittee or by another party to whom the permittee transfers the biosolids for treatment, use, or disposal,
- b) have access to and copy any records that must be kept under the conditions of this permit or of 40 CFR 503, by the permittee or by another party to whom the permittee transfers the biosolids for further treatment, use, or disposal,
- c) inspect any facilities, equipment (including monitoring and control equipment), practices, or operations used in the biosolids treatment, storage, use, or disposal by the permittee or by another party to whom the permittee transfers the biosolids for treatment, use, or disposal.

12. Monitoring shall be conducted as follows:

- a) Biosolids shall be tested for the metals required in Section 503.16 (for land application) or 503.26 (for surface disposal), using the methods in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), as required in 503.8(4), at the following minimum frequencies:

<u>Volume (dry metric tons)</u>	<u>Frequency</u>
0 - 290	once per year
290 - 1500	once per quarter
1500 - 15000	once per 60 days
> 15000	once per month

Sampling Plan - For accumulated, previously untested biosolids, the permittee shall develop a representative sampling plan, including number and location of sampling points, and collect representative samples. Test results shall be expressed in mg pollutant per kg biosolids on a 100% dry weight basis.

Sampling Requirements: Biosolids to be land applied shall be tested for TKN, ammonium-N, and nitrate-N at the frequencies required above.

- b) Prior to land application, the permittee shall demonstrate that the biosolids meet Class A or Class B pathogen reduction levels by one of the methods listed in 503.32. Prior to disposal in a surface disposal site, the permittee shall demonstrate that the biosolids meet Class B levels or shall ensure that the site is covered at the end of each operating day.
- c) For biosolids that are land applied or placed in a surface disposal site, the permittee shall track and keep records of the operational parameters used to achieve Vector Attraction Reduction requirements in 503.33(b).
- d) Class 1 facilities (facilities with pretreatment programs or others designated as Class 1 by the Regional Administrator) and Federal facilities with > 5 MGD influent flow shall sample biosolids for pollutants listed under Section 307(a) of the Act (as required in the pretreatment section of the permit for POTW's with pretreatment programs.) Class 1 facilities and Federal Facilities with > 5 MGD influent flow shall test dioxin/dibenzofurans using a detection limit of < 1 pg/g during their next sampling period if they have not done so within the past 5 years and once per 5 years thereafter.
- e) The biosolids shall be tested annually using the Toxicity Characteristic Leaching Procedure, or more frequently if necessary to determine hazardousness.
- f) If biosolids are placed in a surface disposal site (dedicated land disposal site or monofill), a qualified groundwater scientist shall develop a groundwater monitoring program for the site, or shall certify that the placement of biosolids on the site will not contaminate an aquifer.



## Appendix A: STANDARD DEFINITIONS

1. A “composite sample” means, for flow rate measurements, the arithmetic mean of no fewer than eight (8) individual measurements taken at equal intervals for eight (8) hours or for the duration of discharge, whichever is shorter. For other than flow rate measurements, a composite sample means, a combination of either (8) individual portions obtained at equal time intervals for eight (8) hours or for the duration of the discharge, whichever is shorter. The volume of each individual portion shall be directly proportional to the discharge flow rate at the time of sampling. The sampling period shall coincide with the period of maximum discharge.

Sample collection, preservation and handling shall be performed as described in the most recent edition of 40 CFR 136.3 (Table II). Where collection, preservation and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 20th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.

2. The “daily maximum concentration limit” means the measurement made on any single discrete sample or composite sample.
3. The “daily maximum mass limit” means the total discharge by mass during any calendar day.
4. A “discrete” or “grab” sample means an individual sample collected from a single location at a specific time, or over a period of time not exceeding 15 minutes. Sample collection, preservation and handling shall be performed as described in the most recent edition of 40 CFR 136.3 (Table II). Where collection, preservation and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 20th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.
5. The “Method Detection Limit (MDL)” is the minimum concentration of an analyte that can be detected with 99 percent confidence that the analyte concentration is greater than zero, as defined by the specific laboratory method listed in 40 CFR part 136. The procedure for determination of a laboratory MDL is in 40 CFR Part 136, Appendix B.
6. The “Minimum Level (ML)” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all of the method-specified sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft *National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels*, March 22, 1994). Promulgated method-specific MLs are contained in 40 CFR Part 136, Appendix A and must be utilized if available. If a promulgated method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the promulgated method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc.

When neither an ML nor an MDL are available under 40 CFR 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML. At this point in the calculation, a different procedure is used for metals than for non-metals.

a. For metals: due to laboratory calibration practices, calculated MLs for metals may be rounded to the nearest whole number.

b. For non-metals: because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of  $(1, 2, \text{ or } 5) \times 10^n$ , where  $n$  is zero or an integer. (For example: if an MDL is 2.5 Fg/L, then the calculated ML is  $2.5 \text{ Fg/L} \times 3.18 = 7.95 \text{ Fg/L}$ . The multiple of  $(1, 2, \text{ or } 5) \times 10^n$  nearest to 7.95 is  $1 \times 10^1 = 10 \text{ Fg/L}$ , so the calculated ML (rounded to the nearest whole number) is 10 Fg/L.)

7. The “monthly or weekly average concentration limit”, other than for fecal or total coliform bacteria, means the arithmetic mean of consecutive measurements made during calendar month or weekly period, respectively. The “monthly or weekly average” concentration for fecal or total coliform bacteria means the geometric mean of measurements made during a monthly or weekly period, respectively. The geometric mean is the  $n$ th root of the product of  $n$  numbers.
8. The “monthly or weekly average mass limitation” means the total discharge by mass during a calendar monthly or weekly

period, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the monthly or weekly average value shall be determined by the summation of all the measured discharges by mass divided by the number of days during the monthly or weekly period when the measurements were made.

9. A "24-hour composite sample" means either: (i) a time-proportioned mixture of not less than eight (8) discrete aliquots obtained at equal time intervals. The volume of each aliquot shall be directly proportional to the discharge flow rate at the time of sampling, but not less 100 ml; or (ii) a flow-proportional combination of individual samples obtained at regular intervals over a 24-hour sampling period. The volume of each sample shall be proportional to the flow rate during the 24-hour sampling period. Sample collection, preservation and handling shall be performed as described in the most recent edition of 40 CFR Part 136.3 (Table II). Where collection, preservation and handling procedures are not outlined in 40 CFR Part 136.3, procedures outlined in the 20th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.