9 August 2017

Mr. Brian Fulce
Regional Project Manager
Delaware North Companies, Inc.
Tenaya Lodge
1122 Highway 41
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NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5233, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, DELAWARE NORTH COMPANIES, INC., TENAYA LODGE AT YOSEMITE, FISH CAMP, MARIPOSA COUNTY

On 29 September 2015 the Blair, Church and Flynn Engineers, on behalf of the Delaware North Companies, Inc., (hereafter "DNC or Discharger"), submitted a Report of Waste Discharge (RWD) proposing a new tertiary wastewater treatment facility to serve the Tenaya Lodge at Yosemite in Fish Camp, Mariposa County. In June 2016 and February 2017, DNC submitted revised and amended RWDs to update the previous RWD. Based on the information provided, the system treats and disposes of less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as formal notice that the General Order is applicable to your system and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5233 for your system. Coverage under the General Order takes effect after Waste Discharge Requirements (WDRs) Order 99-086 have been rescinded.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describe mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the General Order and the attached *Monitoring and Reporting Program* (MRP) No. 2014-0153-DWQ-R5233. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

DNC owns and operates the Tenaya Lodge that offers guests accommodations in a 249 room hotel and 53 cottages (formerly the Apple Tree Cottages). DNC owns and

operates the associated Wastewater Treatment Facility (WWTF) that is regulated by Waste Discharge Requirements (WDRs) Order 99-086. Order 99-086 allowed a discharge of up to 0.08 million gallons per day (mgd) of secondary disinfected domestic effluent to two separate disposal areas. In the winter, effluent is discharged to three leachfields, with a designed flow limit of 0.030 mgd or 30,000 gallons per day (gpd). The existing leachfields contain 2,484 feet of disposal trench. In the summer, when snow is not on the ground, in addition to the leachfields, a subsurface drip disposal system is available for use that by design adds another 0.050 mgd of disposal capacity.

DNC replaced the former secondary treatment WWTF in January of 2016 with a new tertiary WWTF. The new WWTF is in the northeast quarter of Section 26, Township 5 South, Range 19 East of the Fish Camp Quadrangle. DNC is proposing to add 54-prefabricated cabins, The Explorer Cabins, to the system. The new WWTF was designed to treat an average annual daily flow rate of 0.085 mgd and a maximum flow of 0.120 mgd. The average discharge rate is anticipated to be about 55,000 gpd (includes the proposed Explorer Cabins) with an anticipated maximum discharge rate of about 78,000 gpd estimated for July of each year.

The current WWTF provides tertiary treatment that combines an activated sludge process, membranes to filter the wastewater, and ultraviolet (UV) disinfection. Wastewater from the Tenaya Lodge cottages and hotel is conveyed to a headworks by way of a gravity sewer main. In the headworks, wastewater is filtered through dual bar screens with 3-millimeter openings, before being transferred to the main treatment system. Filtered material captured in the screens is disposed of at the Mariposa County Sanitary Landfill. Sludge separated from the effluent in the treatment process is dewatered using a centrifuge. It is estimates that once the Explorer Cabins come on line, the WWTF will produce about 120 pounds of sludge per day which will be placed in a roll off bin for subsequent disposal at the Mariposa County Sanitary Landfill.

The filtered wastewater is collected in a 50,000 gallon underground fiberglass equalization tank with aeration to provide mixing. From the equalization tank, the wastewater is then pumped into the anoxic basin inside the treatment plant building. The anoxic basin is sized for denitrification and has a mixer to maintain the solids in solution while not providing any air to the waste. The flow is moved to the aerated membrane bioreactor (MBR) via pumps. The MBR has a dissolved oxygen (DO) probe to monitor the DO in the basin and adjust the level of the blowers. Within this system is the UV treatment process which acts as a disinfectant and is the last treatment step prior to dispersal. Additionally, an existing centrifuge is utilized, as well as an off-board waste activated sludge (WAS) storage. The centrifuge acts as a de-watering process to separate suspended solids from the treated water prior to membrane filtration and disinfection.

Central Valley Water Board staff and Mariposa County Health Department (Mariposa County) staff have had concerns regarding the disposal capacity of the leachfields dating back to the late 1990's (daylighting effluent), particularly during November and December,

when only the leachfields could be used for disposal. DNC had the Salem Engineering Group (Salem) evaluate the capacity of the disposal systems. Salem excavated six test pits and performed six percolation tests in the area of the leachfields in 2015. Salem concluded that the actual capacity of the leachfields is 34,600 gpd and the capacity of the subsurface drip disposal system is 64,250 gpd.

Using the information from the Salem Report and anticipated lodge occupancies, DNC submitted a Revised RWD on 6 June 2016 in support of the Explorer Cabin project. The Revised RWD included estimates of the volume of wastewater that would be generated at the Tenaya Lodge on a monthly basis and were based on past occupancy and water usage. Central Valley Water Board staff reviewed the data and compared it to real time data collected from the newly upgraded WWTF and found that the Revised RWD greatly underestimated the actual flows in the months of November through February of each year.

Due to those concerns, DNC submitted *Report of Waste Discharge – Amendment No. 2* on 6 February 2017 that proposes to add 908 linear feet of leachfield trench to the existing central leachfield. The added trenches will result in the three leachfield areas having a total of 3,392 feet of leachfield and will increase the disposal capacity to 45,835 gpd. Blair, Church, and Flynn also submitted climatic data and requested that the subsurface drip system be allowed for use in the first 15-days of November and the last 15-days of March if snow is not on the ground. The dual usage of the subsurface drip system along with a 150,000 gallon storage tank and the expanded leachfield should provide sufficient disposal capacity at the Tenaya Lodge.

The results for electrical conductivity (EC), total dissolved solids (TDS), biochemical oxygen demand (BOD), and nitrate as nitrogen from the new WWTF since February 2016 are presented in Table 1. The results are from 14 samples collected from February 2016 through March 2017. The numbers below the results in parentheses are the range of the results.

Table 1 - Effluent Results (New WWTF)

Electrical Conductivity	Total Dissolved Solids	Biochemical Oxygen Demand	Nitrate as Nitrogen
Micromhos per Centimeter	Milligrams per Liter	Milligrams per Liter	Milligrams per Liter
687 (535 - 832)	339 (280 - 445)	4 (2 - 10.7)	1.3 (0.1 - 5.2)

The Discharger collected samples of the influent and the effluent and analyzed them for Total Kjeldahl Nitrogen (TKN). The results in Table 2 show that the new WWTF is removing nitrogen from the discharge well in excess of the 50 percent removal requirement of this General Order.

Table 2 - Effluent Results – TKN (New WWTF)			
Date Sample Collected	Influent	Effluent	Percentage Removed
	Milligrams per Liter	Milligrams per Liter	
4/14/17	55	7.6	86%
4/17/17	52	1.8	96%
4/24/17	21	2.8	87%
5/2/17	41	2.4	94%

The results in the previous two tables indicate the new WWTF is working as designed. BOD and nitrate as nitrogen concentrations are low and EC and TDS results are below water quality objectives.

In addition to the discharge of tertiary treated wastewater to the leachfields (year round) and to the subsurface disposal system (summer months), DNC is also proposing to use recycled water for landscape irrigation in the summer months and submitted a Title 22 Report (Report) to the State Water Board, Division of Drinking Water (DDW) in March 2017. DNC is in the process of obtaining approval of the Title 22 Report required for the operation of the landscape irrigation system from the State Water Boards, Division of Drinking Water. **This General Order limits the discharge to the subsurface disposal systems only at this time.** The use of landscape irrigation for wastewater disposal shall not occur until the Title 22 Report has been approved by the State Water Boards, Division of Drinking Water, and by the Central Valley Water Board Executive Officer. Prohibition A.10 of the General Order states that the use of recycled water in a manner different than described in the DDW approved title 22 engineering report is prohibited.

The Recycled Water Policy requires permits for landscape irrigation with recycled water to include priority pollutant monitoring at the recycled water production facility. Annual monitoring is required for design production flows greater than one million gallons per day; a five year monitoring frequency is required for flows less than one million gallons per day. Priority pollutants are listed in Appendix A of 40 Code of Federal Regulations (C.F.R.) Part 423.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ-R5233, with all attachments, and MRP No. 2014-0153-DWQ-R5233.

The maximum discharge from the WWTF to the leachfields is currently **34,600 gpd**. Upon the completion of the addition of the 908 linear feet of leachfield trench, and with approval from the County of Mariposa Health Department staff and the Executive Officer, DNC may increase the discharge to the leachfields to **45,835 gpd.** During the summer months (mid-March through mid-November of each year) the maximum discharge increases due to the availability of the subsurface drip disposal system that provides another **64,250 gpd** of

disposal. Discharge to the subsurface drip disposal system cannot occur when there is snow covering the surface of the subsurface drip disposal area.

In accordance with the requirements of the General Order, discharges with shallow groundwater and flow rates greater than 20,000 gpd are required to meet a nitrogen effluent limitation. With the new WWTF denitrifying the effluent, an effluent limit of 50 percent reduction of the influent is appropriate for the discharge from this WWTF.

The General Order states in Section B.1 that the Discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater treatment system equipment, activities, land application areas, and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the applicable setback requirements, as summarized in Table 3:

Table 3 - Site Specific Applicable Setback Requirements

Equipment or Activity	Domestic Well	Flowing Stream[1]	Ephemeral Stream Drainage[2]	Property Line
Treatment System, or Collection System[3]	100 ft [4] 50 ft [5]	50 ft.[5]	50 ft.	5 ft.[5]
Leach Field[6]	100 ft [4,5]	100 ft.[5]	50 ft.	5 ft.[5]
Recycled Water Requirements (Landscape Irrigation)				
Landscape Irrigation (disinfected tertiary recycled water)[7]	50 ft[8]	25 ft	50 ft	25 ft
Spray Irrigation (disinfected tertiary recycled water)[9]	No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence of a place where public exposure could be similar to that of a park, playground, or school yard.			
Wastewater Storage Requirements				
Impoundment (disinfected tertiary recycled water)[10]	100 ft [10]	100 ft	100 ft	50 ft

1. A flowing stream shall be measured from the ordinary high water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.
2. Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snow-melt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high water mark (described in "a" above). Irrigation canals are not considered ephemeral streams drainage
3. Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection
4. California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.
5. Setback established by California Plumbing Code, Table K-1.
6. Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits
7. Disinfected tertiary recycled water is defined in California Code of Regulations, title 22, section 60301.230.
8. Setback established by California Code of Regulations, title 22, section 60310(a). A reduced setback is allowed as described in California Code of Regulations, title 22, section 60310(a) if all the conditions in the section are met and compliance is documented in the ROWD and NOA.
9. Additional restrictions for spray irrigation of recycled water are contained in California Code of Regulations, title 22, section 60310(f).
10. Setback established by California Code of Regulations, title 22, section 60310(b).

The General Order contains Section B.6 regarding Subsurface Disposal, which includes in part the following:

a. Wastewater shall not surface in any location of the disposal area;

b. Subsurface disposal systems shall hold in reserve sufficient land area for possible future 100-percent replacement of the subsurface disposal system, or establish an equivalent contingency that is approved by the Regional Water Board's Executive Officer and described in the NOA. If less than 100-percent replacement area was previously permitted under existing individual WDRs, WQO 97-10-DWQ, or a local agency permit, the minimum reserve area previously permitted shall be maintained.

g. Subsurface disposal systems including leach fields and seepage pits, must comply with USEPA Underground Injection Control requirements when classified as a Class V well. Subsurface disposal systems with at least one of the following characteristics are classified as Class V wells:

   i. The system has the capacity to serve 20 or more persons per day.

   ii. The system receives wastewater other than domestic wastewater such as that generated by manufacturing, chemical processing, industrial fluid disposal, automotive repair, or recycling.

   iii. The system receives sewage containing biological agents (such as wastewater from recreational vehicles or portable toilets)

   Disposal systems that are classified as Class V wells must be registered with USEPA either by completing the online form at: http://www.epa.gov/region09/water/groundwater/injection-wells-register.html , or by completing and submitting Form 7520-16: Inventory of Injection Wells. Form 7520-16 is available at: http://epa.gov/region09/water/groundwater/uic-pdfs/7520-16.pdf .

The General Order contains Section B.7 regarding Recycled Water Systems, which includes in part the following:

a. Wastewater shall not be applied to a land application area within 24 hours of forecasted precipitation with a greater than 50-percent probability of occurring, during precipitation events, or when the land application area surface soil is saturated.

c. Discharge of wastewater from a land application area is prohibited.

f. If recycled water is applied, it shall comply with the title 22 water recycling criteria, this General Order, the NOA, a title 22 Engineering Report, and any DDW approval conditions.

g. Public contact with wastewater/recycled water shall be precluded through use of fences, signs, and/or other appropriate means. All public use areas where recycled water is used shall be posted with signs that are visible, in a size no less than 4 inches by 8 inches and include the following wording, "Recycled Water – Do Not Drink." (Cal. Code Regs. tit. 22, § 60310(g).)

The General Order states in Section D.1.a that the discharge shall not exceed the effluent limitations as described in Table 4. This table summarizes effluent limitations for activated sludge, MBR, or similar treatment systems (not including residential aerobic treatment systems) and treatment systems with flow rates in excess of 20,000 gpd. The Discharger shall comply with the applicable effluent limitations, as summarized in the following table:

Table 4 - Effluent Limitations Based on Technology Performance		
Activated Sludge, MBR, or similar (not including residential aerobic treatment units)		
Constituent	**Units**	**Limit**
Flow to Leachfield	Gallons per day	34,600 (45,835)[1]
Flow to Subsurface Drip System	Gallons per day	64,250[2]
Biochemical Oxygen Demand	Milligrams per liter	30 (monthly average), 45 (7-day average)
Total Suspended Solids	Milligrams per liter	30 (monthly average), 45 (7-day average)
Total Nitrogen	Milligrams per liter	50% reduction from influent concentration

1. The discharge to the leachfield of tertiary treated wastewater can increase from 34,600 gpd to 45,835 gpd, once the additional leachfield trenches have been installed and approved by Mariposa County Health Department, Environmental Health Division staff and by the Executive Officer.
2. The Discharger may discharge tertiary treated wastewater to the subsurface drip system from mid-March through Mid-November, provided there is no snow covering the subsurface drip system area.

Provision E.1 of the General Order requires dischargers enrolled under the General Order to prepare and implement the following reports within **90 days** of the issuance of the NOA:

- Spill Prevention and Emergency Response Plan (Provision E.1.a.).
- Sampling and Analysis Plan (Provision E.1.b).
- Sludge Management Plan (Provision E.1.c)

A copy of the Spill Prevention and Emergency Response Plan, the Sampling and Analysis Plan, and the Sludge Management Plan shall be maintained at the treatment facility and shall be presented to the Regional Water Board staff upon request.

As mentioned above, DNC is to expand the existing leachfields that currently have 2,484 linear feet of leachfield trench by adding 908 linear feet of leachfield trench to the central leachfield to accommodate for the increased flows associated with the proposed Explorer Cabins project. **DNC cannot connect the proposed Explorer Cabins to the new WWTF** until the additional leachfield trenches have been constructed, inspected, and approved by Mariposa County Health Department, Environmental Health Services staff

and the upgraded disposal system (new leachfield trenches) are approved by the Executive Officer.

In March 2017, DNC submitted a Title 22 Report for using the tertiary treated effluent for landscape irrigation around the lodges and cottages. DDW staff prepared a 11 July 2017 letter requesting an updated Title 22 Report be submitted to address various issues with the use of tertiary treated wastewater for landscape irrigation. This General Order limits the discharge to the subsurface disposal systems only at this time. The use of landscape irrigation for wastewater disposal shall not occur until the Title 22 Report has been approved by the State Water Boards, Division of Drinking Water, and by the Central Valley Water Board Executive Officer.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ-R5233, with all attachments, and MRP No. 2014-0153-DWQ-R5233 could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5C221018000, Facility Name: Tenaya Lodge WWTF, Order-2014-0153-DWQ-R5233.

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the General Order is available on the State Water Board's web site at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

If you have any questions regarding this matter, please contact Jeff Pyle by phone at (559) 445-5145, by email at jpyle@waterboards.ca.gov.

Clay L. Rodgers

for Pamela C. Creedon
Executive Officer

Attachments: Monitoring and Reporting Program No. 2014-0153-DWQ-R5233
Technical Memorandum for Delaware North Companies, Inc., Tenaya Lodge WWTF, Report of Waste Discharge
State Water Resources Control Board Order WQ 2014-0153-DWQ (Discharger Only)

cc w/o attachments:

State Water Resources Control Board, Division of Drinking Water, Fresno
David Conway, Mariposa County Health Department, Environmental Health Division P.O. Box 5, 5100 Bullion Street, Mariposa, California 95338
Tim Casagrande, 1041 East Portland Avenue, Fresno, California 93720

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5233

FOR

DELAWARE NORTH COMPANIES, INC.
TENAYA LODGE WASTEWATER TREATMENT FACILITY
MARIPOSA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Water Code section 13267 states, in part:

> "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

Water Code section 13268 states, in part:

> "(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).
>
> (b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars ($1,000) for each day in which the violation occurs."

Delaware North Companies, Inc. (DNC) owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order

2014-0153-DWQ-R5233. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

ACTIVATED SLUDGE MONITORING

Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater quality. At a minimum, influent monitoring shall consist of the following:

Constituent	Units[1]	Sample Type	Sample Frequency	Reporting Frequency
Flow	mgd	Meter	Continuous	Quarterly
BOD	mg/L	24-Hour Composite	Monthly	Quarterly
TSS	mg/L	24-Hour Composite	Monthly	Quarterly
Nitrate as Nitrogen	mg/L	24-Hour Composite	Monthly	Quarterly
Total Kjeldahl Nitrogen	mg/L	24-Hour Composite	Monthly	Quarterly
Total Nitrogen	mg/L	24-Hour Composite	Monthly	Quarterly

1. mgd = million gallons per day; mg/L = milligrams per liter.

Effluent Monitoring

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the disposal area. At a minimum, effluent monitoring shall consist of the following:

Constituent	Units[1]	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Metered	Continuous	Quarterly
pH	pH Units	Grab	Weekly	Quarterly
Electrical Conductivity	umhos/cm	Grab	Weekly	Quarterly
Biochemical Oxygen Demand	mg/L	24-Hour Composite	Twice Monthly	Quarterly
Total Suspended Solids	mg/L	24-Hour Composite	Twice Monthly	Quarterly
Nitrate as Nitrogen (NO_3 as N)	mg/L	24-Hour Composite	Monthly	Quarterly
Ammonia as Nitrogen	mg/L	24-Hour Composite	Monthly	Quarterly
Total Kjeldahl Nitrogen (TKN)	mg/L	24-Hour Composite	Monthly	Quarterly
Total Nitrogen	mg/L	Calculated (equals the sum of NO_3 as N + TKN)	Monthly	Quarterly
General Minerals[2]	varies	24-Hour Composite	Monthly	Quarterly

1. gpd = gallons per day, umhos/cm = micromhos per centimeter, mg/L = milligram per liter, varies = units vary per analyte.
2. Analysis for general minerals will include a least the following: Alkalinity, Bicarbonate, Calcium, Carbonate, Chloride, Hardness, Magnesium, Potassium, Sodium, Sulfate, and TDS.

The filtered wastewater is collected in a 50,000 gallon underground fiberglass equalization tank with aeration to provide mixing. From the equalization tank, the wastewater is then pumped into the anoxic basin inside the treatment plant building. The anoxic basin is sized for denitrification and has a mixer to maintain the solids in solution while not providing any air to the waste. The flow is moved to the aerated membrane bioreactor (MBR) via pumps. The MBR has a dissolved oxygen (DO) probe to monitor the DO in the basin and adjust the level of the blowers. Additionally, an existing centrifuge is utilized in this new system, as well as an off-board waste activated sludge (WAS) storage. The centrifuge acts as a de-watering process to separate suspended solids from the treated water prior to membrane filtration and disinfection.

DISINFECTION SYSTEM MONITORING

Samples shall be collected from immediately downstream of the disinfection system (ultraviolet [UV] treatment process). Disinfection monitoring shall include the following:

Constituent	Units [1]	Sample Type	Sample Frequency	Reporting Frequency
Total Coliform Organisms	MPN/100 mL	Grab	Weekly	Quarterly

Constituent	Units [1]	Sample Type	Sample Frequency	Reporting Frequency
Turbidity	NTU	Meter	Continuous	Quarterly

1. MPN/100 mL = most probable number per 100 mL sample. NTU = nephelometric turbidity unit.
2. The weekly sampling requirement for total coliform organisms is required for the discharge of tertiary treated wastewater to the leachfields only. The frequency of sampling for total coliform organisms for discharge to the landscape irrigation areas will be determined when the Dischargers Title 22 Report is approved by DDW and the Executive Officer.

SUBSURFACE DISPOSAL AREAS

Wastewater is discharged to leachfields year round and solely to the leachfields during the winter months (mid-November through mid-March). In the summer months (mid-March through mid-November), a subsurface drip disposal area is also available for disposal provided there is no snow covering the subsurface drip disposal area. In general, monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal areas are not saturated, burrowing animals and/or deep rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area. Monitoring shall include, at a minimum, the following:

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. [1]	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions [2]	Quarterly	Quarterly
Plant Growth [3]	Quarterly	Quarterly
Vectors or Animal Burrowing [4]	Quarterly	Quarterly

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect a disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

RECYCLED WATER MONITORING

If recycled water is used for irrigation of landscape areas, priority pollutant monitoring is required at the production facility. Sampling shall be consistent with the following:

Constituent	Sampling Frequency	Reporting Frequency
Priority Pollutants	5 years	The next annual report.

Landscape areas are defined as parks; greenbelts; playgrounds; school yards; athletic fields; golf courses; cemeteries; residential landscaping; common areas; commercial landscaping (except eating areas); industrial landscaping (except eating areas); freeway, highway, and street landscaping.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

GROUNDWATER MONITORING

Prior to sampling, groundwater elevations shall be measured and the wells shall be purged of at least three well volumes and until pH and electrical conductivity have stabilized. No-purge, low-flow, or other sampling techniques are acceptable if they are described in an approved Sampling and Analysis Plan. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater elevations shall be calculated. Samples shall be collected using approved USEPA methods. Groundwater monitoring shall include, at a minimum, the following:

GROUNDWATER MONITORING REQUIREMENTS

Constituent	Units[1]	Sample Type	Sampling/Reporting Frequency
Depth to Groundwater	0.01 Feet	Measurement	Quarterly
Groundwater Elevation	Feet	Calculated	Quarterly
pH	Standard pH. Units	Grab	Quarterly
Electrical Conductivity	umhos/cm	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly
Total Coliform Organisms	MPN/100 mL	Grab	Quarterly

1. Depth to groundwater is to be measured to one hundredth of a foot; mg/L = milligrams per liter; MPN/100 mL = Most probable number per 100 milliliters.

The Discharger may request a reduced monitoring and reporting schedule once adequate data has been collected to characterize the site. (Typically two years of quarterly sampling is required for adequate characterization.)

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to clearly illustrate compliance with the General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall

be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the appropriate Regional Water Board office, in this case 1685 E Street, Fresno, CA 93706. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office: Program: Non-15, WDID: 5C221018001, Facility Name: Delaware North Companies, Inc., Tenaya Lodge WWTF, Order-2014-0153-DWQ-R5233.

During the life of this General Order, the State Water Board or the Central Valley Water Board may notify the Discharger to electronically submit and upload monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) Program Web site http://www.waterboards.ca.gov/ciwqs/index.html or similar system. Electronic submittal to CIWQS, when implemented, will meet the requirements of our Paperless Office System.

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g. the January-March Quarterly Report is due by May 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

1. Results of all required monitoring.

2. A comparison of monitoring data to the discharge specifications, biochemical oxygen demand, total suspended solids, and total nitrogen effluent limits, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format.)

3. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 1st following the monitoring year**. The Annual Report shall include the following:

1. Tabular and graphical summaries of all monitoring data collected during the year.

2. An evaluation of the performance of the wastewater treatment system, including discussion of capacity issues, nuisance conditions, system problems, and a

forecast of the flows anticipated in the next year. A flow rate evaluation, as described in the General Order (Provision E.2.c), shall also be submitted.

3. A description of disinfection system maintenance activities performed in the calendar year. The description shall address inspections performed, lamp bulb replacement, lamp sleeve cleaning, and manufacturer recommended maintenance activities.

4. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order.

5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of the those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

The Discharger shall implement the above monitoring program as of the date of this MRP.

Ordered by:

Clay L. Rodgers
for PAMELA C. CREEDON, Executive Officer
8/9/2017
DATE